Fiordland Pilots Instructions and Standard Operating Procedures

Revised (July 2023)

Environment Southland is the brand name
of Southland Regional Council

1 Introduction

This manual contains the Standard Operating Procedures for pilotage carried out in Fiordland. It covers operational aspects of providing safe pilotage for vessels accessing Fiordland to ensure the prevention of human injury or loss of life, the avoidance of damage to the environment, (in particular to the Fiordland marine environment) and to assets.

The basis for these Standard Operating Procedures is the applicable International Maritime Organisation's conventions, resolutions and recommendations – i.e. Standards of Training, Certification and Watchkeeping (STCW) convention, Safety of Life at Sea (SOLAS) convention, International Safety Management (ISM) code, as well as applicable New Zealand Maritime Rules and Guidelines, and the Southland Regional Council Navigation Bylaws, 2009. The format and layout are based on the guidelines of the International Standard for Maritime Pilot Organisations (ISPO).

The instructions and Standard Operating Procedures should be read in conjunction with the Fiordland Cruise Ship Safety Management System manual. While the instructions and Standard Operating Procedures in this document largely relate to the real-time operation and related requirements, the Safety Management System covers the overall safety management framework and non-real time activity.

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2 General

1.1 Definitions

Cable means one-tenth of a nautical mile or 185.2 meters;

Cruise New Zealand (CNZ) means the organisation that markets New Zealand as a cruise destination to Cruise Lines;

Code of Practice is a component of the Safety Management System for Milford Sound Commercial Operators;

Cruise Ship means any ship at or over 1000 gross tons (International Convention System), the main purpose of which is to carry passengers for hire.

Flag A means the Divers Flag of the International Code of Signals, a burgee (swallow-tailed) flag coloured in white and blue, with white to the mast, or a rigid equivalent.

Gross Tonnage means the gross tonnage of a ship determined under Maritime Rule 48.6 or the tonnage measurement rules contained in annexe 1 of the International Convention on Tonnage Measurements of Ships 1969, as the case may be;

Harbourmaster means a person appointed as a harbourmaster under the Local Government Act 1974;

Knot means one nautical mile per hour;

Maritime Pilot is any pilot who is authorised by the Southland Regional Council (Environment Southland) to carry out pilotage services in the Fiordland pilotage areas, and holds appropriate documentation issued by Maritime New Zealand;

Master means any person (except a pilot) having command or charge of a ship;

Master's pilotage exemption means a master's pilotage exemption issued under section 41 of the Maritime Transport Act and Maritime Rule 90.13;

Mile means nautical mile or 1852 meters;

The *Pilot*, in relation to any ship, means any person not being the master or a member of the crew of the ship who has the conduct of the ship;

Pilot service means services provided by Fiordland Pilots;

Pilotage area means an area specified in the schedule, attached to Maritime Rule Part 90, as a pilotage area;

Pilot's licence means a pilot's licence issued under section 41 of the Maritime Transport Act and Maritime Rule Part 90.7;

Safety Management System means the overall management framework put in place to coordinate and control cruise ships and other activities to ensure the ongoing safety of operations, protection of the environment and enjoyment of the experience by passengers;

Southland Regional Council means the regional council as specified in the Local Government Act 1974;

Ship means every description of a boat or craft used in navigation, whether or not it has any means of propulsion, and includes:

- a barge, lighter, or other like vessel;
- a hovercraft or other thing deriving full or partial support in the atmosphere from the reaction of air against the surface of the water over which it operates;
- a submarine or other submersible;

STCW convention is the convention for Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended in 2010 (new convention effective from January 2012;

Training provider means the provider of a training course;

1.2 Objectives

The objectives of the Fiordland Pilotage Standard Operating Procedures are:

(a) to ensure that the activities of the services provided by Fiordland Pilots are administered so as to provide a quality service with due regard to the safety of human life, and the avoidance of damage to the environment and property; and
(b) to encompass existing good practices.

The Fiordland Pilotage Standard Operating Procedures should ensure:

(a) compliance with mandatory local, national and international rules and regulations;
(b) relevant guidelines and standards recommended by recognised maritime industry organisations are taken into account;
(c) relevant and recognised customs and traditions are taken into account.

1.3 Application

These Standard Operating Procedures are applicable in all Fiordland pilotage areas administered by the Southland Regional Council.

3 Directions

3.1 General Directions

Fiordland presents a rugged, majestic and sheer coastline with equally impressive intra-coastal passages. The coast drops off to great depths quickly and the sheer rock walls of the various sounds also plunge to considerable depths, as a result of which there are few safe anchorages.

The physical characteristics, especially the often confined nature of some passages, mean that wind speeds within the Fiords may be several times those encountered offshore, and this effect must be considered before entering. Conversely, strong winds outside the Fiords may lead to calm waters inside. Wind shear may be encountered around prominent headlands.

Pilots will be familiar with the 'zero discharge' to water requirements of the Cruise Deed of Agreement (see Appendix 1), and the requirement to take all reasonable steps to minimise smoke opacity levels within the Southland coastal marine area.

Pilots will be familiar with the restrictions on vessel speed within Fiordland where a maximum speed of 5 knots must be maintained within 200 metres of the shore or within 50 metres of another vessel, except where ship handling conditions make this inappropriate.

Pilots will ensure that the vessel is a signatory to the "Cruise Ship Deed of Agreement" to carry out the proposed activities within the Southland coastal marine area.

Pilots will be familiar with the Southern Police District Fiordland/Coastal Passenger Ship Emergency Plan (see Appendix 6) and have a working knowledge of its contents.

Pilots will be familiar with the Fiordland Cruise Ship Safety Management System Manual and the purpose of that framework. Pilots are to be aware that Milford tourist launch operations also have a safety management system and follow a Milford Code of Practice.

Pilots will be familiar with the restriction on sounding the ship's whistle, siren or horn only as a navigation safety signal (Southland Regional Council Navigation Safety Bylaws).

3.2 Local Conditions

Weather

Fiordland is a region of rugged majesty with sheer cliffs plunging almost vertically, the nature of the terrain lending itself to the generation of katabatic winds and the confined nature of some passages can result in local winds considerably stronger than those offshore. Wind shear may be encountered around some headlands. Weather forecasting for the area is difficult, as it is the part of the country where many weather systems first come ashore. The weather conditions may change rapidly and must be constantly monitored and the area forecast regularly updated. Weather forecasts are broadcast on VHF 71.

Wind

As noted above, accelerated wind speeds may be encountered within the fiords. The effect of winds of a given direction and velocity also varies in different sounds to the extent that what may be perfectly acceptable in one could cause difficulties in another.

As the size of ships under pilotage also varies (from about 1,000 gross tons (GT) to 148,000 GT) along with their handling characteristics, a large number of variables are present. The decision on whether or not to proceed will be based on experience and made in consultation with the particular vessel's master and bridge team. The potential consequences of a cruise ship being involved in an accident while transiting a Fiordland sound are so catastrophic that the safety ethic cannot be over-emphasised:

"If in doubt, keep out"

Tidal Streams

Generally, tidal streams in Fiordland are not of sufficient strength to be of concern, but two locations where there may be some tidal influence are the approach to Thompson Sound from seaward and transiting Paget Passage, in Dusky Sound.

Because Thompson Sound is entered at right angles to the tidal flow its influence may be noticeable and care must be taken to counter it.

When transiting Paget Passage, attention must be paid to the tidal information presented on charts NZ7653 and NZ7656, as the slow speed at which the passage is taken may exaggerate the tidal effect. Along the coast, the general flow of the current is to the southwest, while the flood tide sets to the south west and the ebb to the northeast.

Anchorages

The sheer cliffs which make Fiordland such a desirable cruising destination also generally plunge to considerable depths meaning there are very few anchorages available and none for larger vessels that could be considered safe, especially in adverse weather. At the first sign of deteriorating weather conditions, the vessel should put to sea or seek shelter in a more appropriate position within the fiords.

3.3 Pilotage Limits

Part 90 of the Maritime Rules lays down the following as compulsory pilotage areas for vessels over 500 GT in Fiordland:

- ***Milford Sound Harbour***

The area of the sea and tidal waters of Milford Sound is south of a straight line drawn from St Anne Point in a 090° T direction to the opposite shore and including the wharf limits at Deep Water Basin.

- ***Poison Bay Harbour***

  The area of the sea and tidal waters inside a straight line from Seabreeze Point in a 215° T direction to the opposite shore.

- ***Breaksea & Dusky Sound Harbours***
  The area of the sea and tidal waters inside a straight line from Rocky Point to North Point of Breaksea Island and from the West Point of Breaksea Island in a 180° T direction to the opposite shore and from Five Finger Point to South Point.

- ***Doubtful & Thompson Sounds Harbours***

  The area of the sea and tidal waters inside a straight line from Febrero Point to Southwest Point on Secretary Island and from Colonial Head to Shanks Head.

3.4 Access to Internal Waters of Fiordland by Cruise Ships

Access to the internal waters is controlled by the Deed of Agreement conditions, which are based on the requirements of Rule 13.1 of the Regional Coastal Plan for Southland (See Appendix 2). Rule 13.2 of the Coastal Plan sets out the conditions under which ships greater than 1000 GT, other than cruise ships, may enter the internal waters of Fiordland.

3.5 Directions for transiting Milford Sound

Charts NZ7622 "Milford Sound to Sutherland Sound", and NZ7621 "Milford Sound"

For vessels arriving from overseas the pilot will board about 2-3 miles WNW of Saint Anne Point or in a position mutually agreed by radio.

Fishing floats may be encountered in the approaches to Milford Sound.

Approaching Dale Point a convenient "wheel-over" point may be with Dale Point and Copper Point in transit. At 10 knots a rate of turn of 20 degrees per minute is recommended, but the rate of turn and position must be constantly monitored as the vessel may be deflected from her intended track, especially in northerly winds. A rate of turn in excess of 15 degrees per minute is often required. Wind shear may be experienced rounding Dale Point and accelerated wind speeds are common between Dale Point and Copper Point. Once past Copper Point, the vessel may depart from the indicated track for sightseeing, but mariners should always be mindful that local tourist vessels navigate within the Sound in a clockwise direction i.e. they keep to the port side. Kayakers and other recreational users may also be encountered.

The effect of the anabatic "Day Breeze", generally encountered in Milford Sound during the afternoon, must be taken into account, especially if it is intended to stop to embark/disembark passengers. Milford Port Control may be contacted on VHF 14.

Outward bound it is important to have the vessel properly positioned in the middle of the channel approaching Dale Point. A convenient wheel over point is when Saint Anne Point is clear of Dale Point and a rate of turn of 20 degrees per minute at 10 knots is recommended, however depending upon prevailing conditions, a rate of turn in excess of 15 degrees per minute is often required.

3.5.1 Anchorages

Small vessels may anchor in Anita Bay. Larger vessels may anchor in Harrison Cove; however, in the Coastal Plan, this is a prohibited activity in a depth of less than 60 metres. In ideal conditions, a vessel may lie to her anchor close to the head of Milford Sound near the approach channel to Deep Water Basin. These anchorages are not satisfactory in any but calm conditions and a vessel lying in Milford Sound for passenger activities will find it best to lie stopped, maintaining position by the use of engines and thrusters.

Anchoring in Doubtful Sound

During underwater ROV surveys in 2012 to determine suitable anchorage areas for cruise ships sensitive benthic environments were discovered south of Secretary Island. Anchoring is now prohibited in the shaded area shown in Appendices "Seymour Island Prohibited Anchoring Area" shown as Chart 3A. An alternative anchorage location outside the sensitive areas is shown on this chart at Lat/Long 45 18.1'S; 166 58.95'E (Blanket Bay).

3.6 Directions for transiting Poison Bay

Chart NZ7622 "Milford Sound to Sutherland Sound"

Occasionally, smaller cruise vessels seek anchorage in Poison Bay, but this is only permitted for shipboard duties, not for cruising purposes. Permission should be obtained either from the Regional Harbourmaster or at the discretion of the Pilot and Regional Harbourmaster notified.

The bay is open to the north-west but reasonably sheltered from all other directions, and anchorage may be obtained close to the entrance and at the head of the bay, both in 40 m of water.

3.7 Directions for transiting Thompson and Doubtful Sounds

Charts NZ7624 "Charles Sound to Dagg Sound", and NZ7625 "Thompson Sound and Doubtful Sound"

Southbound

The approach to Thompson Sound is made across the inshore current and vessels may also experience strong winds and/or swell on the beam which may increase as the entrance is approached due to the wind deflecting off the steep coastline.

Extreme care must therefore be taken to ensure the vessel maintains her track.

Once within the entrance, Thompson Sound presents no particular navigational difficulty until Common Head is approached. Even though calm conditions may have been experienced in the transit of Thompson Sound, strong westerly winds may be encountered in the channel between Omapere Rock and Seymour Island causing a decrease in the rate of turn and carrying the vessel towards Seymour Island. Whitecaps beyond Seymour Island will give a warning of strong winds, but, in any case, extreme care is required.

Common Head should be rounded at a distance of about two cables, and once clear of Omapere Rock, a course will be shaped to pass south of Marcaciones Point. Kayakers may be encountered in this area.

Pass south of Utah Island for Gaol Passage (Patea Passage), keeping well clear of the rock about 1 cable west of Utah Island. Particular attention must be paid to the course made good while transiting Gaol Passage as strong northerly winds may be deflected off the sheer cliffs on the south side of the passage causing the vessel to make leeway to the north while in the lee of Bauza Island, but to the south as Jamieson Head is approached.

Tarapunga Rock lies six cables west of Jamieson Head, which should be rounded at a distance of three cables.

A convenient wheel-over point may be as Nee Islets clear Jamieson Head. Once the Hares Ears bear less than 300°T the vessel is clear of Tarapunga Rock, and a turn to seaward may be commenced.

Northbound
Doubtful Sound will be approached north of the Hares Ears keeping the west end of Bauza Island bearing more than 130°T until the vessel is clear of Tarapunga Rock when course may be shaped to pass between Tarapunga Rock and Jamieson Head, rounding Jamieson Head at a distance of two cables.

Similar effects may be experienced in Gaol Passage as described for a southbound vessel. Once clear of Bauza Island a course may be shaped for Pendulo Reach between Common Head and Seymour Island, again keeping a sharp lookout for kayakers.

Rounding Common Head again requires a distance of about two cables, and thereafter the transit of Thompson Sound is quite straightforward.

3.7.1 Directions for transiting Te Awaatu Channel (The Gut)

In good weather, in consultation, and with the Master's approval, some ships, usually up to 200m LOA, may transit Te Awaatu Channel (The Gut) between Bauza Island and Secretary Island. Make a radio call prior to entering The Gut, as there may be fishing boats or tourist launches in the area, intending to enter, or even inside The Gut. For example: "*All ships, all ships, this is cruise ship _____ transiting The Gut in five minutes north/south bound.*"

NB: when coming from either way, the depth sounder will rise rapidly from over 100m to about 24m.

Southbound
Follow the route for south-bound transit of Thompson Sound and Doubtful Sound, already detailed, until the vessel is clear of Omapere Rock (south cardinal mark). From this

point steer courses for the centre of The Gut (width 1 cable), ensuring a minimum distance of 2 cables to the starboard coastline, to avoid Renown Rock.

Once clear of Bauza Island (north) there is a choice to sail either to the north or to south of the Shelter Islands:

- To the south of the Shelter Islands follow north Bauza Island. With a safe distance of 3 cables to NE Bauza Island, staying well clear of charted drying rock. Thence steer for centre channel (width 1 cable) and clear water to the north of Hares Ears.
- To the north of Shelter Islands. Maintain mid channel (PI 2 cables to starboard coastline) until clear of Shelter Islands, turning to port at a safe distance of 3 cables around charted drying rock.

NB: stay well to the south of drying rock approx. 7 cables to NNW of the Shelter Islands.

Northbound

When approaching Doubtful Sound from sea steer either to the north or to the south of the Shelter Islands.

- To the north of Shelter Islands maintain a safe distance of 3 cables to the north of Shelter Islands until abeam of the islands (approx. range to Secretary Island ahead: 3 cables) before turning into the channel. From here steer for the centre of The Gut, about 3.5 NM.
- To the south of the Shelter Islands when abeam of Hares Ears turn to a SE'ly course towards Bauza Island, maintaining 2 cables safe distance to the Shelter Islands. When abeam of the Shelter Islands (approx. range to Bauza Island ahead: 6 cables), turn to port to steer for the centre of the channel and a safe distance of 3 cables to NE Bauza Island. When abeam of charted dangerous rock, turn to starboard and steer for the centre of The Gut.

3.7.2 Directions for transit to Deep Cove

Resource consent is required for cruise ships to proceed to Deep Cove, and they do not normally do so. In a medical emergency, however, it may be necessary; and occasionally other vessels take equipment into Deep Cove.

The passage up Malaspina Reach and Doubtful Sound is quite straightforward passing to the west of Fergusson Island and Elizabeth Island and then north of Rolla Island into Deep Cove. The wharf in Deep Cove is 41 metres long so if the vessel is berthing there lines boat(s) and lines handlers will be required for all but the smallest vessels. The wharf is cantilevered off the rock face giving depths of 12 to 15 metres alongside. It is usual to berth starboard side to at Deep Cove Wharf.

If the vessel is turning in Deep Cove, and departing, it may be best to keep to the western side of the cove and turn to port as the outflow from the Lyvia River and Manapouri tailrace will then help rather than hinder the turn.

3.7.3 Anchorages

Small vessels can find a sheltered anchorage in Deas Cove but this may become untenable in strong northerlies.

Within the "Green" area (see maps/cruise ship "Deed of Agreement" Appendix 1) larger vessels may find temporary anchorage north of Seymour Island, but as anchoring here partially obstructs the channel between Seymour Island and Common Head it may only be

used if it is known there are no other vessels in transit. Quite large vessels have anchored in Blanket Bay and in about 30 metres of water off Espinosa Point.

In an emergency, or where the safety of ship, passengers or crew are at risk, anchorage may be found in the "Red" area west of Macdonell Island, Bradshaw Sound, north of Elizabeth Island, north to north west of Rolla Island outside Deep Cove, at the head of Deep Cove itself, or at the head of most other Arms.

3.8 Directions for transiting Breaksea and Dusky Sounds

Charts NZ7653 "Breaksea and Dusky Sounds", NZ7655 "Breaksea Sound", and NZ7656 "Dusky Sound".

Southbound
The approach to Breaksea Sound is made through the channel between Breaksea Island and Oliver Point. As the Sound opens the vessel should steer towards Entry Island, keeping well clear of the foul ground south of Oliver Point.

Entry Island may be passed on either hand, but the normal passage is to the south of it giving an easy turn into the Acheron Passage. Keep to the centre of the Acheron Passage, especially in the narrower southern part, and take care to stay at least two cables off Passage Point to avoid the foul ground there.

Follow the Bowen Channel round to Porpoise Point, passing at least two cables south of Porpoise Point to avoid the rock and foul ground off the point. Once clear of Bowen Channel steer for Passage Islands passing about three cables north of Indian Island. Pass down the middle of the channel between Indian Island and Passage Islands steering to the east of Thrum Cap rounding it at a distance of two cables, pass two cables south of Nomans Island thence to sea keeping at least four cables off the land on either side to avoid the extensive foul ground.

Fishing floats may be encountered off Dusky Sound and may be best avoided by favouring the north side of the Sound until well clear of the land.

Northbound
Again, favour the north side of the sound keeping at least four cables off to avoid the foul ground. Shape a course to pass two cables south of Nomans Island, round Thrum Cap at a distance of two cables and pass mid-way between Indian Island and Passage Islands.

Once clear of Indian Island steer for Porpoise Point passing two cables south of it to avoid the foul ground there and enter the Bowen Channel. Follow the shore of Resolution Island staying two cables off until entering the Acheron Passage. Take care to avoid the foul ground off Porpoise Point and pass through the centre of the narrow channel at the southern end of the Acheron Passage. Once the Acheron Passage widens, stay at least two cables off the land on either hand and, as the channel between Resolution Island and Entry Island opens, alter course to pass through the middle of the channel.

Once clear of Entry Island steer for the channel between Breaksea Island and Oliver Point, taking care to avoid the foul ground south of Oliver Point and thence through the centre of this channel out to sea.

3.8.1 Anchorages

Within the "Green" area there are no safe anchorages in Breaksea Sound or the Acheron Passage. In Dusky Sound vessels may find shelter between Anchor Island and Petrel Islands in Anchor Island Harbour, north of Pigeon Island in the approaches to Facile Harbour or east of Five Fingers Peninsula in the approaches to Cormorant Cove and Goose Cove.

Small vessels may anchor in Duck Cove.

The anchorages in Pickersgill Harbour and Cascade Cove are given under Paget Passage and Cook Channel section.

In an emergency, where the safety of the ship, passengers or crew is at risk, a number of anchorages are available in the "Red" area.

The best anchorage in Breaksea Sound is considered to be that in Beach Harbour, east of Harbour Islands.

When transiting the Acheron Passage an emergency anchorage may be found north of Oke Island in Wet Jacket Arm. In Dusky Sound, an emergency anchorage may be found at the head of the sound in Supper Cove.

3.9 Directions for transiting Paget Passage and Cook Channel

Charts NZ7653 "Breaksea and Dusky Sounds", NZ7656 "Dusky Sound".

In good weather, some vessels, usually up to 200 m LOA, and in consultation with the Master, may pass south of Long Island via Paget Passage and Cook Channel. This route should only be attempted in calm weather. **Under no circumstances attempt the passage in adverse conditions.**

If it is intended to take this route calculate an ETA at Paget Passage and note the state of tide and strength and direction of the anticipated tidal stream there. This information will be found on Charts NZ7653 and NZ7656.

Note: The drying rock on the east side of the Passage can only be seen at low water, and an isolated danger beacon has been placed.

Southbound

Follow the procedure for a Southbound transit of Breaksea and Dusky Sounds already detailed until vessel approaches Passage Point at the southern end of the Acheron Passage. Then once clear of the foul ground off Passage Point alter course to port and steer to pass about four cables south of Shag Islands.

Earlier editions of Chart NZ7653 indicated a 000°-180° track through Paget Passage,[1] but did not give the optimum distances off either the drying rock on the eastern side of the Passage or the foul ground on the western side south of East Point. Rather, a track of about 155° T through the passage with a closest approach to East Point of 1.2-1.3 cables is preferable.

Establishing a parallel index to maintain this closest approach to East Point may assist. Once clear of the foul ground south of East Point steer mid-channel through Cook Channel passing south of Long Island, Curlew Island and Indian Island, and re-join the outward route from Dusky Sound already described south of Nomans Island.

Northbound
Enter Dusky Sound as previously described until approaching Nomans Island when course should be altered to pass south of Indian Island, Curlew Island and Long Island through Cook Channel.

As Paget Passage is approached it is preferable to follow the line of the south shore, staying about two cables off. A track through Paget Passage of about 335 degrees T, with a closest approach to East Point of 1.2-1.3 cables, is recommended. Establishing a parallel index to maintain this closest approach to East Point may assist. When following a track, two cables off the south shore a convenient wheel-over point is when Shag Islands start showing clear of East Point. As always the turn must be carefully monitored for the effects of wind and/or tide. Once clear of Paget Passage alter course to pass midway between Passage Point and Front Islands and once the Acheron Passage begins opening a turn into the Passage may commence, taking care to avoid the foul ground off Passage Point. Thereafter follow the northbound route previously described.

3.9.1 Pickersgill Harbour/Cascade Cove

Because of its historical significance, some smaller cruise ships arrange to land passengers at Astronomer Point, Pickersgill Harbour. To facilitate this, the vessel may anchor off Pickersgill Harbour or in Cascade Cove.

Approaches to Pickersgill Harbour should only be attempted in small vessels[2].

3.9.2 Anchoring off Pickersgill Harbour

Approach the harbour from the north-east passing midway between Crayfish Island and the land ESE maintaining bare steerage way and paying careful attention to soundings. Anchor when soundings decrease to about 60 metres. In northerly conditions, this anchorage is untenable and the vessel should anchor in Cascade Cove.

Entry to Cascade Cove may be made either to east or west of Heron Island, but the channel south east of the island is the wider. Pass between the small islet and the drying rock close within the entrance. Care must be taken to remain mid-channel when attempting the west channel and a minimum distance of 100 m should be maintained to the east side of Cascade Cove. A rock 0.3' south of Heron Island, now marked with an isolated danger beacon, should be kept to the east. Sheltered anchorage may be found in about 40 metres of water.

[1] This track is no longer shown on the current edition of NZ7653
[2] "Small vessels" is defined as a cruise ship (usually of the adventure type) up to 130m LOA

Large numbers of fishing floats are often present and due to the restricted swinging room a running moor may be the best option.

3.9.3 Facile Harbour/Pigeon Island

Approaches to Facile Harbour should only be attempted in small vessels. From the south remain close to the east side of Five Fingers Peninsula (approx. 0.25'). When Parrot Island north point is bearing 090 commence constant radius turn (R=0.5') into Facile Harbour, until Pigeon Island is ahead. Safe anchorage can be found in 40 m deep water to north of Pigeon island. Maximum swinging room 0.2'.

Approaching Facile Harbour from the north (via Acheron Passage), follow the Bowen Channel to east of Anchor Island ensuring 0.2' to Useless Islands to starboard and 0.2' to Anchor Island to port. Steer for approx. 0.2' south of Parrot Island and commence constant radius turn into Facile Harbour (R=0.5') as above.

3.10 Table of Distances

Saint Anne Point to head of Milford Sound to Saint Anne Point	16 miles
Saint Anne Point to Colonial Head, Thompson Sound	53 miles
Colonial Head, Thompson Sound to Hares Ears, Doubtful Sound	20 miles
Hares Ears, Doubtful Sound to Breaksea Island, Breaksea Sound	21 miles
Breaksea Island, Breaksea Sound to South Point, Dusky Sound	24 miles
Breaksea Island to South Point via Cook Channel	31 miles
South Point, Dusky Sound to Bluff Pilot Station	104 miles
South Point, Dusky Sound to Otago Pilot Station	240 miles

3.11 General Requirements

Under the terms of the Environment Southland cruise ship "Deed of Agreement" cruise vessels' itineraries for Fiordland Sounds must be notified up to 6 months in advance of the actual visit, and under this agreement cruise ship visits are limited to a maximum of two vessels per day in "any waterway, passage, fiord, bay or inlet" (see Section 6.2 of the Deed of Agreement), which should ensure to a large extent that cruise ship transits of the Sounds will not coincide and that all cruise vessels, the Milford Harbour Controller, Environment Southland and emergency services will know the schedule and position of all transiting cruise ships.

Area of Operations

Visits by cruise ships to areas other than those shown Green on the Maps 1 to 5 (Appendix 1) are either prohibited in the Regional Coastal Plan, or require a specific resource consent to be granted by Environment Southland prior to the visit.

The anchorages shown on the maps are those identified by the New Zealand Cruise Association as being the positions normally used by vessels that operate under this Agreement. Any changes or additions to those positions shown require endorsement at the Annual Consultative Meeting.

It is recognised that any other anchorage may be used at the discretion of the ship's Master and/or Pilot during times of bad weather, or in the event of an emergency.

Restrictive Parameters

When Cruise New Zealand or an independent operator proposes a new vessel for entry into the internal waters of the Fiordland coastal marine area the Environment Southland Harbourmaster and Fiordland pilots (through the Fiordland Pilots' Working Group) will investigate that vessel's dimensions and handling characteristics to determine if she can be safely navigated within the area.

Speed Restrictions

No person shall navigate a ship (including a ship towing some object) at a proper speed exceeding 5 knots when within:

- 50 metres of any other ship, floating structure or person in the water;
- 200 metres of the shore or any other structure; or
- 200 metres of any ship or floating structure that is flying flag A.

The above clause shall not apply to any ship that cannot be navigated safely in compliance with this clause, but this ship shall comply as closely as is safely practicable.

Milford Sound Tourist Fleet

The powered tourist craft within Milford Sound maintain a clockwise route when transiting Milford Sound, i.e. when proceeding to the mouth of the sound they keep close to the western wall and conversely when returning they keep close to the eastern wall of the sound (see Milford Sound Code of Practice).

Tourist kayaks also use the fiord. Their manoeuvrability can be severely limited by wind and the inexperience of some paddlers. Extreme care must be exercised (see Milford Sound Code of Practice).

Commercial Vessels

Every commercial ship shall ensure, when navigating within harbour limits, that:

- the main engines are to be immediately available for reducing speed, stopping or going astern at all times without delay;
- anchors are immediately available for letting go in an emergency and capable of being used without power;
- all aids to navigation, including, but not limited to, radar and depth recording devices, if fitted are to be in continuous operation and fully utilised.

The master of every commercial ship while navigating within harbour limits shall ensure that sufficient trained personnel are tasked with monitoring the ship's progress and implementation of the agreed passage plan.

3.12 Communications

Maritime Radio

Maritime Radio maintains a continuous listening watch on VHF 16 throughout Fiordland via a series of repeater stations.

Milford Sound

Milford Harbour Control and the local tourist fleet and professional kayak operators keep a listening watch on VHF 14 (usually manned by Harbour Control 0800 – 1700).

Cruise Ships in Transit

All vessels will broadcast an "All Stations" notification on VHF 16 at least 15 minutes before entering any compulsory pilotage area within Fiordland National Park, advising their position, intentions and approximate schedule. Fishing vessels working in Fiordland usually keep a listening watch on VHF 10, as do organised kayakers.

All ships

While within the Southland coastal marine area, a listening watch will be maintained on VHF 16.

Weather Forecasts

Weather forecasts are broadcast on VHF 71.

3.13 Passage Planning

The pilot will be expected to take on board the vessel a copy of the approved passage plans. On boarding the vessel, he/she may be made aware of additional factors, such as the vessel's handling characteristics. These may require the passage plan to be amended.

The passage plans in this document shall be updated as required and reviewed annually. A revised passage plan shall be provided to all appropriate cruise ship operators prior to their ship's arrival.

4 Document Control

As stated in the Fiordland Cruise Ship Safety Management System, the pilotage service providers are responsible for advising and distribution of documents to pilots as required. This is applicable to all documents belonging to the Fiordland Cruise Ship Safety Management System, as well as all applicable rules, regulations and guidelines promulgated by Maritime NZ, Environment Southland and other national and international maritime organisations. Pilots are responsible for maintaining their personal copies of the nautical charts.

5 Personnel and Resources

5.1 General Provisions and Selection

Selection of the right personnel to fill positions affecting the Fiordland Pilotage providers' performance is a vital factor in ensuring the safety of the serviced vessels and the environment. To make certain that the pilot has the appropriate innate skillset for the position the recruiting procedures will take into consideration but is not restricted to the following requirements:

(a) the applicant must hold a certificate of competency as Master of a Foreign Going ship issued or recognised under Section 41 of the Maritime Transport Act 1994. Any overseas qualification must go through the formal recognition process and must be from an administration that has a mutual agreement under the STCW convention;
(b) the applicant must hold a current pilot licence for other pilotage areas in New Zealand;
(c) the applicant must hold a current valid certificate for medical fitness for seafarers as described under Maritime Rule part 34 - Medical Standards;
(d) the applicant must have completed an "Advanced Pilots" training course at an approved training provider;
(e) the applicant must be a "fit and proper person" as defined in the Maritime Transport Act 1994.

5.2 Training

The Fiordland Pilots training programme is based on practical onboard instruction and training provided on ships under the guidance of a senior pilot licensed for the area and approved by the Harbour Master. Pilot training must be conducted as per the Fiordland Pilots Training Manual approved by Maritime NZ.

5.3 Pilot Licence Grading

The pilot service has two licence levels:

Grade 2 (Limited pilot) – vessels up to 70.000 GRT or 250 m LOA
Grade 1 (Unlimited)

The training required for progression through these grades is defined in the approved Fiordland Pilot Training Manual.

5.4 Exercise of Privilege

Pilots will hold a valid pilot licence for Fiordland.

To maintain the validity of the licence a minimum of four solo pilotage acts (two northbound and two southbound) over 18 months will apply. Failure to complete the Exercise of Privilege criteria will result in lapsing of the pilot's licence, in which case retraining and reassessment of competence will then be required.

In accordance with MR Rule 90.81 (4) currency may be maintained by the use of a ship simulator. The minimum requirement listed above may be reduced by no more than 25%, however, or one north or south transit.

5.5 Continuing assessment

Various tools may be used as a mechanism toward continued currency and competence including, but not limited to:

- ongoing training, i.e. simulator training, electronic aids to navigation, BRM; azipod training;
- peer review;
- provision of industry relevant texts and journals;
- continued familiarity with pilot service providers and other, local emergency response plans and procedures;

MR 90.45(1)(c) provisions require an annual assessment by a suitably qualified person, generally a pilot with a current Unlimited Fiordland Pilot licence. The Director, Maritime New Zealand has agreed that the assessor may be a suitably qualified (and approved) person other than a licensed Fiordland pilot.

6 Pilot Logistic Operations

6.1 Pilot Boat Procedures

There is one pilot boat in Milford Sound – Fiordland Pilot Services Limited maintains a pilot boat which is also moored in Deepwater Basin. Servicing and manning of the vessel is provided by Port Otago Limited.

Pilot boat manning

The pilot boat skipper must comply with the relevant Maritime NZ qualifications for operating a commercial vessel. The maximum number of persons allowed onboard is in accordance with the pilot boat Safe Manning Certificate. The pilot boat skipper is to ensure all persons on board are wearing lifejackets when appropriate. The pilot boat skipper is fully responsible for the safe navigation of the pilot boat. The navigation of the pilot boat shall fully comply with Maritime NZ Maritime Rule Part 22 Collision Prevention and with Southland Regional Council Navigation Safety Bylaws.

Pilot boat manning training

Pilot boat manning training is provided by the pilot boat providers, and must be logged accordingly in the pilot boats' log books.

Pilot boat operations

Pre-departure checklist to be carried out and logged accordingly.

Pilot boat equipment

The pilot boat equipment must comply with Maritime Rules part 40C: Design, Construction and equipment Non-passenger ships that are not SOLAS ships, and is audited to SSM standards.

Pilot boat backup

The pilot boat in Milford Sound is essential to the safe operations of pilot boarding and disembarking, and the operators of the pilot boat must ensure that they have a "backup plan" in place to provide a suitable alternative vessel in the event of any failure, mechanical or otherwise, of the primary pilot boat. The "backup plan" shall be submitted to the Regional Harbourmaster for approval. Approved helicopter training must be undertaken by both pilotage providers as a backup means for winching pilots on board in the event that the primary pilot boat is unavailable.

6.2 Pilot Transfer Arrangements

All pilot transfers shall be in compliance with SOLAS, Chapter V – Safety of Navigation, regulation 23: "Pilot transfer arrangements" and NZ Maritime Rules Part 53 – Pilot Transfer Arrangements and Ship-Helicopter Pilot Transfers.

6.3 Emergency Preparedness

Measures to ensure the proper response to hazards, accidents and emergency situations are as follows:

- onboard pilot boat contingency plans are according to the vessel's approved Maritime Operator Safety System (MOSS) manual.

The above procedures include, but are not restricted to, the allocation of duties of the personnel within the plan, emergency response procedures, and procedures to follow in response to different types of hazardous occurrences and communication methods - including list of contacts, dealing with the media and notification to next of kin.

7 Pilotage Operations

7.1 The Pilot

The pilot is responsible for his or her own professional development derived from the training and experience provided and as required by the pilot services.

The pilot should contribute to a good working environment with the Master and bridge team members while providing maritime pilotage.

The pilot should be aware of the possible differences in culture and languages on board vessels. English is the working language.

When a pilot first boards a vessel a full Master/Pilot exchange will be undertaken with the pilot ensuring he/she is familiar with the vessel's manoeuvring characteristics, propulsion and steering systems (fixed or controllable pitch propellers, Azipods, single or twin rudders, thrusters etc), with particular regard to turning circle and stopping distance, and with the bridge equipment. Appendix 5, sets out a Fiordland Passage Plan and fiord pre-entry Checklist, which is to be completed during and prior to the transit of the fiords.

At least 15 minutes before entering any compulsory pilotage area within Fiordland all vessels will broadcast an "All Stations" notification on VHF Channel 16 advising their position, intentions and approximate schedule. While within the Southland coastal marine area, a listening watch will be maintained on VHF Channel 16.

Before entering each sound the pilot will conduct a briefing with the bridge team to ensure all are familiar with the proposed route and schedule, speed at various points, any dangers adjacent to the vessel's proposed track, clearing bearings and distances off, wheel over points, anticipated weather, state of tide and the influence it may have, any other traffic likely to be encountered and any other relevant information. The bridge team must be left in no doubt that they must challenge the pilot's conduct of the vessel if they are in any doubt concerning the pilot's actions or intentions. The bridge team must also be aware of their requirement to monitor the vessel's position constantly and advise of any set or leeway encountered. The pilot will be kept informed of the status of all bridge, steering and propulsive equipment, whether anchors are cleared/secured, watertight doors open/shut, stabilizers housed/operating and of any change in their status.

The pilot should be fully aware of all factors that may affect the pilotage passage. The information may be obtained from the following sources:

- the Standard Operating Procedures in this manual
- the Fiordland Cruise Ship Safety Management System;
- navigation warnings and notices to mariners;
- shipboard navigation systems and equipment;
- shore-based systems and port operations;
- meteorological and hydrological information.

The principles of Bridge Resource Management will be adhered to at all times.

The pilot should be up to date with analysis from the "reporting systems" made available to him (non-conformities, accidents and hazardous occurrences) in support of his professional development and performance. These systems are detailed in the Fiordland Cruise Ship Safety Management System.

The pilot should cooperate with the pilot services management with respect to training and proficiency programmes.

The pilot is responsible for his behaviour while providing maritime pilotage.

7.2 Safety Management System

From both all maritime pilots, co-workers in the supporting services as well as crew members, it is expected that they:

- are familiar with all aspects of the Fiordland Cruise Ship Safety Management System relevant to the proper performance of the job.

This includes the Drug and Alcohol Policy (section 8.2 Drug and Alcohol Policy of the Safety Management System) and Fatigue Management (section 8.3. Fatigue Management of the Safety Management System).

7.3 Smoking Policy

From both all maritime pilots and co-workers in the supporting services, as well as the crew members, it is expected that they:

- only smoke on board the pilot vessel in the designated smoking area;
- only smoke in the areas onboard serviced vessels where smoking is permitted;
- only smoke in the spaces ashore where smoking is permitted.

8 Emergency Preparedness

Emergency preparedness is covered in section 7.5 Coordinated Emergency Response Planning of the Fiordland Cruise Ship Safety Management System. The relative isolation of Fiordland, the nature of the terrain and lack of community infrastructure means in an emergency a vessel will initially be reliant on its own resources. Beyond this, vessel masters in an emergency in the internal waters of the Fiordland coastal marine area should be conversant with the Southern Police District Fiordland/Coastal Passenger Ship Emergency Plan (Appendix 6).

8.1 Emergency Numbers

Duty NCO Invercargill Police	(03) 211 0400
Te Anau Police	(03) 249 7600
Rescue Co-ordination Centre New Zealand (Emergency Line)	0508 472 269
South Port	(03) 212 8159
Fiordland Pilot Services Ltd	(03) 215 8898
Environment Southland (Harbourmaster)	(03) 211 5115 or 0800 768 845
Fiordland Fishermen's Radio Te Anau	(03) 249 7402
Bluff Fishermen's Radio	(03) 212 7281

9 Reports, Audits and Analysis

9.1 Reports and Analysis

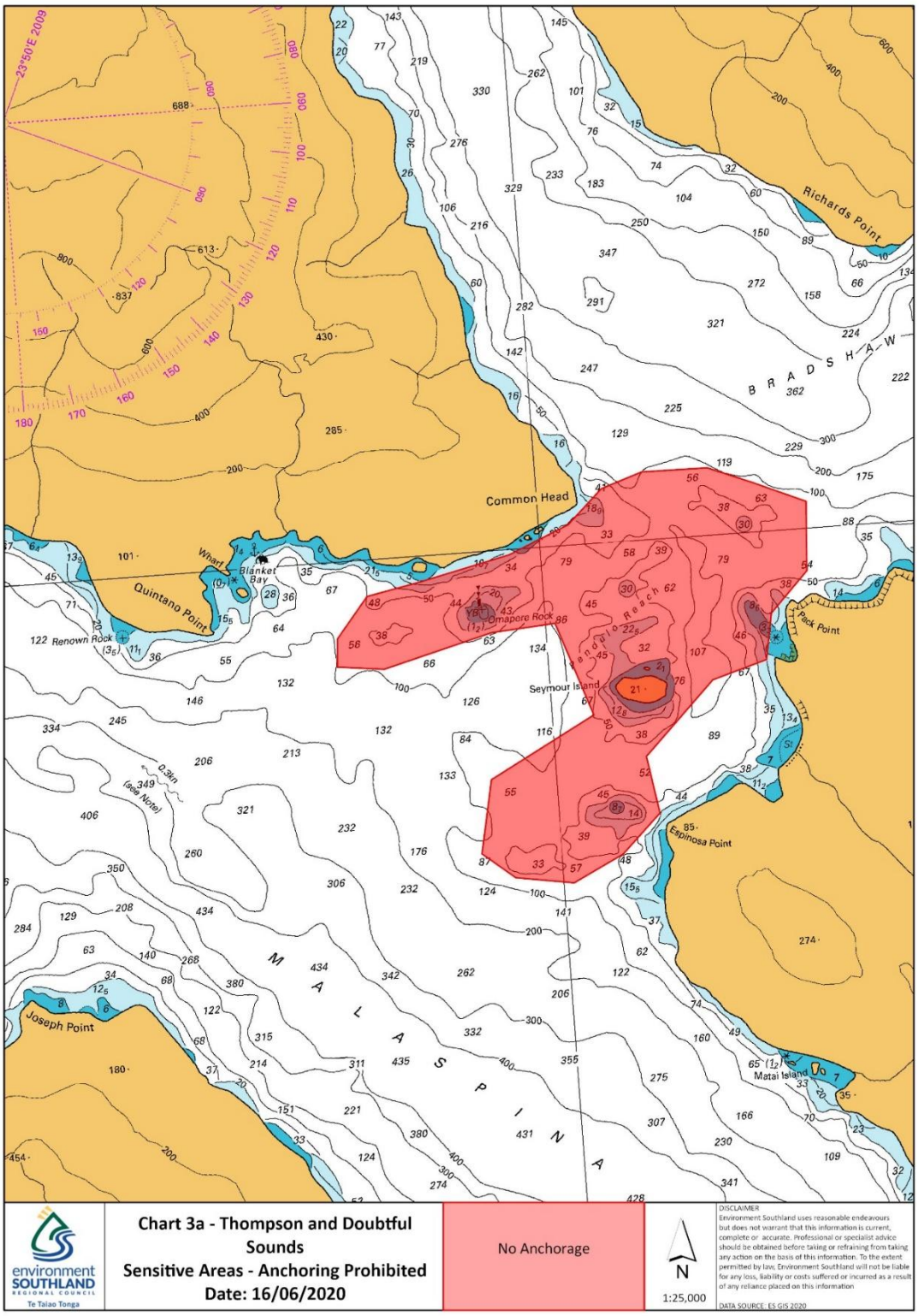
The reporting duties of the Master are covered in section 5.2 Performance Analysis System and Reporting of the Fiordland Cruise Ship Safety Management System. As stated in the Safety Management System, any persons providing reports will receive feedback through the pilot services.

9.2 Audits

Pilots may be observed (or audited) from time to time, in order to determine that all pilots are following Standard Operating Procedures and to maintain consistency. Internal audits are covered in section 4.4 Pilot Audit Programme of the SMS.

10 Appendices

Seymour Island Prohibited Anchorage Area



Appendix 1 - Deed of Agreement

Between the New Zealand Cruise Ship Industry and Environment Southland

(appended separately)

Appendix 2 - Regional Coastal Plan for Southland

Rule 13.1 - Cruise Ships within the internal waters of Fiordland and Stewart Island

1 Within:

- i Milford Sound
- ii Thompson Sound
- iii that part of Doubtful Sound extending from open coastal waters to a line between Joseph Point and Espinosa Point, excluding First Arm and areas east of First Arm
- iv Breaksea Sound west of Acheron Passage
- v Acheron Passage
- vi Dusky Sound west of the western end of Cooper Island
- vii Halfmoon Bay
- viii Paterson Inlet

a it is a permitted activity for cruise ships to enter into and pass through such waters, provided that:

- i the operator of the ship is a party to the "Environment Southland Deed of Agreement between "Cruise Ship Operators and Environment Southland".
- ii except for Milford Sound, Paterson Inlet and Halfmoon Bay:
  - a no passengers are on-loaded or off-loaded onto shore or into other ships. Expedition ships conducting tours by ships tender and having obtained current Department of Conservation permits to land ashore are exempt.
  - b no anchoring or mooring takes place.
- iii no more than two cruise ships shall enter any waterway, passage, fiord, bay or inlet in any one day.

b except as provided for by paragraph (a) above, it is a discretionary activity for cruise ships to enter into and pass through such waters;

2 Except as provided for by (1) above, it is a non-complying activity for cruise ships to enter into and pass through the internal waters of Fiordland and Stewart Island.

Note: Any cruise ship over 1,000 Gross Tons wishing to engage in any activity in the enclosed waters of Fiordland or Stewart Island, which is not party to "Environmental Partnership, Deed of Agreement between the New Zealand Cruise Ship Industry and Environment Southland", will require a resource consent for that purpose.

Rule 13.2 - Ships over 1,000 gross registered tons, other than cruise ships, within the Internal Waters of Fiordland and Stewart Island

1 It is a permitted activity for any ship over 1,000 gross registered tons, which is not a cruise ship, to enter Halfmoon Bay, Stewart Island provided that the sole purpose of such passage is to off-load and/or uplift cargo.

2 It is a discretionary activity for any ship over 1,000 gross registered tons, which is not a cruise ship, to be within:

a Milford Sound;
b Thompson Sound;
c that part of Doubtful Sound extending from open coastal waters to a line between Joseph Point and Espinosa Point, excluding First Arm and areas east of First Arm;
d Breaksea Sound west of Acheron Passage;
e the Acheron Passage;
f Dusky Sound west of the western end of Cooper Island; and
g Deep Cove and Doubtful Sound, provided that the sole purpose of such passage is to use facilities at Deep Cove to off-load cargo and uplift stores and carry out activities associated with the construction or maintenance of the Manapouri power scheme, Deep Cove water outlet or tailrace.

3 Other than provided for by (1) and (2) above, it is a prohibited activity for which no resource consent shall be granted for any ship over 1,000 gross registered tons, which is not a cruise ship, to enter and be within the internal waters of Fiordland and Stewart Island.

Note: Except for entering Halfmoon Bay for cargo transfer purposes, any non-passenger vessel over 1,000 Gross Tons, which is not a fishing vessel, wishing to engage in any activity in the enclosed waters of Fiordland or Stewart Island, will require a resource consent for that purpose.

Appendix 3 - Approved Pilot Training Manual

(Appended separately)

Appendix 4 - Master/Pilot Information Exchange

IMO RESOLUTION A.960(23)

RECOMMENDATIONS ON TRAINING AND CERTIFICATION AND ON OPERATIONAL PROCEDURES FOR MARITIME PILOTS OTHER THAN DEEP-SEA PILOTS

ANNEX 2

RECOMMENDATION ON OPERATIONAL PROCEDURES FOR MARITIME PILOTS OTHER THAN DEEP-SEA PILOTS

5 Master - pilot information exchange

5.1 The master and the pilot should exchange information regarding navigational procedures, local conditions and rules and the ship's characteristics. This information exchange should be a continuous process that generally continues for the duration of the pilotage.

5.2 Each pilotage assignment should begin with an information exchange between the pilot and the master. The amount and subject matter of the information to be exchanged should be determined by the specific navigation demands of the pilotage operation. Additional information can be exchanged as the operation proceeds.

5.3 Each competent pilotage authority should develop a standard exchange of information practice, considering regulatory requirements and best practices in the pilotage area. Pilots should consider using an information card, form, checklist, or other memory aid to ensure that essential exchange items are covered. If an information card or standard form is used by pilots locally regarding the anticipated passage, the layout of such a card or form should be easy to understand. The card or form should supplement and assist, not substitute for, the verbal information exchange.

5.4 This exchange of information should include at least:

- presentation of a completed standard Pilot Card. In addition, information should be provided on rate of turn at different speeds, turning circles, stopping distances and, if available, other appropriate data.
- general agreement on plans and procedures, including contingency plans, for the anticipated passage.
- discussion of any special conditions such as weather, depth of water, tidal currents and marine traffic that may be expected during the passage.
- discussion of any unusual ship-handling characteristics, machinery difficulties, navigational equipment problems or crew limitations that could affect the operation, handling or safe manoeuvring of the ship.

- information on berthing arrangements; use, characteristics and number of tugs; mooring boats and other external facilities.
- information on mooring arrangements; and
- confirmation of the language to be used on the bridge and with external parties.

5.5 It should be clearly understood that any passage plan is a basic indication of preferred intention and both the pilot, and the master should be prepared to depart from it when circumstances so dictate.

5.6 Pilots and competent pilotage authorities should be aware of the voyage planning responsibilities of masters under applicable IMO instruments.

Appendix 5 - Passage Plans

environment SOUTHLAND
Te Taiao Tonga

Fiordland Passage Plan Checklist

Date: ……

Vessel name: ……..……..
Planned route: ……..……..

Vessel elements

- ☐ Ship's pilot card presented
- ☐ Steering mode established
- ☐ Desired maximum rate of turn established
- ☐ Thrusters available
- ☐ Main engine ready for use
- ☐ Any deficiencies of ship that may influence the passage

Navigation elements

- ☐ Navigation equipment identified
- ☐ Radar and ECDIS for pilot use set-up & vector/predictor length confirmed
- ☐ Agreement on passage plan, incl. turning in Milford Sound
- ☐ General alert on VHF channel 16
- ☐ VHF channels 16/14/10 are to be monitored
- ☐ Critical points of transit discussed
- ☐ Weather conditions discussed, incl. expected visibility and wind
- ☐ Traffic likely to be encountered discussed
- ☐ Need for stabilizers discussed

BRM elements

- ☐ Responsibilities defined
- ☐ Deviations from the plan to be challenged

Briefings completed for each fiord

☐ Milford	☐ Doubtful Thompson	☐ Breaksea Dusky	☐ Other _____

Master: ……
Pilot: ……....

Fiordland and Stewart Island Passage Plans

www.es.govt.nz/environment/maritime/cruise-ships

Appendix 7 - Milford Sound Code of Practice

Separate document updated annually.