



COASTAL PILOTAGE EXAMINATIONS - GUIDANCE INFORMATION

The Australian Maritime Safety Authority (AMSA) administers various types of written examinations for trainee coastal pilots and those licensed coastal pilots seeking to obtain pilot licences for different coastal pilotage areas.

These examinations form part of AMSA's coastal pilot training and licensing framework described in Marine Order 54 (Coastal pilotage).

Written examinations administered by AMSA include:

- Standard Written Questions Examination
- Prince of Wales Channel (POWC) Blank Chart Examination
- Hydrographers Passage Blank Chart Examination
- Whitsundays Anchorage Blank Chart Examination.

To assist potential applicants prepare for these examinations, this guidance document provides general information about the content of these examinations including:

- the subject matter and content covered within each examination
- suggested references and study material
- AMSA's expectations for completing the written and chartwork examinations
- the examination process
- the required booking process.

Examination Content:

Standard Written Questions Examination.

This is a 90 minute exam (with a 75% pass mark) which covers a diversity of subject matter related to coastal pilotage operations and regulation including:

- Vessel reporting requirements to REEFVTS
- Services provided by REEFVTS
- REEFVTS communications methods
- REEFVTS Ship Reporting points
- Operational discharges in the Great Barrier Reef and Torres Strait
- Master / Pilot Exchange (MPX) key inclusions
- The operation of AMSA's Under Keel Clearance Management (UKCM) System



- General seamanship and ship-handling
- Standard Marine Communication Phrases (SMCP's)
- Coastal pilot licence conditions and particulars
- Coastal pilot licence types, limitations and restrictions
- AMSA's Default Fatigue Management Plan (FRMP) particulars, including minimum rest periods, leave requirements, point accruals etc.
- Vessel incident reporting requirements
- Coastal pilot marine incident reporting requirements
- Commencing and ceasing duties reporting requirements
- ECDIS implementation particulars (per IMO).

The following references are recommended as study guides for the written examination:

- Marine Order 54 (Coastal pilotage)
- REEFVTS User Guide
- AMSA's Default FRMP
- Queensland Coastal Passage Plan (QCPP)
- Relevant pages from AMSA's website
- UKCM User Guide and Tutorials
- Relevant sections of Admiralty Manuals of Seamanship Vol I & III related to pivot points and anchoring
- IMO Standard Marine Communication Phrases Booklet
- AMSA Form 18, AMSA Form 19, AMSA Form 355 (SV-HH)
- AMSA ECDIS Fact Sheet / IMO Resolution MSC.282(66).

Prince of Wales Blank Chart Exam.

This is a 90 minute examination (with a 75% pass mark) designed to assess an applicant's local area knowledge and familiarity with the relevant passage plan information detailed in the Queensland Coastal Passage Plan (QCPP) for a pilotage transit of POWC.

The blank chart provided for this exam is based on navigation chart *AUS293 Prince of Wales Channel* and is marked with basic approximations of charted hazards and land masses to provide a level of general geographical context.

An extract of the blank chart is provided in below (Figure 1). This is an example of the level of base detail provided, which must be annotated by the applicant during the chartwork exam with all navigationally significant information.

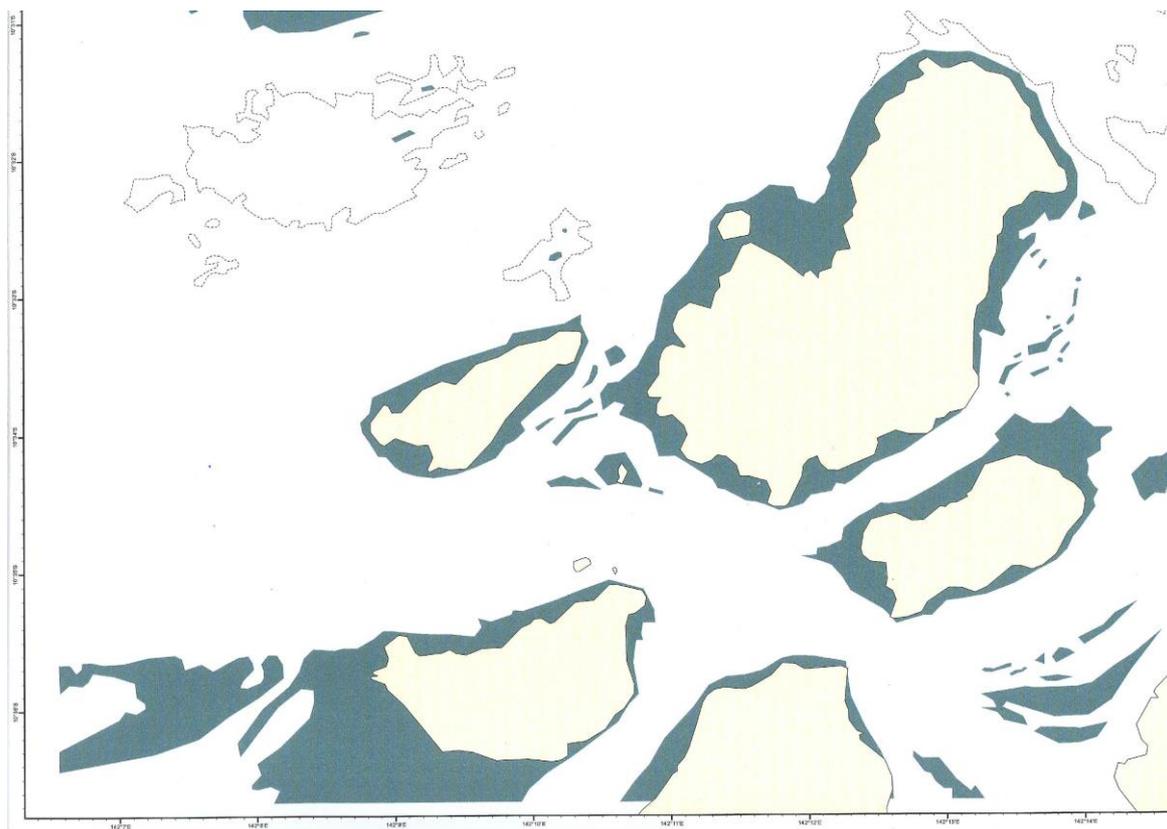


Figure 1 – Extract of POWC Blank Chart

The type of information sought in this chart exam includes:

- The location of key charted features including geographic names, reefs, shoals, rocks, islands, points (headlands) etc.
- The location of aids to navigation (AtoN) in the region and the ability to annotate such AtoN on the blank chart in accordance with correct chart symbology.
- The full charted characteristics of AtoN, including any sector arcs and colours.
- Descriptions of daytime appearances of key AtoN.
- How key AtoN (and any related sectors) can be used to assist safe navigation.
- Appropriate locations of potential gyro compass checking opportunities.
- Areas subject to any maximum draught limitations.
- Locations and values of minimum charted depths.
- Charted magnetic variation information.
- Full chartwork for a non-shallow draught passage through POWC channel (eastbound or westbound) between east of Strait Rock and west of Goods Island Pilot Boarding Ground, in accordance with the information contained in the QCPP. Chartwork is to include all tracks, waypoints (by name) and parallel indices (PI's) in accordance with the QCPP.
- A detailed narrative* (commentary) which describes how the pilotage is to be executed from the pilot's perspective.

*The detailed narrative section provides an applicant with the opportunity to demonstrate a clear understanding of how the pilotage is conducted operationally, including an appreciation of local features such as headmarks, sternmarks, selected wheelover triggers, important sector

light colour changes, AtoN specifics and how certain AtoN are best utilised, tidal influences, submerged hazards, etc.

An example narrative for a fictional leg is indicated below to assist with preparations:

“095 Leg (‘Smith (N)’ Waypoint to ‘Jones’ Waypoint):

After altering course from 062, steady on 095 with Kool Reef Light (occulting 10s) as headmark. Jones Reef light should be fine on the starboard bow. After steadying on 095, the green sector of Johnson Rock light should also be visible slightly further to starboard.

After travelling approx. 3 cables on this leg, the colour sector of Lanagan Rock light (on the port quarter) should change from white to red. At the same time, the Melu Is. leads should come into transit on a bearing of 190 (abaft the starboard beam). This transit provides an opportunity for a gyro check. Leave Cook Reef buoy on your port side.

Commence wheelover to next course (110) no earlier than the transit of Hugo Rock Light and Whince Point Light to port. Alternative triggers for the course alteration to 110 include altering no later than the transit of Hugo Rock light and the right hand edge of Darno Islet light, or at an approximate distance of 2.5 cables from ‘Jones’ waypoint.

Be aware of strong southerly tidal influence (4-5 knots) during a flooding tide in the vicinity of Jones Reef“.

In assessing the examinations, greater weighting is given to the chartwork and detailed narrative sections. Minor errors regarding AtoN characteristics, such as elevation or range, will not normally result in exam failure, however major safety-related errors (and/or omissions) in the chartwork section, or an inability to accurately describe how the pilotage is conducted in the detailed narrative section, may result in an assessment that the applicant cannot demonstrate the required knowledge.

Applicants are encouraged to develop a detailed understanding of the QCPP details, prior to sitting the exam.

The blank chart contains compass roses to assist with the placement of accurate tracks; however the cartographic accuracy of track placement is not assessed as part of the exam. For example, if a track is placed on the chart with a course indicated of 086T, the accuracy of the drawn track is not checked against the compass rose to assess whether it aligns exactly with the 086 bearing. Similarly for PIs; the actual distance annotated by the applicant on the blank chart is not measured for distance accuracy. The important aspect is that the chartwork reflects the passage plan information detailed in the QCPP.

The following references are recommended as study guides for the chartwork examination:

- Relevant chartlets from the Queensland Coastal Passage Plan (QCPP)
- Navigation chart AUS293 Prince of Wales Channel (corrected)
- Symbols and Abbreviations Used on Admiralty Paper Charts (Chart 5011)
- Admiralty List of Lights and Fog Signals (NP83) Vol. K.

Hydrographers Passage Blank Chart Exam.

This is a 90 minute examination (with a 75% pass mark) designed to assess an applicant's local area knowledge and familiarity with the relevant passage plan information detailed in the Queensland Coastal Passage Plan (QCPP) for a pilotage transit of Hydrographers Passage.

The blank chart provided for this exam is based on navigation chart *AUS821 Hydrographers Passage*

The content, structure and type of information sought in this exam mirrors the POWC blank chart exam (including chartwork and detailed narrative requirements), however the content is specific to Hydrographers Passage. Applicants are expected to be able to demonstrate detailed knowledge of the passage planning and chartwork required for safe transits of this particular coastal pilotage area.

The following references are recommended as study guides for the chartwork examination:

- Relevant chartlets from the Queensland Coastal Passage Plan (QCPP)
- Navigation chart AUS821 Hydrographers Passage (corrected)
- Symbols and Abbreviations Used on Admiralty Paper Charts (Chart 5011)
- Admiralty List of Lights and Fog Signals (NP83) Vol. K.

Whitsundays Anchorage Blank Chart Examination.

This is a 2.5 hour examination (with an 85% pass mark) which covers a range of aspects related to the conduct of pilotage within the Whitsundays pilotage area including designated anchorages.

The Whitsundays pilotage exam seeks to test local knowledge and also assess the applicant's knowledge regarding relevant legislative requirements (and the corresponding reference publications) which govern the operation of cruise ships in the Whitsundays pilotage area.

It is imperative that applicants are able to demonstrate relevant planning and chartwork skills appropriate to anchoring a cruise ship (at a designated anchorage) and how to keep a vessel safe once at anchor. The examination questions are designed to allow the applicant to demonstrate a thorough understanding of pilotage and navigation details related to each anchorage in the Whitsundays, as well as an understanding of relevant guidelines and restrictions appropriate to cruise ship operations in the Great Barrier Reef Marine Park (including vessel discharge restrictions).

In terms of local knowledge for the various anchorages, information required will relate to least charted depths (on approach and in each anchorage box), hazards (on approach and departure), tidal regimes (extent, strengths and directions of flood / ebb tides) and considerations for alternative anchorages.

The written exam contains questions which require the calculation of tides, depths, the amount of cable to veer at a specified anchorage at a calculated time. Graph paper and appropriate tidal publications are provided in order to make these calculations. Applicants should be familiar with the process for determining standard and secondary port tidal calculations using

the Australian National Tide Tables (ANTT) and the Queensland Tide Tables (official Maritime Safety Queensland (MSQ) publication only).

Applicants should familiarise themselves with the official source of tidal prediction data in Australia and why a particular tidal publication may be appropriate for use when calculating the tides for a secondary port.

The examination requires the applicant to conduct chartwork (on provided chartlets) and to plot an approach into a particular anchorage showing all relevant navigational considerations (including limiting danger lines, clearing bearings, clearing ranges, PI's, dead ranges, final swinging circles, etc.).

The following references are recommended as study guides for the written and chartwork examinations:

- For each anchorage (and approach), the relevant sections of navigation charts
 - o AUS252 Whitsunday Group
 - o AUS253 Whitsunday Passage
 - o AUS254 Plans in Whitsundays
 - o AUS825 Whitsunday Island to Bowen
- Relevant sections of the Admiralty Sailing Directions - Australia Pilot Vol 3 (NP15)
- Relevant sections of the Mariners Handbook (NP100)
- GBRMPA website pages relevant to cruise ship operations
- The Whitsundays Plan of Management
- Relevant sections of the MSQ publication 'Port Procedures and Information for Shipping (Whitsundays)'
- Australian National Tide Tables
- Australian Hydrographic Service (AHS) website
- MSQ 'Queensland Tide Tables' (available at MSQ website).

General Examination Conditions:

Applicants are provided 5 minutes reading time prior to commencing an exam. Applicants are encouraged to read each question closely during this time. If required, applicants are able to seek clarification from the exam supervisor regarding any question prior to commencing the exam.

Once the examination has commenced, the applicant is not permitted to leave the examination room until the examination is completed.

Mobile phones are to be turned off and are not permitted to be used at any time throughout the examination. No electronic aids are permitted (other than as provided by AMSA).

All materials are provided to complete each exam including pencils, eraser, pencil sharpener, compass, dividers, rolling ruler, Capt. Fields (parallel) ruler, spare paper, calculator and various reference materials depending on the examination being completed. Applicants are able to use their own writing materials and charting equipment if preferred.

Exam Preparations and Bookings:

Coastal pilotage examinations are normally conducted at AMSA's Brisbane Office (Level 9, East Tower, 410 Ann Street). Examinations (other than the Whitsundays Anchorage exam) may also be conducted at AMSA's Canberra Head Office (82 Northbourne Ave, Braddon), on request. In some instances, examinations *may* be considered at other AMSA regional offices, subject to suitable supervisory staff availability.

The conduct of all coastal pilotage written and charting examinations incurs a fee in accordance with items 8.2.7 and 8.2.8 of the 'Australian Maritime Safety Authority Fees Determination 2015' (available [here](#)).

Prior to sitting any coastal pilotage exam, applicants should allow as much preparatory time as possible to study the applicable reference material. The information provided within this guidance note is aimed at assisting applicants with such preparations.

The content and structure of coastal pilotage examinations may change from time to time. Any changes will be reflected in an update to this guidance document.

To book an examination, or to obtain further information about the content and/or structure of coastal pilotage examinations, contact AMSA's Principal Advisor - Coastal Pilotage, via:

- ph.: 07 3001 6801
- mobile: 0417 317 988
- email: coastal.pilotage@amsa.gov.au.

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