



File ref:

HBR90/191144

Version:

2.0

Issue date: March 2023

CONTENTS

• •	INT	RODUCTION	6
2.	OU	R PILOTS	6
3.	EM	ERGENCY AND USEFUL CONTACT NUMBERS	7
4.	JUI	RISDICTION	7
5.	GE	NERAL INFORMATION	7
	5.1.	Position and Function	7
	5.2.	Port Limits	7
	5.3.	Approach and Entry	7
	5.3	.1. Seaward Approach Channel	7
	5.4.	Minimum Under Keel Clearance (UKC)	8
	5.5.	Arrival Displacements	8
	5.6.	Tidal Levels and Tidal Streams	8
	5.7.	Weather Conditions	9
	5.7	.1. Dry Season Weather	9
	5.7	.2. Wet Season Weather	9
	5.8.	Bureau of Meteorology (BOM) Website	9
6.	SH	IP, TIDAL AND WEATHER LIMITATIONS	10
	6.1.	Ship Limitations	10
	6.2.	Environmental Considerations	
	6.2.6.3.	Environmental Considerations	10
			10 10
	6.3.	Tidal Stream	10 10 11
7.	6.3.6.4.6.5.	Tidal Stream Wind Limits	10 10 11
7.	6.3.6.4.6.5.	Tidal Stream Wind Limits Broome Tidal Levels (2018)	101111
7.	6.3. 6.4. 6.5. PIL	Tidal Stream Wind Limits Broome Tidal Levels (2018) OTAGE	
7.	6.3. 6.4. 6.5. PIL 7.1.	Tidal Stream Wind Limits Broome Tidal Levels (2018) OTAGE Compulsory Pilotage	10 11 11 11 11
7.	6.3. 6.4. 6.5. PIL 7.1. 7.2.	Tidal Stream Wind Limits Broome Tidal Levels (2018) OTAGE Compulsory Pilotage Exemption from Compulsory Pilotage Pilot Booking	
7.	6.3. 6.4. 6.5. PIL 7.1. 7.2. 7.3.	Tidal Stream Wind Limits Broome Tidal Levels (2018) OTAGE Compulsory Pilotage Exemption from Compulsory Pilotage Pilot Booking	
7.	6.3. 6.4. 6.5. PIL 7.1. 7.2. 7.3.	Tidal Stream Wind Limits Broome Tidal Levels (2018) OTAGE Compulsory Pilotage Exemption from Compulsory Pilotage Pilot Booking 1. Notice Required of Cancellation or Change	
7.	6.3. 6.4. 6.5. PIL 7.1. 7.2. 7.3. 7.4.	Tidal Stream Wind Limits Broome Tidal Levels (2018) OTAGE Compulsory Pilotage Exemption from Compulsory Pilotage Pilot Booking 1. Notice Required of Cancellation or Change Pilotage Fees and Charges	1011111111
7.	6.3. 6.4. 6.5. PIL 7.1. 7.2. 7.3. 7.4. 7.5.	Tidal Stream Wind Limits Broome Tidal Levels (2018) OTAGE Compulsory Pilotage Exemption from Compulsory Pilotage Pilot Booking 1. Notice Required of Cancellation or Change Pilotage Fees and Charges Pilot Contact Details	1011111111



File ref:

HBR90/191144

Version:

Issue date:

March 2023

2.0

8.	MA	STER / PILOT EXCHANGE AND SHIP REQUIREMENTS	. 14
9.	A G	BUIDE TO ENTERING AND LEAVING PORT	. 15
(9.1.	Entering Port	. 15
	9.1	.1. Entering Port Passing West of Preferred Channel mark	. 18
	9.1	.2. Entering Port Passing East of Preferred Channel Mark	. 18
,	9.2.	Leaving Port	. 19
	9.2	.1. Leaving Port via Main Channel	. 19
	9.2	.2. Leaving Port Passing East of Preferred Channel Mark	. 19
,	9.3.	Caution – Leads Visibility	. 19
,	9.4.	Navigational Safety	. 19
,	9.5.	Reporting and Feedback	. 19
10	TO	WAGE REQUIRMENTS	. 20
	10.1.	Port of Broome Towage Requirements	. 20
	10.2.	Tug Protocol and Orders	. 22
	10.3.	Bow and Stern Thrusters	. 23
11.	DE	SIGNATED ANCHORAGE AREAS	. 23
	11.1.	Roebuck Bay Anchorage (RB1 – RB9)	. 23
	11.2.	Entrance Point Anchorage (E1 – E4)	. 23
	11.3.	Outer Anchorage (O1 – O3)	. 24
	11.4.	Inner Anchorage North East of Broome Wharf	. 24
	11.5.	Cable Beach Anchorage	. 24
	11.6.	Allocation of Anchorages	. 26
12	PO	RT OF BROOME RADIO WATCH AND REPORTING REQUIREMENTS	. 26
	12.1.	Radio Call Signs and Calling/Working Frequencies	. 26
	12.2.	Radio Procedures for Pilotage, Berthing, Un-berthing and Tug Coordination	. 26
13.	DE	TAILED INFORMATION - BROOME WHARF	. 27
	13.1.	General Details	. 27
	13.2.	Declared Depths and Displacements at Berths	. 27
	13.3.	Photographs of Wharf	. 29
14.	KP.	A DIRECTION IN RESTRICTED VISIBILITY	. 30
	14.1.	Background	. 30
	14.2.	Procedure	. 30
15.	CO	VID-19 INFORMATION SHEET - VESSELS UNDER 14 DAY QUARANT	INE



PILOTS AND PILOT EXEMPT MASTERS HANDBOOK

File ref:

HBR90/191144

Version:

2.0

Issue date: March 2023

15.1.	Vessel Arrival	31
15.2.	Access Requirements	31
16. MINI	MUM REQUIREMENTS FOR A BEGINNER PILOT	33
16.1.	Introductory Licence and or Pilotage Exemption Licence (Class E)	33
16.2.	Class D Licence	33
16.3.	Class C Licence	33
16.4.	Class B License	33
17. BRO	OME NAVIGATION AIDES	34
18. PILO	TAGE EXEMPTION PROCEDURE	35
18.1.	Introduction	35
18.2.	Definition of 'Exempt Master'	35
18.3.	Eligibility for Pilotage Exemption Certificates	35
18.4.	Conduct of Pilotage Exemption Trips	36
18.5.	Conduct of Exemption Trips with an Exempt Master	36
18.6.	Documents Required Prior to Sitting the Pilotage Exemption Examination	36
18.7.	Pilotage Exemption Examination	37
18.8.	Award of Pilotage Exemption	37
18.9.	Period of Pilot Exemption Validity	38
18.10.	Pilotage Exemption Renewal	38
18.11.	Check pilotage	39
18.12.	Suspension or Cancellation of Pilotage Exemption Certificates	39
18.13.	Exempt Masters Obligation to Record Movements	39



File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

Abbreviations

AMSA Australian Maritime Safety Authority

ATSB Australian Transport Safety Bureau

CPP Controllable Pitch Propeller

DPI Department for Planning and Infrastructure

DWT Deadweight

HM Harbour Master

IMO International Maritime Organisation

LOA Length Overall

NMSC National Marine Safety Committee

NM Nautical Mile

PM Port Manager

PMB Pilot Movement Book

PO Pilotage Observation

PUS Pilotage Under Supervision

STCW 95 IMO Conference of Safety Training, Certification and

Watchkeeping (1995)



File ref:

HBR90/191144

Version:

2.0

Issue date: March 2023

1. INTRODUCTION

In accordance with the Port of Broome Marine Safety Plan these guidelines have been established to ensure that general pilotage standards and pilot training at Port of Broome comply with the Guidelines for Australian Marine Pilotage Standards issued by the National Marine Safety Committee (NMSC).

Pilotage is compulsory within Port Limits, for all vessels over 35m length overall. Gazettal for pilots is completed once it has been demonstrated that training is in compliance with the national guidelines.

The Guidelines for Australian Marine Pilotage Standards state that the guidelines are a: document to assist marine authorities in setting their own standards appropriate to pilotage operations carried out in their jurisdictions.

Port of Broome lays down the minimum standards for pilotage and training appropriate to the conditions experienced at Broome.

2. OUR PILOTS

Port of Broome Pilots understand our excellent reputation is due to the experience and professionalism of our Pilot team.

Our Pilots also understand their ambassadorial role, not just for Broome and Western Australia, but the whole country. In many circumstances the Pilot is the first and last point of contact for vessels arriving in, and departing from Australia, and as such we aim to ensure the Master and their crew not only have full confidence in the Pilot's abilities but are made to feel welcome during their stay.

Our Pilot team possesses a broad range of experience, and many of our Pilots are originally from Western Australia and regional areas. Collectively, our current Pilots bring years of pilotage experience to the port and are committed to serving the community of Western Australia.

As an absolute minimum, our Pilots are Master Class 1 accredited Master Mariners which ensures they are at the very least, the equivalent in terms of sea going qualification as the ship's Master. Additionally, our Pilots are expected to have accumulated at least five years deep sea and pilotage experience prior to even being considered as becoming a Kimberley Port Authority Pilot. This ensures we have the highest possibly qualified and experienced personnel available to serve as a Pilot.

We maintain our high standards through continuous professional development (CPD) and providing ongoing training to all our Pilots which includes but is not limited to:

- Bridge Resource Management (BRM)
- Advanced Marine Pilot Training



File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

• Bi-annual simulator training, including emergency and contingency response, plus specialised vessels, and new berth familiarisation.

The majority of our pilots are members of the Australian Marine Pilots Institute (AMPI), and adhere to Australia's world leading standards on Pilotage. Through this, we can exchange ideas with our peers in other major ports around the country so as to remain at the forefront of our profession and deliver excellent service to our many and varied customers.

3. EMERGENCY AND USEFUL CONTACT NUMBERS

Operations on Call Officer: +61 417 173 679

Security Gatehouse: +61 419 044 765

4. JURISDICTION

The Port of Broome is a Security Regulated Port established and operating under the *Port Authorities Act 1999* and the supporting *Port Authorities Regulations 2001*.

The Port of Broome encompasses land, infrastructure and waters as shown in figure 1.

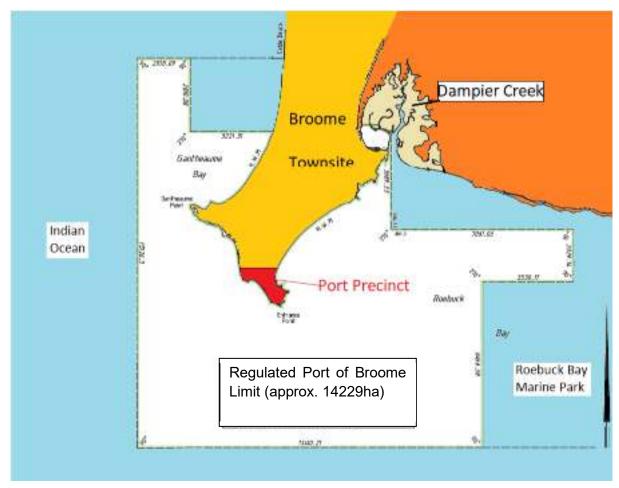


Figure 1 - Regulated Port of Broome Limit



File ref:

HBR90/191144

Version:

2.0

Issue date: March 2023

Mariners are cautioned to keep a sharp lookout for small traffic and vessels at anchor north of Gantheaume Bay.

If Mariners wish to use the channel to the East of the preferred Channel Marker mariners must be aware of possible shoaling within the Eastern vicinity of the buoy to 4.3m and ensure the tide allows sufficient UKC.

Broome Outer Wharf has a minimum depth of 9.2 metres (2019) alongside at the extreme northern end of the wharf. Annual surveys are conducted by the Western Australian Department of Transport and depths alongside are updated from this information. The most recent sounding information was collected in September 2020 and is available at www.kimberleyports.wa.gov.au.

There is a 6.8m shoal t to the North West of the Main Wharf restricting draft for the inner berths 1, 2 and 3. Vessels must not stray more than 40m from the wharf face and go no further south than the rear lead

Mariners are cautioned there is an 8.1m depth at LAT in the swing basin. Masters must ensure there is sufficient UKC during manoeuvres.

5.4. Minimum Under Keel Clearance (UKC)

Minimum Static UKC whilst berthed is 1.0 metre.

Minimum Dynamic UKC whilst underway is 1.0 meter + 10% of max. draft.

The required UKC is always subject to the Harbour Master's discretion with due consideration to the prevailing environmental conditions (wind, atmospheric pressure and tidal streams) which may necessitate a greater UKC.

5.5. Arrival Displacements

The Broome Wharf is rated for a maximum berthing displacement of 50,000 tonnes. Displacements exceeding 50,000t will require the Harbour Master's approval.

5.6. Tidal Levels and Tidal Streams

The maximum tidal range at Broome is 10.3 metres, with a **mean** spring tide range of 7.7m. Many tidal ranges experienced have been greater than this.

Tidal streams in the approaches to the harbour can attain rates of up to 5 knots. At the wharf, streams can attain rates of up to 1.75 knots.

The rate and direction of tidal streams need to be carefully assessed by all vessels entering and leaving Port, irrespective of size.

As a rule, it is recommended that vessels plan for an arrival which will enable berthing starboard side to the wharf. (Exceptions require the permission of the HM).



File ref:

Issue date:

HBR90/191144

Version:

2.0

March 2023

The Broome Wharf area experiences approximately 8 hours of ebb stream and 4 hours of flood stream during a tidal cycle. The stream turns about 3 hours before high water and a 'false ebb' (-2.5 hrs) (due to a build-up of water in the bay) is experienced at the wharf until the time of high water, when the actual ebb commences.

5.7. Weather Conditions

Broome experiences a tropical climate and has two seasons – the Dry Season (May-October) and the Wet Season (November to April).

5.7.1.Dry Season Weather

During the Dry Season, the port experiences predominantly east to south east winds which tend to reduce during the afternoons when a westerly sea breeze opposes the predominant weather. Conditions are normally fine with temperature ranges between 12°C during the night to high 20's/low 30°Celsius during the day. The easterly winds normally tend to be moderate to fresh and appropriate caution should be exercised when berthing at these times.

5.7.2. Wet Season Weather

During the Wet Season, the port experiences predominantly westerly to north westerly winds which freshen in the afternoon. Temperatures during the Wet Season range from the mid-high 20°C at night through to the mid-high 30°C during the day, with associated very high levels of humidity. Tropical cyclones occur during this season, and the port is also subject to tropical squall-line systems associated with cumulonimbus clouds, which result in occasional violent thunderstorms with associated winds which can exceed 50 knots.

These winds are often from the north east or east. These systems can be detected and monitored on marine radar and the Bureau of Meteorology (BOM) website.

5.8. Bureau of Meteorology (BOM) Website

Further information about Broome weather and climatic conditions can be obtained at the Bureau of Meteorology website www.bom.gov.au. Whilst alongside at Broome, vessels are encouraged to monitor this website, particularly the Broome area radar loop which can provide advance warning of approaching storm cells, which may make a departure from an alongside berth necessary.



File ref:

HBR90/191144

Version:

2.0

Issue date: March 2023

6. SHIP, TIDAL AND WEATHER LIMITATIONS

6.1. Ship Limitations

Vessels outside the below parameters will be considered on a case by case basis and dependent on the Harbour Master's discretion. Maximum Draft	Tidal Dependant (see required UKC)
Maximum Berthing Displacement	50,000 M/T.(>50k M/T with approval from HM)
Minimum Depth Alongside Outer Face	9.2 m (2019) (northern end of wharf,
from CD	quickly deepens to greater than 10.0 m)
Minimum UKC for Entry and Departure	1 metre + 10% of the Draft
Minimum UKC Alongside	1 metre

6.2. Environmental Considerations

Broome has an extreme tidal range and is subject to strong tidal streams both in the channel approaches (the Cut) and at the berths. Dependent upon the size and manoeuvrability of vessels, some limitations may apply regarding wind and tidal stream. The information below represents guidance that masters should take into consideration, dependent upon the handling characteristics of their vessels. Ships requiring pilotage will receive advice from the duty pilot about berthing and un-berthing considerations.

6.3. Tidal Stream

Plan to approach the intended berth by stemming the tidal stream unless the vessel is highly manoeuvrable.

All vessels are to berth Starboard side to the wharf and be prepared for sea as required in the predominant conditions or emergency.

Product tankers and large Cruise ships should always plan to arrive at around the time of high water. Large Cruise ships will normally enter and leave the harbour by remaining in the main channel leaving the preferred channel marker to starboard.

All vessels should plan to be at the channel entrance one hour before High Water Springs to ensure the cross current does not exceed three knots.

Vessels are not to manoeuvre within Port waters in currents greater than three knots.



File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

6.4. Wind Limits

The following restrictions may apply, they can only be varied at the Harbour Master's discretion:

- Products tankers will not normally be berthed in winds exceeding 20 knots;
- Large Cruise ships will not normally be berthed in winds greater than 20 knots;
- Conventional ships without a bow thruster will not normally be berthed in winds greater than 20-25 knots, and
- Ships will not normally be berthed or let go during thunderstorm activity.

6.5. Broome Tidal Levels (2018)

Broome Tidal Levels (2018) Tidal Level	Height (metres)
Chart Datum (LAT 2009) (CD)	0.00m
Lowest Astronomical Tide (LAT)	0.114m
Mean Low Water Springs (MLWS)	1.596m
Mean Low Water Neaps (MLWN)	4.555m
Mean Sea Level (MSL)	5.460m
Mean High water Neaps (MHWN)	6.365m
Mean High Water Springs (MHWS)	9.325m
Highest Astronomical Tide (HAT)	10.605m

7. PILOTAGE

7.1. Compulsory Pilotage

In accordance with the *Port Authorities Act 1999* and *Port Authorities Regulations 2001*, pilotage within Broome port limit is compulsory for all vessels with a length overall of greater than 35 metres except as provided below.

All ships are to prepare for pilotage in our enclosed waters by ensuring maximum redundancy in relation to thrusters and power configuration.

7.2. Exemption from Compulsory Pilotage

The following categories of vessels shall be exempt from compulsory pilotage:

• Australian Defence Force vessels other than those used primarily to transport troops, fuel, stores or equipment;



File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

• a vessel that is registered in Australia and has a length overall not greater than 35m;

- vessels that are under the command of an exempt master and may be moved under cover of the exempt master's valid Pilotage Exemption Certificate (PEC);
- vessels that are being led by another vessel under the control of a pilot in the circumstances outlined in Port Authorities Regulation 40;
- vessels that are for the convenience of shipping in the Port or because the vessel is engaged in dredging operations and exempted by the Harbour Master from using pilotage services; and
- the Harbour Master may direct an exempt Master to use a Pilot under certain circumstances as outlined in the *Port Authorities Regulations 2001/r31*.

7.3. Pilot Booking

Bookings for pilots should be forwarded at least 48 hours in advance of requirement. Booking requirements can be indicated on KPA's Berth Booking Form and Pre-arrival notification form, refer to KPA's website.

The ships Pilot Card is to be submitted alongside every berth booking.

Rig tenders requiring pilotage should send requirements including ETA as soon as they leave their respective rigs. Masters using this access are also to be aware of small craft fishing in this area.

7.3.1. Notice Required of Cancellation or Change

A minimum of two hours' notice is required for a cancellation, or change of time, of a pilot on arrival and departure. Should such notice not be received, the applicable charge will be invoiced to the customer.

7.4. Pilotage Fees and Charges

For pilot fees and charges refer to KPA's website: www.kimberleyports.wa.gov.au

7.5. Pilot Contact Details

KPA has contracted the pilotage service to a pilotage service provider. All pilot queries should be forwarded to the contact details below:

Email: operations@kimberleyports.wa.gov.au

Mobile: +61 417 731 679

Email: harbourmaster@kimberleyports.wa.gov.au

Mobile: +61 429 121 875



File ref:

Version: 2.0

Issue date: March 2023

HBR90/191144

7.6. Pilot Boarding Grounds

The following Pilot Boarding Grounds are established in the Port of Broome are both located on chart AUS 50:

- Northern Pilot Boarding Ground 17° 51.4' S 122° 10.0' E; and
- Western Pilot Boarding Ground Draft limit 7.5m Is 17° 58.04' S 122° 05.04' E (Note Draft Limit for entry from here)
- Inner Pilot Boarding Ground 17° 59.25' S 122° 09.9' E (abeam and between Gantheaume Point Light and Escape Rocks).

Any chartlet in this booklet is not for Navigation. Courses, distances and Way Points are for reference only.

Master and Officers are always to continuously monitor the vessel's position and immediately bring to the Pilot's attention any matter that causes concern or is not understood.

The principles of Bridge Resource Management are to be always followed.

7.7. Pilot Boarding Arrangements

The Pilot will generally board at the allocated pilot boarding ground indicated on the appropriate chart. Boarding is to be conducted on the lee side. Pilots will board by pilot launch.

Boarding ladders are to be rigged on the lee side, 1.5 metres above the water with two manropes in all cases when the pilot is disembarking. When the pilot is boarding man ropes will not be required however a heaving line for a bag may be.

Man-ropes for disembarkation are required even for low freeboard vessels where a pilot transfer occurs through a rescue zone.

Tankers and larger vessels where appropriate should use a combination ladder. Boarding speed should be between 6-8 knots.

During the North West Monsoon (September-March), significant swell is experienced in the harbour approaches. During this time of year, boarding is normally conducted on the starboard side with the ship on a north easterly heading.

Western Pilot Boarding Ground is strictly for vessels with draft less than 7.5m.

Masters are warned of possible strong currents that can set their vessels toward shoal areas that may be shallower at Chart Datum than shown due to constantly shifting seabed.

The **Inner Pilot Boarding Ground** is normally only used for vessels less than 80m in length after prior arrangement with the Harbour Master.

Pilot ladders are to be rigged strictly in accordance with SOLAS guidelines as shown in the picture below.

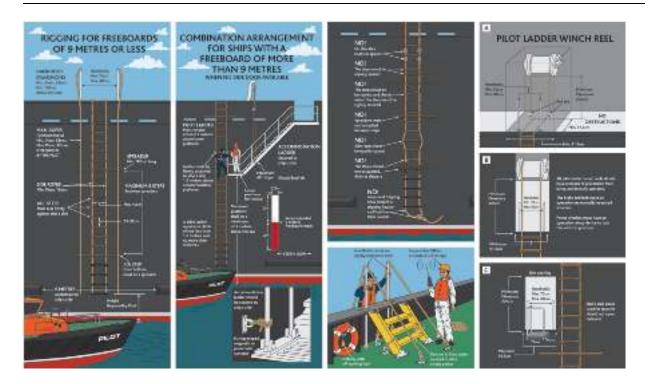


PILOTS AND PILOT EXEMPT MASTERS HANDBOOK

File ref: HBR90/191144

Version: 2.0

Issue date: March 2023



7.8. Pilotage Communications Assignments

Ships approaching the Port should maintain a listening watch on VHF Channels 16 and 14. Pilots will normally call arriving vessels at least 30 minutes prior to scheduled boarding on VHF Channel 14. The KPA (call sign "Port of Broome") maintains a 24 hour listening watch on VHF Channel 16.

After office hours all pilot queries to be directed to KPA on-call officer mobile: +61 417 173 679.

8. MASTER / PILOT EXCHANGE AND SHIP REQUIREMENTS

KPA endorses the concept of the Bridge Team in the light of Bridge Resource Management principles, with a particular emphasis on concise and closed loop communication as articulated in various contemporary publications and regulations. The Port recognises that the safe and timely movement of ships with a Pilot embarked is greatly enhanced when there is a robust and meaningful Master/Pilot Exchange of Information and a detailed discussion with the Bridge Team of the planned and intended passage to the berth. Importantly, the Master/Pilot Exchange of Information between the Pilot and the Bridge Team must produce an agreed and defined passage to the berth and a shared mental model.

All ships requiring pilotage services are requested to provide the pilot with information about the handling characteristics of the ship using a standard format International Pilot Card.



File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

9. A GUIDE TO ENTERING AND LEAVING PORT

The following guidance is provided by the Broome Pilots and serves as a basis for the standard entry and departure plans used for ships embarking a pilot.

9.1. Entering Port

From the northern pilot boarding ground to the north of Gantheaume Point (position 17° 51.4 S and 122° 10.0E) vessels travel in a course of 165°T for 2.32NM then alter course to 200°T until Gantheaume Point abeam then alter course onto the 130°T track to enter Roebuck Deep. This course will take vessels through a previous outer anchorage. Masters are advised to keep a good lookout for vessels anchored and small vessel traffic. Tidal streams on this trackflood to the south and ebb to the north at rates of up to 3 knots at springs

From the western Pilot Boarding Ground, (Max Draft 7.5m) the recommended track leads 094½° True on Gantheaume Point Light. The maximum draft of vessels using the west to east channel is 7.5m. Tidal streams on this track flood to the south and ebb to the north at rates of up to 3 knots at springs.

Dependent upon the size and turning characteristics of vessels, when Gantheaume Point is on a bearing of 094½° True, at a range of 2.2 miles, course should be altered to 130° True, to leave Gantheaume Point 1.0 mile to port, Escape Rocks Buoy .55 cables to starboard and Riddell Point 6 cables to port.

On a flood tide, larger and less manoeuvrable vessels may wish to increase their distance from Riddell Point to between 7-8 cables, in order to provide more room for the alteration into the Inner Harbour. Tidal streams on the 130° track flood to the south east and ebb to the northwest at rates of up to 3 knots at springs

Dangers on the 130° track consist of the shoal water extending from the coast between Gantheaume Point and Entrance Point, in addition to the shoal water to the west of Roebuck Deep, the northern extremity of which is marked by Escape Rocks buoy. At the southern end of the track, tidal streams will start flooding to the east north east and ebbing to the west south west at rates of up to 5 knots at springs.

Note: These Port Passage Plans herein are provided here as reference only. Displayed is a passage for both East and West transits passing Preferred Channel mark which are dependent on the state of tide and tidal flows and as guided by the Pilot. Courses, distances and Way Points are for reference only. Master's & Officers are to continuously to monitor the vessel's position and if any time there is a doubt, this is to be brought to the immediate attention of the Pilot.



PILOTS AND PILOT EXEMPT MASTERS HANDBOOK

File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

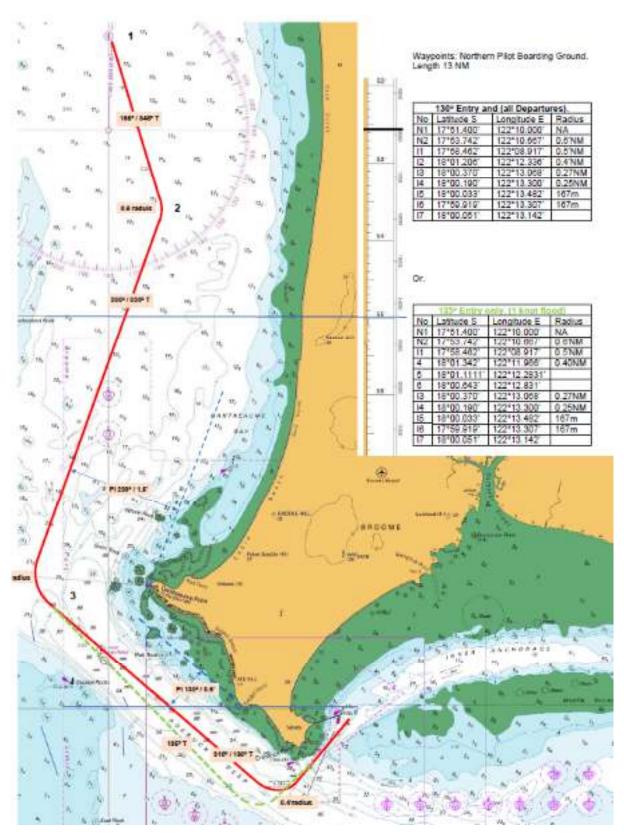


Figure 2 - Northern Approach to Broome. All Ships with draft greater than 7.5m



AND PILOT EXEMPT

2.0

HBR90/191144

File ref:

Version:

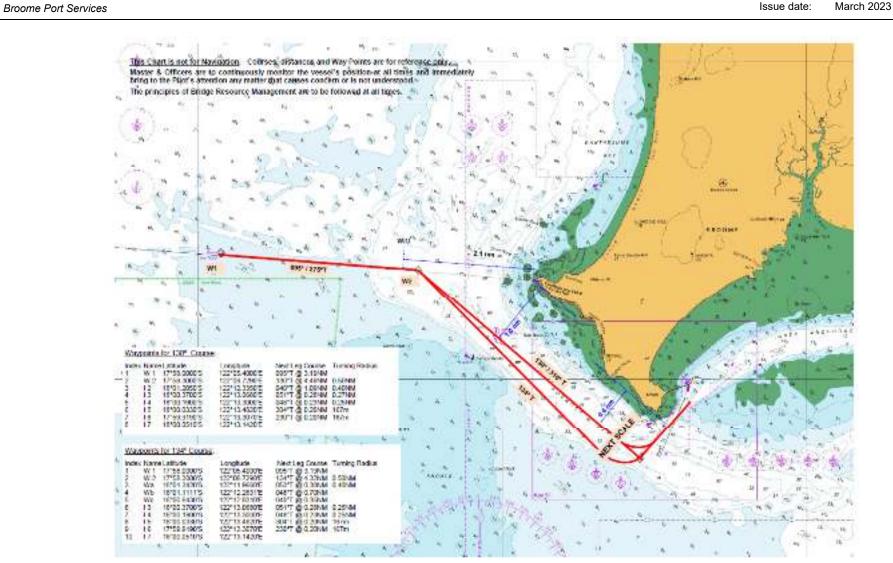


Figure 3 - Port Passage Plan from Western Pilot Boarding Ground



File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

9.1.1.Entering Port Passing West of Preferred Channel mark

When entering port using the leads and the main channel, care must be taken to allow for the cross tidal stream that is experienced on both ebb and flood during the approach to the cutting.

The natural line of the channel is around 040° True. Vessels need to remain port of the leads to pass the preferred channel marker abeam at 0.10NM. Mariners are recommended to set up a Parallel Index line 0.10M to Starboard heading 040T through the preferred channel mark.

It should be noted that the cross tidal stream experienced in the approach changes direction to either follow or oppose when you are around 100 metres south west of the preferred channel marker.

9.1.2. Entering Port Passing East of Preferred Channel Mark

When entering port using a secondary channel passing east of preferred channel marker, vessels should ensure that they have sufficient tide to allow a safe UKC on the 4.1 metre (2019) shoal to the SSE of the beacon.

Care must be exercised with the assessment of tidal stream and leeway in the approach to ensure safe clearance on the beacon.



Figure 4 - Port Passage Plan from Roebuck Deep



File ref:

HBR90/191144

Version:

n: 2.0

Issue date: March 2023

9.2. Leaving Port

9.2.1. Leaving Port via Main Channel

The process for entering port is essentially reversed. There is no discernible set to port on the flood north of the preferred channel mark (#1 Buoy). Any set towards the East Cardinal buoy tends to be accentuated during easterly winds.

The course is 220° T. A Parallel Index is recommended at 0.1M passing through the preferred channel mark.

Vessels should be aware of the significant cross stream which commences about 100 metres south of the preferred channel mark. This stream can cause shears and steering difficulties at times, particularly in slower moving vessels.

9.2.2.Leaving Port Passing East of Preferred Channel Mark

When leaving port passing east of Preferred Channel Mark, vessels should ensure that they have sufficient tide to allow a safe UKC on the shoal to the east of the mark. Care must be exercised with the assessment of tidal stream and leeway in the approach to ensure safe clearance on the beacon.

The caution about the commencement of the cross stream mentioned above is equally relevant when leaving port and passing east of the beacon. This stream can cause shears and steering difficulties at times, particularly in slower moving vessels.

9.3. Caution – Leads Visibility

Port users are advised that appropriate caution should be exercised when entering and leaving port when one or both leads are obscured. This can happen when vessels are berthed at berths 5-6, when extremely large vessels are alongside, or fog is present.

9.4. Navigational Safety

All mariners are reminded that, as is the case with all aids to navigation, due cognizance needs to be paid to all available means and sources of information in order to monitor and maintain the safe conduct of their vessel. The use of a single aid to navigation to the exclusion of visual and aural cuing, supplemented by radar, echo sounder and other electronic aids to navigation can quickly result in vessels standing into danger.

9.5. Reporting and Feedback

Mariners are invited to provide feedback on any aspect of port and navigational safety, either reporting deficiencies or failures of existing systems or in areas where improvements enhancing safety and/or efficiency might exist, to the Harbour Master for consideration.



File ref:

Version: 2.0

Issue date: March 2023

HBR90/191144

10. TOWAGE REQUIRMENTS

There is currently one licenced towage service provider, Broome Marine, operating in the port. Vessels, through their Shipping agents or Logistic Service providers, should book tugs, according to the schedule below, prior to the arrival or departure of a vessel in line with the towage company's booking requirements.

Failure to arrange for appropriate towage will result in delays to berthing or sailing.

Two approved tugs are available to provide towage services:

- Tug "Yarra" 43t bollard pull 2 x Azimuth Stern Drive propulsion units.
- Tug "Berkley" 47t bollard pull 2 x Azimuth Stern Drive propulsion units.

Communications with the tug will normally be established by the Broome Pilot on the working channel (VHF Channel 6). In the event of atmospheric ducting, creating interference from other ports on the primary working channel, a secondary channel will be employed after agreement between the Pilot and the Tug Master. The secondary working channel will normally be VHF Channel 8.

In ordinary circumstances, the tugs will supply their own towline. However, port users should be prepared to supply a line in emergency situations.

As required the pilot vessel Kestrel is available for pushing tasks only.

The following table articulates the prudent operational limits which have been determined by KPA, noting potential wind and tidal conditions. The information below is a guide only and may change dependent upon ship type or conditions. The Harbour Master may be consulted at any time to provide towage clarification for clients as it is important that appropriate tugs are ordered to facilitate the safe handling of ships. The conduct of Berthing/Un-berthing operations are limited to winds up to maximum sustainable speed of 25 knots.

Any requirements outside these parameters are to be approved by the Harbour master.

10.1. Port of Broome Towage Requirements

All vessels berthing at the Port of Broome will require towage in accordance with the table below. For vessels of less than 80 m LOA, towage requirements will be at the discretion of the Harbour Master.

In certain circumstances the Harbour Master may require additional towage after considering a particular vessel's situation including characteristics, e.g. prevailing tide cycle, anticipated weather conditions, berth congestion, vessels berthing displacement in relation to allocated berth capacity.



PILOTS AND PILOT EXEMPT MASTERS HANDBOOK

File ref:

Issue date:

HBR90/191144

Version:

2.0

March 2023

PORT OF BROOME TOWAGE GUIDE AFTER A RISK ASSESSMENT COMPLETED JANUARY 2020 THE FOLLOWING TOWAGE GUIDELINES ARE RECOMMENDED BY THE HARBOUR MASTER (Variation can only occur with the permission of the Harbour Master)

Type of vessel	Wind ≤ 15 knots (10 minute mean average)		Wind ≥ 15 knots (10 minute mean	average)
	IN	OUT	IN	OUT
Vessel less than 80m LOA Wind less than 25 Knots	Nil	Nil	Nil	Nil
Vessel 80m to 130m LOA Wind Limit 25knots	1 tug	1 tug	1 tug	1 tug
Vessel 130m to 200m LOA Wind Limit 25 Knots Tankers 20 knots	2 tugs	1 tug	2 tugs	2 tugs
Vessel over 200m LOA	2 tugs	2 tugs	2 tugs	2 tugs
Product tankers (and vessels carrying hazardous cargo such as Ammonium Nitrate). Wind limit 20 knots	2 tugs	2 tugs	2 tugs	2 tugs

The towage tables above should be taken into consideration when making port bookings.

The Harbour Master may vary the above requirement for a vessel upon completion of an appropriate risk assessment. – Appropriate vessels where possible are to be set up in Class 2 DP mode.

^{*} Outward towage requirement assumes vessel berthed starboard-side-to on the outer berth face.



PILOTS AND PILOT EXEMPT MASTERS HANDBOOK

File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

10.2. Tug Protocol and Orders



TUG PROTOCOL AND ORDERS

It is a priority of intention that a shared mental model of the planed and confingency movement be established with the Tug Skippers prior to execution. This is achieved by the pilot discussing the move by telephone conversation with one skipper prior to the rendezvous at Riddell Point, this information is then shared with the other skipper and tug team.

On sightling the tugs communication is established on VHF 6 and the manoeuvre and positioning of tugs is discussed. All communications are closed loop, with the tug skipper repeating the order and the pilot confirming or not with a "yes" or "no", in the event of "no" the pilot will repeat the order.

Vessel is slowed to 6/7 kts through the water and the pilot will request the bow tug to approach and make fast. Once the bow tug is fast the stern tug is requested to approach and make fast. Once tugs are made fast, they will "fall astern" with minimum weight on the tugs line. The ship's speed is increased to 8 knots for the Part turn. Prior to the Part turn the pilot will warn the tugs a check that the speed is safe.

Tug orders to be used in conjunction with tug assisted ship movements, orders will be given in the format described below.

During Pilotage and Berthing (Tug made tast)

	"Posh"	The tug positioned at right angles to the vessel's fore and aft line, with its bow in contact with the vessel's hull and the tug pushing.
2	-ru"	The tug positioned at right angles to the vessel's fore and aft line, the tug line stretched out and the tug pulling.
1	"Lay Back"	The tug positioned alongside the vessel, parallel to vessel's fore and aft line, bow to bow with line stretched aft and the tug pulling
9	"Stand-by to"	The tug maintaining position to provide any one of the three positions above with as little weight on the vessel as possible.
5	"Foll Astern"	The tug will trail astern with minimal weight on the Tug's line.
4	"Angle x " Push Ahead"	The tug positioned amidships on outboard side, angled towards bow to push the Ship ahead.
7	"Angle x " Push Astern"	The tug positioned amidships on outboard side, angled towards stem to push the Ship astern.

Power Ratings

	" Stop"	The tug will stop the previous power order given and will be read to carry out the previous direction order.
2	" Minimum"	The tug will provide power slightly above that required to keep the tug in the 'stand-by' position.
3	" Quarter"	The tug will provide power that is quarter of its maximum confinuous power rating.
	" Half"	The tug will provide power that is half of its maximum continuous power rating.
5	" Three Quarters"	The tug will provide power that is three quarters of its maximum continuous power rating.
	" Full"	The tug will provide power that is equal to its maximum confinuous power rating



File ref:

HBR90/191144

Version:

Issue date:

2.0

March 2023

10.3. Bow and Stern Thrusters

Vessels fitted with bow and/or stern thrusters may seek dispensation from the Harbour Master from the towage requirements outlined in the previous table provided the thrusters are compliant. Such dispensation must be in writing

A compliant thruster to be considered as a substitute for the provision of towage will be required to:

 be in good working order and capable of operating at 100% efficiency, that is, to operate at its stated power output for a period of 15 minutes without disruption; and meet KPA's minimum power to length ratio as outlined in the following Bow Thruster Compliancy Table, below.

THRUSTER COMPLIANCY TABLE

Vessel LOA (up to and including)	Thruster Power
120 m	460 kW
135 m	650 kW
160 m	910 kW

11. DESIGNATED ANCHORAGE AREAS

Designated anchorages within the Port of Broome are clearly indicated on charts AUS 50 and AUS 51. These anchorage positions have been allocated after considering the following criteria:

11.1. Roebuck Bay Anchorage (RB1 – RB9)

These anchorages have been positioned south of Middle Ground and are specifically designated for oil-rig tenders and seismic survey vessels. Masters who consider any of these anchorages unsuitable for their vessels for any reason (specifically draft limitations) should bring these reasons to the attention of 'Broome Port' on VHF Ch.14.

11.2. Entrance Point Anchorage (E1 – E4)

These anchorages have been positioned south west of Entrance Point and are again designated for oil-rig tenders and seismic survey vessels. Masters who consider any of these anchorages unsuitable for their vessels for any reason (specifically draft limitations) should bring these reasons to the attention of 'Broome Port' on VHF Ch.14.



File ref:

HBR90/191144

Version:

Issue date:

2.0

March 2023

11.3. Outer Anchorage (O1 – O3)

These anchorages are situated to seaward of the outer pilot station and are designated for all vessels including livestock vessels and tankers of greater than 100 metres in length awaiting pilot boarding at the outer pilot boarding place and all vessels awaiting instructions, pilotage or allocation of an inner anchorage.

11.4. Inner Anchorage North East of Broome Wharf

Use of the area annotated "Inner Anchorage" on AUS 51 and situated to the north east of Broome Wharf is only to be used by pearling, fishing and charter vessels. Naval patrol boats and Australian Border Force vessels may also use this anchorage area if there is sufficient sea room available to safely accept them. Vessels using this anchorage are to ensure that they do not encroach upon the prohibited anchorage area marked on AUS 51 and are not to anchor within the line of moorings, generally situated within the 10 metre contour.

11.5. Cable Beach Anchorage

Smaller Vessels (up to 150m) may anchor outside pilotage waters to the North of Gantheaume Point / Cable beach. (CB1 to 3) on the chart below



Broome Port Services

File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

OUTER	MAX	POSITION		GANTHEAUME Lt. Ho.	
ANCHORAGE DRAFT		LATITUDE	LONGITUDE	BEARING	RANGE
O3	9.5	17 ^o 55.00'S	122 ^o 04.00'E	118 ^O (T)	7.3'
O2	9.5	17 ^o 56.00'S	122 ^o 04.00'E	111 ^o (T)	6.8'
01	7.0	17 ⁰ 57.00'S	122 ^o 04.00'E	103 ^o (T)	6.5'

CABLE BEACH	MAX	POSITION		CABLE BEACH Lt. Ho.	
ANCHORAGE	ANCHORAGE DRAFT		LONGITUDE	BEARING	RANGE
CB1	8.0	17 ⁰ 54.7879' S	122 ⁰ 11.0787 'E	157 ^O (T)	2.6'
CB2	8.0	17 ⁰ 55.1734' S	122 ⁰ 10.9314 'E	152 ^O (T)	2.2'
СВ3	8.0	17 ⁰ 55.5593' S	122 ⁰ 10.7843 'E	167 ^O (T)	2.5'

ENTRANCE	MAX	POSI	ITION	CHANNEL ROCK Bon	
ANCHORAGE	DRAFT	LATITUDE LONGITUDE		BEARING	RANGE
E4	5.5	18 ⁰ 01.20'S	122 ^o 10.75'E	068 ^O (T)	0.19'
E3	5.5	18 ^o 01.35'S	122 ^o 11.15'E	058 ^O (T)	0.16'
E2	5.5	18 ^o 01.50'S	122 ^o 11.55'E	045 ^O (T)	0.14'
E1	4.5	18 ⁰ 01.65'S	122 ^o 11.95'E	027 ^o (T)	0.13'

ROEBUCK MAX		POSI	TION	CHANNEL ROCK Bon		
BAY ANCHORAGE	DRAFT	LATITUDE	LONGITUDE	BEARING	RANGE	
RB1	8.0	18 ^o 01.30'S	122 ^o 13.70'E	315 ^o (T)	1.0'	
RB2	8.0	18 ⁰ 01.30'S	122 ^o 14.15'E	300°(T)	1.4'	
RB3	8.0	18 ^o 01.30'S	122 ^o 14.60'E	295 ^o (T)	1.7'	
RB4	8.0	18 ^o 01.30'S	122 ^o 15.05'E	290°(T)	2.2'	
RB5	6.5	18 ^o 01.30'S	122 ^o 15.45'E	286 ^O (T)	2.5'	
RB6	6.5	18 ^o 01.30'S	122 ^o 15.90'E	285 ^O (T)	2.9'	
RB7	6.5	18 ^o 01.30'S	122 ^o 16.35'E	283 ^O (T)	3.3'	
RB8	6.5	18 ⁰ 00.90'S	122 ^o 15.90'E	277 ^O (T)	2.9'	
RB9	6.5	18 ^o 00.90'S	122 ^o 16.35'E	275 ^o (T)	3.3'	

NOTE: Maximum drafts based on Low Water Springs.

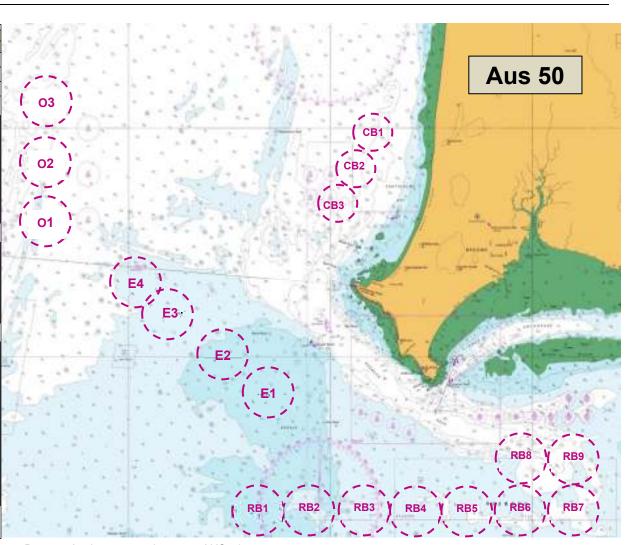


Figure 5 - Broome Anchorage as shown on AUS 50



PILOTS AND PILOT EXEMPT MASTERS HANDBOOK

File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

OUTER	MAX	POS	ITION	GANTHEAUME Lt. Ho.	
ANCHORAGE	DRAFT	LATITUDE	LONGITUDE	BEARING	RANGE
О3	9.5	17 ^o 55.00'S	122 ^o 04.00'E	118 ^O (T)	7.3'
O2	9.5	17 ^o 56.00'S	122 ^o 04.00'E	111 ^o (T)	6.8'
01	7.0	17 ^o 57.00'S	122 ^o 04.00'E	103 ^o (T)	6.5'

CABLE BEACH	MAX	POSI	CABLE BEACH Lt. Ho.		
ANCHORAGE	DRAFT	LATITUDE	LONGITUDE	BEARING	RANGE
CB1	8.0	17 ⁰ 54.7879' S	122 ⁰ 11.0787 'E	157 ^O (T)	2.6'
CB2	8.0	17 ⁰ 55.1734' S	122 ⁰ 10.9314 'E	152 ^O (T)	2.2'
СВЗ	8.0	17 ⁰ 55.5593' S	122 ⁰ 10.7843 'E	167 ^O (T)	2.5'

11.6. Allocation of Anchorages

If prior arrangements have been made through Port Operations by a vessels agent or logistic coordinator Pilotage Exempt Masters may proceed to an allocated anchorage on arrival subject to normal radio reporting procedures. All other vessels arriving at port limits if not expecting a pilot on arrival should anchor at the outer anchorage and await further instructions from KPA.

12. PORT OF BROOME RADIO WATCH AND REPORTING REQUIREMENTS

KPA maintains a 24 hour radio watch on VHF Channel 16/14.

12.1. Radio Call Signs and Calling/Working Frequencies

The following specific 'Port of Broome'

information should be noted:

Port Call sign:

International Call sign: VH6HZZ

Calling Frequency: VHF Channel 16

Working Frequency: VHF Channel 14

Alternative Working: VHF Channel 12 and VHF

Channel 6

In the event of any emergency situation (i.e. fuel spill, fire, flood, medical emergency, damage to the wharf, security incident report etc.).

12.2. Radio Procedures for Pilotage, Berthing, Un-berthing and Tug Coordination

Pilots contracted to KPA for the Port will normally employ VHF Channel 6 while conducting pilotage manoeuvres and controlling the tug and pilot boat. During these periods, it is



PILOTS AND PILOT EXEMPT MASTERS HANDBOOK

File ref:

HBR90/191144

Version:

2.0

Issue date: March 2023

requested that other vessels employ the alternative working frequency (VHF Channel 14 or 12) for communications with the port. This will normally be coordinated by the port radio operator.

Masters of vessels with a valid pilotage exemption should communicate with their relevant Wharf Supervisor on VHF Channel 6 to coordinate optimum berthing position and line requirements during berthing/un-berthing.

13. DETAILED INFORMATION - BROOME WHARF

13.1. General Details

Broome wharf was commissioned in its present site in 1966. An extension to the wharf was completed in 2005 providing a total of 331 metres of wharf space on the outer face. The wharf has flat pile fenders on both outer and inner berths. In 2016 the original wharf enjoyed an 'extension of life' upgrade with a new concrete decking and progressive fender and pile refurbishment continuing through to 2019. Power, potable water and diesel fuel can be provided from the wharf in accordance with figure 6.

Bollard ratings on the wharf:

- Berths 1 to 6, 50M/T
- Berth 11, 35M/T

13.2. Declared Depths and Displacements at Berths

The last annual survey of the Broome wharf was conducted in September 2020. From these survey sheets, the following declared depths are promulgated for each berth:

Berth	CD Depth	Max. Displacement
1	5.2m	9,000 MT
2	9.2m	9,000 MT
3	8.2m	9,000 MT
4	9.2m	50,000 MT

Berth	CD Depth	Max. Displacement
5	11.6m	50,000 MT
6	11.2m	50,000 MT
11S	5.3m	1,500 MT
11N	5.8m	1,500 MT



PILOTS AND PILOT EXEMPT MASTERS HANDBOOK

File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

Broome Wharf Information

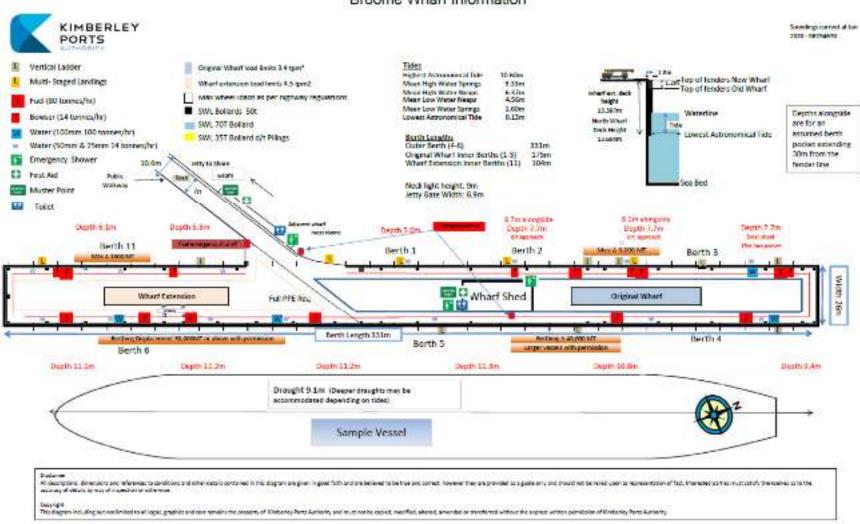


Figure 6 - KPA Wharf Diagram Information



File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

13.3. Photographs of Wharf



Photograph 1 – Berth 6 viewed from NNE



Photograph 2 - Berths 4-5



File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

14. KPA DIRECTION IN RESTRICTED VISIBILITY

14.1. Background

On average the Port of Broome experiences 22 days of fog per annum. Fog generally lifts by 1000hrs but however may linger the entire day. Whilst there is risk to commercial shipping due to traffic and currents the greatest risk is to smaller craft that are not aware of or ignore COLREG R.19 and proceed at an unsafe speed with total reliance on a chart plotter and disregard for other vessels. Only the Harbour Master may vary these conditions after consultation with the Pilot.

14.2. Procedure

Item	Description	Comment	Responsible
1	Weather Zone / Port Dashboard / Operational Forecast. HM /Operations Port Security Pilots / BMT / Agent	Pilot to monitor and inform all parties of FOG RISK. Ensure all persons are in the loop have access to Weather Zone PC and smart phone application.	Pilot
2	Port Security to monitor visibility and be made aware that they perform a critical function in their judgement. Informing the Master via VHF of the visibility and whether the pilotage is on or postponed until further notice.	The agreed benchmark for visibility is that the wharf or wharf flood lights by night can (even partially) be seen from the gatehouse.	Port Security
3	Conducting Pilotage and Fog rolls in.	Port Security to monitor visibility and inform Pilot if the wharf cannot be seen. Pilot to monitor visibility if it is established less than 500m then refer to 4 for contingency.	Port Security/Pilot
4	Pilot boarded - Inbound Commit points a. via NPBP b. via WPBP c. after IPBP and before Entrance Point d. On 040 and past Entrance Point	a. NPBP to Gantheaume and before IPBP anchor or if UKC allows exit Port waters, proceed 275 via WPBP. b. WPBP to Gantheaume and before IPBP. Anchor or exit Port waters proceed towards NPBG c, Proceed to Roebuck Anchorages. d. Proceed and berth Port Side to.	Pilot
5	Procedure for a delay or cancellation.	The Pilot will monitor the Restricted Visibility from the wharf or vessel and take advantage of the first opportunity to effect safe	Pilot



PILOTS AND PILOT EXEMPT MASTERS HANDBOOK

File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

					passage. If a delay goes on for one hour or more the Pilot may cancel this passage and describe a time for another attempt.	
6	KPA proced	this	policy	and	Dissemination to all effected parties.	НМ

15. COVID-19 INFORMATION SHEET – VESSELS UNDER 14 DAY QUARANTINE PERIOD

The following information sheet outlines the controls that are in place for vessels arriving within the 14 day quarantine period from an international or interstate port. These controls ensure that KPA complies with the relevant legislation while also minimising the risk of COVID-19 spread in the workplace.

15.1. Vessel Arrival

Prior to the vessels arrival there are a range of controls in place including:

- Confirmation by vessel that there is no illness on board
- Pilot to wear appropriate PPE, confirm with master there is no illness reported on board and that regular temp checks have been undertaken and recorded
- Vessel crew to remain onboard at all times

15.2. Access Requirements

Once the vessel is alongside there will be no access or egress for any personnel (eg KPA employees, vessel crew, contractors, vessel agent, pilot etc) onto the vessel without the express permission of Harbour Master or delegate.

- KPA will have the following controls in place at the gangway:
- a gangway watch when KPA operations are not being undertaken
- a sign at the gangway advising of no access onto vessel without Harbour Master approval
- a document satchel attached to gangway for remote exchange of documents etc.
- a bucket with diluted disinfectant (eg Viralfx) to clean PPE
- garbage bag and bin for PPE waste. Note: garbage to be segregated for appropriate disposal if detection of COVID-19
- boot wash



File ref:

HBR90/191144

Version:

2.0

Issue date: March 2023

If you require access to the vessel and have Harbour Master approval you must have the following in place:

- a document outlining your COVID-19 access controls and equipment decontamination processes (where appropriate)
- wear the minimum PPE requirements including suit, gloves and face mask unless otherwise approved by the Harbour Master
- maintain segregation between vessel crew and approved visitors
- remote communication with Master /rep using Radio comms or mobile phone



File ref:

Version: 2.0

Issue date: March 2023

HBR90/191144

16. MINIMUM REQUIREMENTS FOR A BEGINNER PILOT

These requirements can be varied by the Harbour Master depending on the experience of the applicant and the feedback from the training pilot/s.

16.1. Introductory Licence and or Pilotage Exemption Licence (Class E)

- Initial Observation runs any vessel 6 In and 6 out plus 4 at night in or out
- Vessels >35m but <130m Pilot under supervision 6 in and 6 out plus 6 at night
- Applicant can then apply for an Introductory License for these vessels.
- An exam, completion of a blank chart and an oral exam in the presence of the Harbour Master and a Licensed Foreign Going Master or Pilot Exempt Master familiar with the port.

16.2. Class D Licence

- May observe any number until confident to pilot under supervision
- Vessels >131m <180m Draft <9.5m Pilot under supervision 6 in and 6 out plus 6 at night
- An application for a Class D Pilots license can be made to include the Introductory License and these class of vessels, can be made, which will require completion of a blank chart, a review of an in or an out passage by the Harbour Master and Training Pilot, followed by a Oral written and oral examination.

16.3. Class C Licence

- May observe any number until confident to pilot under supervision
- Vessels >131m <180m Draft >9.5m, 3 in and 3 out.

16.4. Class B License

- Vessels >181m <250m Pilot under supervision 6 in and 6 out at anytime
- Completion by examination and oral questioning in the presence of HM and a Licensed Foreign Going Master or Harbour Masters delegate
- Open water Pilots licence > 250m



File ref:

Issue date:

HBR90/191144

Version:

2.0

March 2023

17. BROOME NAVIGATION AIDES

March 2020

Description	Light Characteristics	Latitude South	Longitude East	Photo
South Cardinal Marker	Q(6) +LFI 15s	18.00.674	122 12.504	1
Port Hand Buoy	Oc.R3s	18.00.547	122 12.771	2
Dual Channel Buoy	FI (2+1)G 10s	18 00.637	122 12.975	3
East Cardinal Buoy	VQ(3)W 5s	18 00.430	122 12.909	4
Starboard Hand Buoy #1	FI G 3s	18 00.506	122 13.083	5
Starboard Hand Buoy #2	FI G 5s	18 00.389	122 13.177	6
Starboard Hand Buoy #3	FI G 3s	18 00.302	122 13.367	7
Gantheaume Point Lighthouse	Single Flashing Light FI 10s 33m 18M	Category 1	AMSA	
Escape Rocks Green Starboard Hand Buoy	FI G 3s	Cat 3	КРА	
Southern Lead Light	Fixed Light F Bu 16m 6M	Cat 3	KPA	
Northern Lead Light	Fixed Light F Bu 22m 6M	Cat 3	KPA	
Berth Light	Fixed Light F R	Cat 3	KPA	
Inner Harbour Lead Light / Board	Fixed Light F Bu	Cat 1	КРА	
Inner Harbour Lead Light /Board	Fixed Light F Bu	Cat 1	KPA	



File ref:

HBR90/191144

Version:

2.0

Issue date: March 2023

18. PILOTAGE EXEMPTION PROCEDURE

18.1. Introduction

In the interest of operator costs and port efficiency suitably qualified Masters and First Mates may be issued by KPA with a Pilotage Exemption (**PE**). The pilotage exemption process is designed to ensure that candidates have the necessary knowledge and practical skills to safely conduct their vessels movements within Port limits. The safety of vessel, Port infrastructure and the environment are paramount considerations in the assessment process. This section details the procedure to be followed by the Master or First Mate of a vessel seeking a Pilotage Exemption Certificate (**PEC**) for the Port.

All Pilotage Exemption applications and or renewals are to be addressed to the Harbour Master.

18.2. Definition of 'Exempt Master'

An 'Exempt Master' **(EM)** means 'the master or first mate of a vessel who holds a PEC for the Port and his specific vessel. A Pilot Exemption is for a specifically named vessel only.

18.3. Eligibility for Pilotage Exemption Certificates

A person may make an application to KPA's Harbour Master for the issue of a PEC if the person is entitled to reside in Australia under an Act of the Commonwealth; and holds:

- an appropriate certificate of competency issued under the Navigation Act 2012;
- an appropriate certificate of competency issued under the WA Marine Act; or
- a certificate of competency or other qualification recognised by KPA as equivalent to the certificates of competency mentioned above, and
- the person, within 12 months prior to the date of application has been:
 - the Master of a vessel under the control of a pilot on at least six occasions when the vessel was moved into the Port, and six occasions out of the Port,
 - the First Mate of a vessel under the control of a Pilot or under the command of an exempt Master for the twelve occasions when the vessel was moved into and out of the Port and when on each occasion, remained on duty on the vessel's bridge while it was so moved.

An exemption for both daytime and night-time vessel movements will be issued when at least an additional three of the moves both into and out of port have occurred at night, six moves in total.



File ref: HBR90/191144

Version: 2.0

Issue date: March 2023

18.4. Conduct of Pilotage Exemption Trips

When conducting trips for the Pilotage Exemption, movements should be planned to occur at different states of the tide, commensurate with the handling characteristics of the vessel being piloted.

Attention should be paid to entering and leaving Port during spring tide conditions when the environmental factors in the Port are more challenging. At least four of the six entry trips should involve berthing at the wharf and four of the six departure trips should incorporate letting go from the wharf. Pilotage exemption trips can be compiled in two ways:

- a embarkation of a KPA approved Pilot for the six entry trips and six departure trips and six at night, if a night exemption is required;
- or control of a Pilot as defined above.

18.5. Conduct of Exemption Trips with an Exempt Master

Exemption trips for a First Mate can be conducted when the vessel under the command of an Exempt Master. The candidate will have the con of the vessel under the supervision of the Exempt Master. When the Exempt Master is satisfied that the candidate is ready to hold a PEC, he/she should raise a letter of recommendation to KPA's Harbour Master indicating that the candidate is proficient in piloting the vessel and ready for assessment.

Notwithstanding the trips conducted with an exempt Master, a KPA approved Pilot is to be embarked for at least two trips into and two trip out of the Port (by day and night) before any pilotage exemption application will be processed. These trips are to incorporate berthing and letting go from the wharf. One of each of these trips is to be completed on the flood and the ebb tide.

18.6. Documents Required Prior to Sitting the Pilotage Exemption Examination

When exemption applicants are ready to sit the Pilotage Exemption examination, having completed not less than twelve transits in and out of the port they should contact the Harbour Master (phone: 08 9194 3100 or email: harbourmaster@kimberleyports.wa.gov.au), to arrange a suitable time. When presenting for the examination, candidates are required to bring copies of the following documents:

- a completed Application for Pilotage Exemption;
- a recent size passport size photograph;
- evidence of Australian citizenship / residency;
- a copy of the appropriate Certificate of Competency;
- a copy of valid AMSA Medical Certificate;



File ref:

HBR90/191144

Version:

Issue date: March 2023

2.0

• a copy of an Exempt Master's Letter of Recommendation (where trips have been conducted with an exempt master); and

• a recommendation from the Pilot to the Harbour Master confirming the candidates readiness to pilot their own vessel in the port.

18.7. Pilotage Exemption Examination

The KPA pilotage exemption examination is a written examination and will include chart work which normally takes about two hours to complete. It covers AtoN characteristics; recommended tracks and pilotage passage planning; tides and tidal streams within port limits; dangers in the port; anchorages and prohibited anchorage areas; minimum depths and local environmental conditions. The written examination may also be supplemented by a verbal examination should insufficient information be evidenced within the examination. Completed examinations are retained on file by KPA.

NOTE: 30 days' notice is required prior to setting of an examination date.

18.8. Award of Pilotage Exemption

After satisfactory completion of the exemption examination and if all other documentation is in order, the Harbour Master will approve the issue of a PEC, the certificate will be delivered or mailed to the applicant and an invoice will be raised for the scheduled fee. If an applicant fails the examination they will be able to sit for another examination after the expiration of one month.

An fee of \$808.54c for a new application or a renewal fee of \$715.85c is payable before a license will be issued

The exemption certificate will be endorsed for the named vessel on which the qualifying runs were completed.

A Daylight only restricted certificate may be issued with a Daylight Only (Sunrise to Sunset) restriction after the completion of six arrivals and six departures from the port under Pilot or an Exempt Master's supervision

An Unrestricted Certificate for night- time operations may be issued on completion of 6 arrival and 6 departure runs in and out of the port. Three of the six arrivals and three of the six departures must be conducted at night under the supervision of a pilot or an Exempt Master

Upgrade of Pilotage Exemption

A restricted PEC can be upgraded to an unrestricted certificate by completing the required night movements in and out of the Port with a KPA licenced Pilot embarked.

To be endorsed for a different class of vessel an exempt master will need to undertake additional runs under pilotage on the new class/sized vessel. This new class/sized vessel can then be added to a PEC. At least six runs, three in and three out must be completed on the new vessel.



File ref:

2.0

HBR90/191144

Version:

Issue date: March 2023

In both of these situations the Pilot must make a positive recommendation to the Harbour Master to upgrade the PEC.

18.9. Period of Pilot Exemption Validity

Provided that a current AMSA medical is maintained by the Master the KPA Pilotage Exemption Certificates for the Port is valid for a period of two years from the date of issue. The anniversary date will be the date the candidate successfully passed the examination. Exemptions will remain valid for two years from the date of issue unless:

- a. the PEC is suspended or cancelled by the Harbour Master;
- b. an exempt Master does not pilot a vessel in or out of the port under the authority of the PEC for a period of six months;
 - the holder in this instance must contact the Harbour Master who will assess the situation and may require one or more vessel movements in and/or out of the Port incorporating berthing and letting go from the wharf under the supervision of an approved Pilot before reinstating the PEC; or
 - II. an exempt master does not utilise his PEC within Port Limits for a period of 12 months in which case the Master must re-commence the process for the issue of another exemption certificate.
 - III. The medical certificate or Certificate of Competency lapses during the term. To this end a PEC will usually be aligned with the Certificate of Competency or a medical.

18.10. Pilotage Exemption Renewal

Exempt Masters that have maintained currency of their Pilotage Exemption wishing to renew their PEC on conclusion of the two year period may make an application to KPA's Harbour Master (30 days' notice required) by forwarding a copy of the following documentation:

- an application for Pilotage Exemption Renewal (available from KPA);
- evidence of residency;
- a copy of the Master's Certificate of Competency;
- a copy of the exempt Master's valid AMSA Medical Certificate;
- a log of the runs in and out of the port since the last PEC renewal; and
- · details for invoicing the scheduled fee.

If deemed necessary by the Harbour Master the applicant may be required to sit another theoretical examination.



File ref:

HBR90/191144

Version:

2.0

Issue date: March 2023

Exempt Masters that have not undertaken any night runs during the preceding 18 months will have their new PEC restricted to Daylight Only. Once issued, the renewed Pilot Exemption Certificate will be valid for a further two year period or the validity of the medical or Certificate of Competency.

18.11. Check pilotage

Masters maintaining a continuous PEC will be subject to annual check pilotage runs with a Port approved pilot or the Harbour Master at the Harbour Masters discretion. EM's will be advised of the need for a check run with sufficient notice to enable them to book a pilot for the run.

Additional pilotage check runs may be mandated following any shipping incident involving an Exempt Master.

18.12. Suspension or Cancellation of Pilotage Exemption Certificates

The Harbour Master may suspend or cancel a PEC if it is deemed that an EM has contravened the Port Authorities Act or Regulations, or if it is deemed that the EM is unable to move a vessel commensurate with the required standards within the Port. Formal written advice of the suspension or cancellation of certificates will be provided by the Harbour Master. The subject Master has the right of appeal as described in Port Authorities Regulations 57 and 58.

18.13. Exempt Masters Obligation to Record Movements

An EM is obliged to maintain a record of each occasion when a vessel is moved under the authority of his/her PEC. Details to be recorded include:

- the name of the vessel;
- the LOA and GRT of the vessel;
- the time and date that the vessel was moved; and
- the start and end points or the movement (e.g. berth 3 to Sea, or Sea to berth 5).

This written record may be called upon intermittently by the Harbour Master, in order to internally audit the pilotage exemption system.

The Application for Pilotage Exemption Certificate (PEC) / Renewal can be found on the website under Forms and Publications https://www.kimberleyports.wa.gov.au/About-Kimberley-Ports-Authority/Forms-Publications

For all other Port processes, such as berth booking, mooring, bunkering, security mariners are referred to the Port of Broome Port and Terminal Handbook.