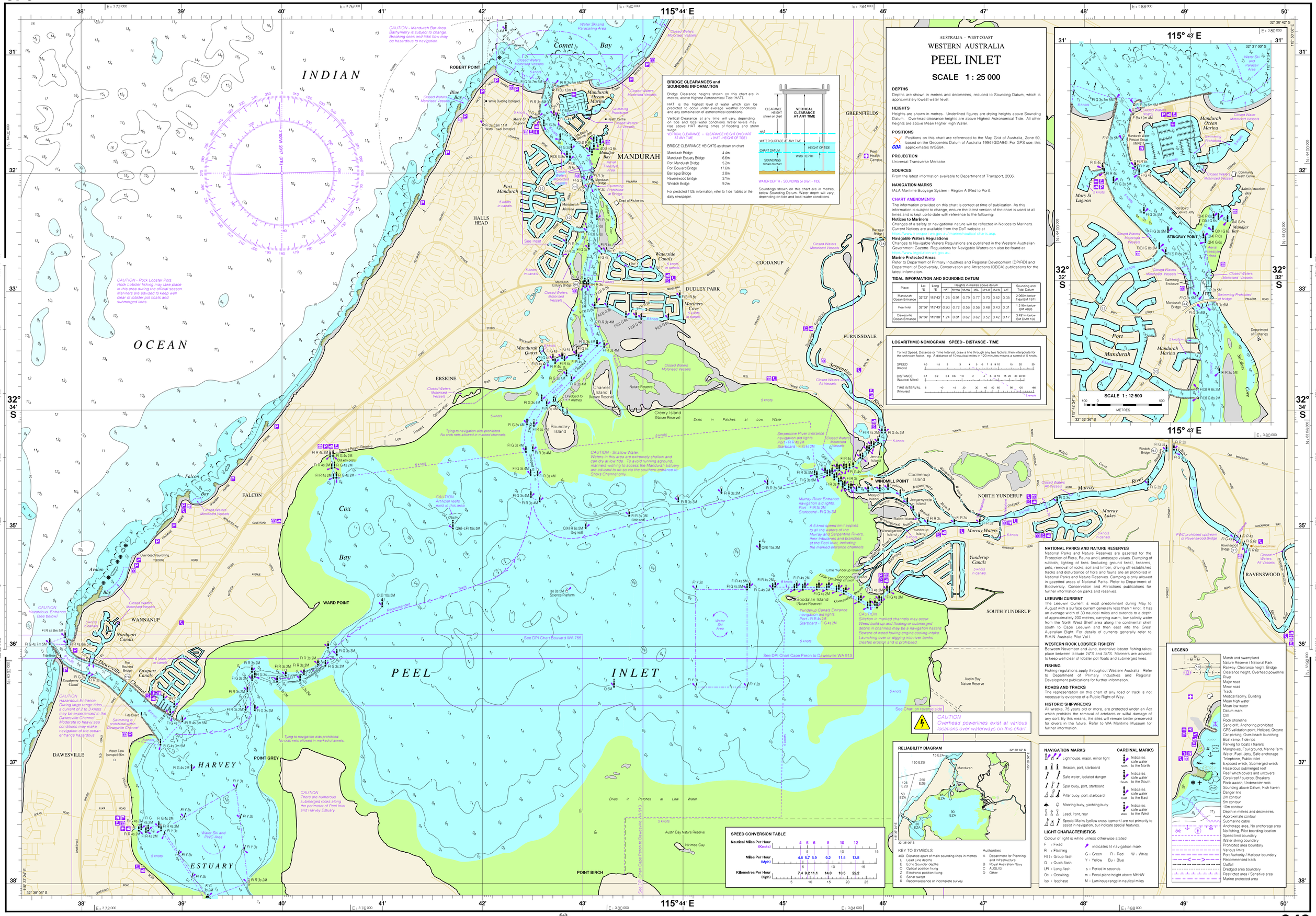
DEPTHS IN METRES

SEE RELATED PUBLICATIONS: Notice to Mariners (https://www.transport.wa.gov.au/marine/nautical-charts.asp). Symbols, Abbreviations and Terms (INT 1), Tide Tables, Sailing Directions. For surveys beyond this chart refer to RAN Charts AUS 334 and AUS 755.



AUSTRALIA - WEST COAST

WESTERN AUSTRALIA

PEEL INLET

SCALE 1 : 25 000

DEPTHS

Depths are shown in metres and decimetres, reduced to Sounding Datum, which is approximately lowest water level.

HEIGHTS

Heights are shown in metres. Underlined figures are drying heights above Sounding Datum. Overhead clearance heights are above Highest Astronomical Tide. All other heights are above Mean Higher High Water.

POSITIONS

Positions on this chart are referenced to the Map Grid of Australia, Zone 50, based on the Geocentric Datum of Australia 1994 (GDA94). For GPS use, this approximates WGS84.

PROJECTION

Universal Transverse Mercator.

SOURCES

From the latest information available to Department of Transport, 2006.

NAVIGATION MARKS

IALA Maritime Buoyage System - Region A (Red to Port).

CHART AMENDMENTS

The information provided on this chart is correct at time of publication. As this information is subject to change, ensure the latest version of the chart is used at all times and is kept up-to-date with reference to the following:

Notices to Mariners
Changes of a safety or navigational nature will be reflected in Notices to Mariners. Current Notices are available from the DoT website at https://www.transport.wa.gov.au/marine/nautical-charts.asp.

Navigable Waters Regulations
Changes to Navigable Waters Regulations are published in the Western Australian Government Gazette. Regulations for Navigable Waters can also be found at www.slp.wa.gov.au.

Marine Protected Areas
Refer to Department of Primary Industries and Regional Development (DPIRD) and Department of Biodiversity, Conservation and Attractions (DBCA) publications for the latest information.

TIDAL INFORMATION AND SOUNDING DATUM

Place	Lat °S	Long °E	Heights in metres above datum HAT	MHHW	MLHW	MSL	MHLW	MLLW	LAT	Sounding and Tidal Datum
Mandurah Ocean Entrance	32°32'	115°43'	1.26	0.91	0.79	0.77	0.70	0.62	0.35	2.060m below Tidal BM 1971
Peel Inlet	32°36'	115°43'	0.93	0.72	0.56	0.56	0.48	0.43	0.31	1.216m below BM A895
Dawesville Ocean Entrance	32°36'	115°38'	1.24	0.81	0.62	0.62	0.52	0.42	0.17	3.491m below BM DMH 102

BRIDGE CLEARANCES and SOUNDING INFORMATION

Bridge Clearance heights shown on this chart are in metres, above Highest Astronomical Tide (HAT).

HAT is the highest level of water which can be predicted to occur under average weather conditions and any combination of astronomical conditions.

Vertical Clearance at any time will vary, depending on tide and local water conditions. Water levels may rise above HAT during times of flooding and storm surge.

VERTICAL CLEARANCE = CLEARANCE HEIGHT ON CHART AT ANY TIME + (HAT - HEIGHT OF TIDE)

BRIDGE CLEARANCE HEIGHTS as shown on chart

Mandurah Bridge	4.4m
Mandurah Estuary Bridge	6.6m
Port Mandurah Bridge	5.2m
Port Bouvard Bridge	17.6m
Barragup Bridge	2.8m
Ravenswood Bridge	3.1m
Windich Bridge	9.2m

For predicted TIDE information, refer to Tide Tables or the daily newspaper.

Soundings shown on this chart are in metres, below Sounding Datum. Water depth will vary, depending on tide and local water conditions.

LOGARITHMIC NOMOGRAM SPEED - DISTANCE - TIME

To find Speed, Distance or Time Interval, draw a line through any two factors, then interpolate for the unknown factor eg. A distance of 10 nautical miles in 120 minutes means a speed of 5 knots.

SPEED (Knots): 1.0 1.5 2 3 4 5 6 7 8 9 10 15 20 30
DISTANCE (Nautical Miles): 0.1 0.2 0.4 0.6 1.0 2 4 6 8 10 15 20 30 40 50
TIME INTERVAL (Minutes): 6 10 15 20 30 40 50 60 90 120 180
Example

NATIONAL PARKS AND NATURE RESERVES

National Parks and Nature Reserves are gazetted for the Protection of Flora, Fauna and Landscape values. Dumping of rubbish, lighting of fires (including ground fires), firearms, pets, removal of rocks, soil and timber, driving off established tracks and disturbance of flora and fauna are all prohibited in National Parks and Nature Reserves. Camping is only allowed in gazetted areas of National Parks. Refer to Department of Biodiversity, Conservation and Attractions publications for further information on parks and reserves.

LEEUWIN CURRENT

The Leeuwin Current is most predominant during May to August with a surface current generally less than 1 knot. It has an average width of 30 nautical miles and extends to a depth of approximately 200 metres, carrying warm, low salinity water from the North West Shelf area along the continental shelf south to Cape Leeuwin and then east into the Great Australian Bight. For details of currents generally refer to R.A.N. Australia Pilot Vol I.

WESTERN ROCK LOBSTER FISHERY

Between November and June, extensive lobster fishing takes place between latitude 24°S and 34°S. Mariners are advised to keep well clear of lobster pot floats and submerged lines.

FISHING

Fishing regulations apply throughout Western Australia. Refer to Department of Primary Industries and Regional Development publications for further information.

ROADS AND TRACKS

The representation on this chart of any road or track is not necessarily evidence of a Public Right of Way.

HISTORIC SHIPWRECKS

All wrecks, 75 years old or more, are protected under an Act which prohibits the removal of artefacts or wilful damage of any sort. By this means, the sites will remain better preserved for divers in the future. Refer to WA Maritime Museum for further information.

CAUTION
Overhead powerlines exist at various locations over waterways on this chart

RELIABILITY DIAGRAM

KEY TO SYMBOLS

400 Distance apart of main sounding lines in metres
L Lead Line depths
E Echo Sounder depths
O Optical position fixing
Z Electronic position fixing
S Sonar swept
R Reconnaissance or incomplete survey

Authorities
A: Department for Planning and Infrastructure
B: Royal Australian Navy
C: AUSLIG
D: Other

SPEED CONVERSION TABLE

Nautical Miles Per Hour (Knots)	4	5	6	8	10	12				
Miles Per Hour (Mph)	4.6	5.7	6.9	9.2	11.5	13.8				
Kilometres Per Hour (Kph)	7.4	9.2	11.1	14.8	18.5	22.2				
	5	10	15	20	25					

NAVIGATION MARKS

Lighthouse, major, minor light
Beacon, port, starboard
Safe water, isolated danger
Spar buoy, port, starboard
Pillar buoy, port, starboard
Mooring buoy, yachting buoy
Lead, front, rear
Special Marks (yellow cross topmark) are not primarily to assist in navigation, but indicate special features.

CARDINAL MARKS

Indicates safe water to the North
Indicates safe water to the South
Indicates safe water to the East
Indicates safe water to the West

LIGHT CHARACTERISTICS

Colour of light is white unless otherwise stated

F : Fixed
Fl : Flashing
Fl(i) : Group-flash
Q : Quick-flash
LFl : Long-flash
Oc : Occulting
Iso : Isophase

indicates lit navigation mark

G : Green R : Red W : White
Y : Yellow Bu : Blue

s : Period in seconds
m : Focal plane height above MHHW
M : Luminous range in nautical miles

LEGEND

Marsh and swampland
Nature Reserve / National Park
Railway, Clearance height, Bridge
Clearance height, Overhead powerline
River
Major road
Minor road
Track
Medical facility, Building
Mean high water
Mean low water
Datum mark
Cliff
Rock shoreline
Sand drift, Anchoring prohibited
GPS validation point, Helipad, Groyne
Car parking, Over-beach launching
Boat ramp, Tide rips
Parking for boats / trailers
Mangroves, Foul ground, Marine farm
Water, Fuel, Jetty, Safe anchorage
Telephone, Public toilet
Exposed wreck, Submerged wreck
Hazardous submerged reef
Reef which covers and uncovers
Coral reef / outcrop, Breakers
Rock awash, Underwater rock
Sounding above Datum, Fish haven
Danger line
2m contour
5m contour
10m contour
Depth in metres and decimetres
Approximate contour
Submarine cable
Anchorage area, No anchorage area
No fishing, Pilot boarding location
Speed limit boundary
Water skiing boundary
Prohibited area boundary
Various limits
Port Authority / Harbour boundary
Recommended track
Outfall
Dredged area boundary
Restricted area / Sensitive area
Marine protected area

Government of Western Australia
Department of Transport
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DEPTHS IN METRES

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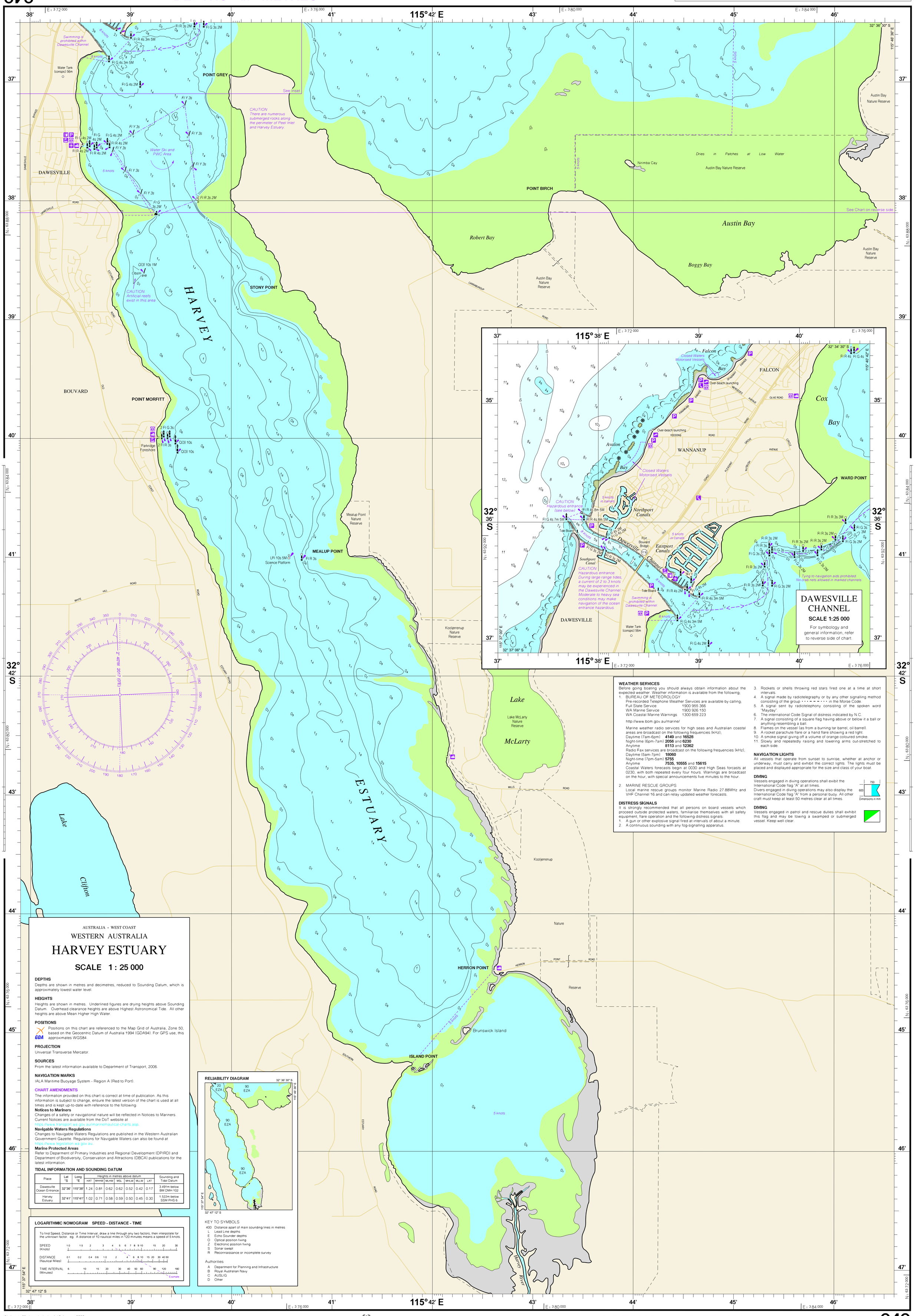

AUSTRALIA - WEST COAST

WESTERN AUSTRALIA

HARVEY ESTUARY

SCALE 1 : 25 000

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Harvey Estuary	32°41'	115°41'	1.02	0.71	0.58	0.59	0.50	0.45	0.30	1.522m below SSM PHS 6

LOGARITHMIC NOMOGRAM SPEED - DISTANCE - TIME

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R Reconnaissance or incomplete survey

Authorities
A Department for Planning and Infrastructure
B Royal Australian Navy
C AUSLIG
D Other

WEATHER SERVICES
Before going boating you should always obtain information about the expected weather. Weather information is available from the following;
1. BUREAU OF METEOROLOGY
   Pre-recorded Telephone Weather Services are available by calling;
   Full State Service 1900 955 366
   WA Marine Service 1900 926 150
   WA Coastal Marine Warnings 1300 659 223
   http://www.bom.gov.au/marine/
   Marine weather radio services for high seas and Australian coastal areas are broadcast on the following frequencies (kHz);
   Daytime (7am-6pm) **4149** and **16528**
   Night-time (6pm-7am) **2056** and **6230**
   Anytime **8113** and **12362**
   Radio Fax services are broadcast on the following frequencies (kHz);
   Daytime (5am-7pm) **18060**
   Night-time (7pm-5am) **5755**
   Anytime **7535, 10555** and **15615**
   Coastal Waters forecasts begin at 0030 and High Seas forcasts at 0230, with both repeated every four hours. Warnings are broadcast on the hour, with special announcements five minutes to the hour.
2. MARINE RESCUE GROUPS
   Local marine rescue groups monitor Marine Radio 27.88MHz and VHF Channel 16 and can relay updated weather forecasts.

DISTRESS SIGNALS
It is strongly recommended that all persons on board vessels which proceed outside protected waters, familiarise themselves with all safety equipment, flare operation and the following distress signals:
1. A gun or other explosive signal fired at intervals of about a minute.
2. A continuous sounding with any fog-signalling apparatus.
3. Rockets or shells throwing red stars fired one at a time at short intervals.
4. A signal made by radiotelegraphy or by any other signalling method consisting of the group • • • – – – • • • in the Morse Code.
5. A signal sent by radiotelephony consisting of the spoken word "Mayday".
6. The international Code Signal of distress indicated by N.C.
7. A signal consisting of a square flag having above or below it a ball or anything resembling a ball.
8. Flames on the vessel (as from a burning tar barrel, oil barrel).
9. A rocket parachute flare or a hand flare showing a red light.
10. A smoke signal giving off a volume of orange coloured smoke.
11. Slowly and repeatedly raising and lowering arms out-stretched to each side.

NAVIGATION LIGHTS
All vessels that operate from sunset to sunrise, whether at anchor or underway, must carry and exhibit the correct lights. The lights must be placed and displayed appropriate for the size and class of your boat.

DIVING
Vessels engaged in diving operations shall exibit the International Code flag "A" at all times.
Divers engaged in diving operations may also display the International Code flag "A" from a personal buoy. All other craft must keep at least 50 metres clear at all times.

750 600 Dimensions in mm

DIVING
Vessels engaged in patrol and rescue duties shall exhibit this flag and may be towing a swamped or submerged vessel. Keep well clear.

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