



## RV Investigator Voyage Plan

VOYAGE #:	IN2024_T02
Voyage title:	2024 Mid-life refit transit to shipyard
Mobilisation:	Brisbane, July 5 – 7, 2024
Depart:	Brisbane, 0800 Monday 8 July 2024
Arrive:	Singapore, Tuesday 23 July 2024
Demobilisation:	Seatrium Admiralty Yard, Singapore, July 23 - 25, 2024
Voyage Delivery Coordinator & Voyage Manager:	Max McGuire

## Voyage objectives

The primary objective of voyage IN2024\_T02 is the safe and timely transit of RV *Investigator* from Brisbane to Seatrium Admiralty Yard, Singapore in preparation for dry dock and mid-life refit works. The transit is direct with no operational time available for science operations unless underway at full speed. Any available operational time to be spent on opportunistic seafloor mapping – while keeping Expected Time of Arrival on track as the primary objective.

Arrival at King George 6 Graving Dock: Vessel will be slotted into place during a five hour operation including heading up the river, exchanging pilots, positioning tug boats, and then centring the vessel over the blocks. The vessel will then transfer to shore side generator power before the graving dock is pumped out.

## Activity plan for first 24-48 hours of voyage

Day	Date	Time	Activity
Monday	8 July	~0700	Australian Border Force (ABF) clearance requirements, seagoing inductions, muster drill, voyage management team meeting and general voyage preparations
Monday	8 July	ASAP	Depart Port of Brisbane and begin piloted transit through Moreton Bay to open water along voyage track

## Proposed voyage track

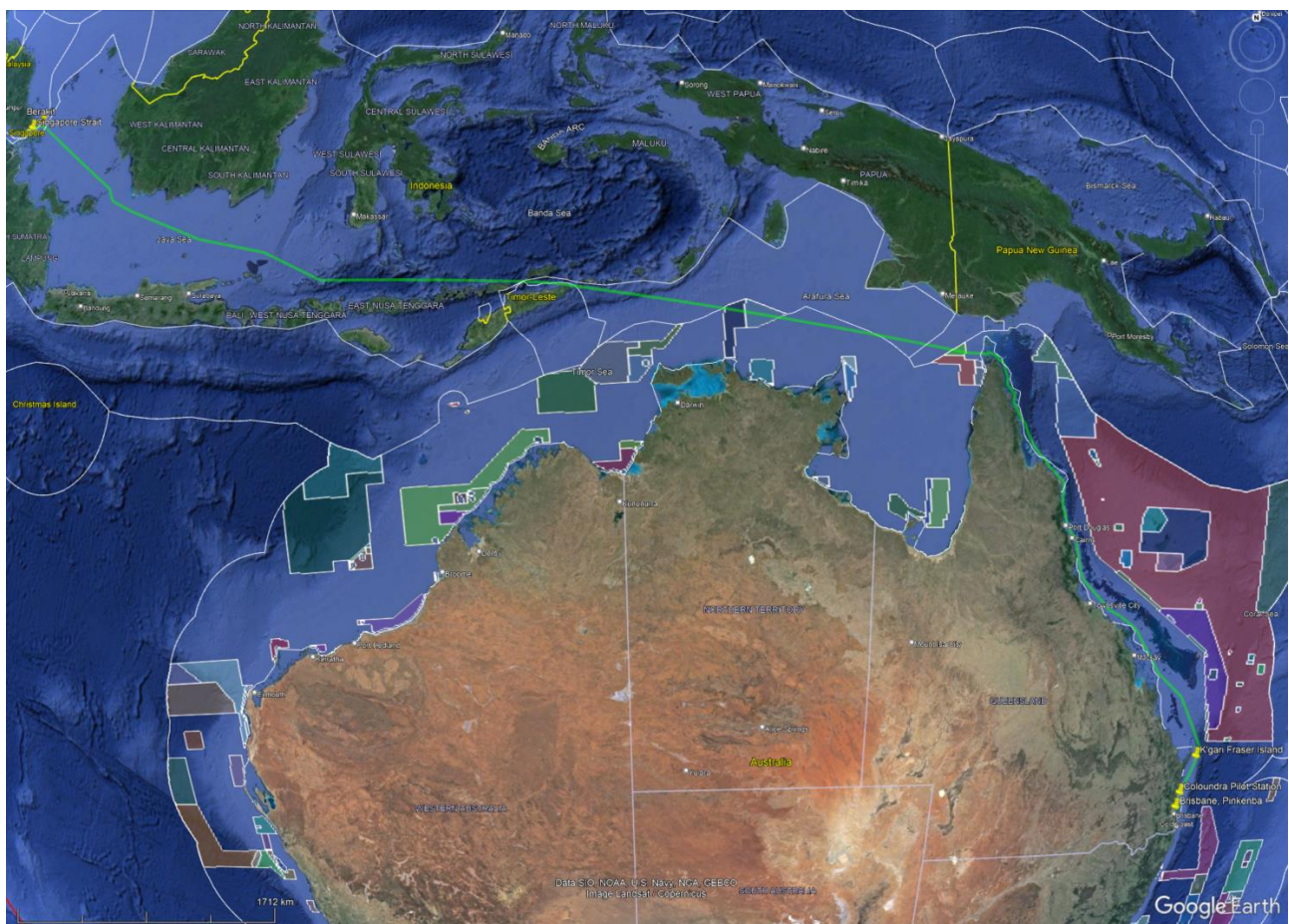


Figure 1. Draft voyage track (green line) with EEZ country boundaries (white lines) and Australian Marine Parks (coloured polygons).

## Waypoints, stations and time estimates

The following time estimates are based on a steaming speed of 10 knots.

SITE	DEGREES DECIMAL MINUTES LATITUDE	DEGREES DECIMAL MINUTES LONGITUDE	DISTANCE (NM)	TOTAL DISTANCE (NM)	STEAMING TIME (HRS)	TOTAL STEAM (HRS)
Berth	~27° 24.990' S	~153° 08.646' E	0.0	0	0.0	0
Quarantine Flats	27° 24.420' S	153° 08.994' E	0.6	0.6	0.1	0.1
Lytton Rocks	27° 23.748' S	153° 09.258' E	0.7	1.4	0.1	0.2
Pelican Banks	27° 23.262' S	153° 09.306' E	0.5	1.8	0.0	0.2
Luggage PT	27° 22.782' S	153° 09.648' E	0.6	2.4	0.1	0.3
Inner Bar	27° 21.144' S	153° 10.788' E	1.9	4.3	0.2	0.5
Entrance Bcns.	27° 18.624' S	153° 12.552' E	3.0	7.3	0.3	0.8
Outer EB	27° 17.508' S	153° 13.332' E	1.3	8.6	0.1	0.9
East of RR	27° 15.276' S	153° 15.744' E	3.1	11.7	0.3	1.2
M8	27° 11.922' S	153° 17.004' E	3.5	15.3	0.4	1.6
M9	27° 09.600' S	153° 20.352' E	3.8	19.0	0.4	2.0
M7	27° 08.310' S	153° 21.090' E	1.4	20.5	0.1	2.1
M3/M4	27° 05.544' S	153° 18.786' E	3.4	23.9	0.3	2.5
M1	27° 03.324' S	153° 18.060' E	2.3	26.3	0.2	2.7
NW12	27° 02.448' S	153° 15.378' E	2.5	28.8	0.3	2.9
NW3	26° 57.768' S	153° 13.482' E	5.0	33.8	0.5	3.4
NW4	26° 51.522' S	153° 09.168' E	7.3	41.1	0.7	4.2
NW 2	26° 49.644' S	153° 08.820' E	1.9	43.0	0.2	4.4
NW FWY	26° 48.480' S	153° 10.686' E	2.0	45.1	0.2	4.6
Caloundra	26° 43.002' S	153° 10.500' E	5.5	50.5	0.5	5.1
Mooloolaba	24° 49.386' S	153° 47.964' E	118.6	169.1	11.9	17.0
Capricorn Channel	22° 42.420' S	152° 04.500' E	158.5	327.6	15.8	32.8
High Peak	21° 49.464' S	150° 40.608' E	94.0	421.7	9.4	42.2
Leeper Shoal	20° 07.050' S	149° 10.056' E	132.9	554.6	13.3	55.5
Holbourne Island	19° 41.310' S	148° 22.530' E	51.6	606.2	5.2	60.7
Cape Upstart	19° 28.782' S	147° 49.992' E	33.1	639.3	3.3	64.0

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Hichinbrook	18° 23.628' S	146° 31.122' E	99.1	738.4	9.9	73.9
Dunk Island	18° 08.040' S	146° 23.190' E	17.3	755.7	1.7	75.6
Fitzroy Island	16° 54.180' S	146° 01.812' E	76.7	832.4	7.7	83.3
Cairns	16° 40.002' S	145° 45.000' E	21.5	853.9	2.1	85.5
Low Isles (E)	16° 30.000' S	145° 39.702' E	11.2	865.1	1.1	86.6
Rattlesnake	15° 50.202' S	145° 26.298' E	41.9	907.0	4.2	90.8
Gubbins (S)	15° 42.348' S	145° 22.770' E	8.6	915.5	0.9	91.6
Two Isles (N)	14° 57.978' S	145° 24.528' E	44.4	960.0	4.4	96.1
Flattery	14° 54.432' S	145° 22.260' E	4.2	964.1	0.4	96.5
Pethebridge (S)	14° 44.802' S	145° 09.852' E	15.4	979.5	1.5	98.0
Coquet (W)	14° 33.198' S	144° 57.798' E	16.5	996.0	1.6	99.7
Bewick (N)	14° 26.670' S	144° 48.000' E	11.5	1007.5	1.2	100.8
Barrow (N)	14° 21.000' S	144° 41.352' E	8.6	1016.1	0.9	101.7
Rocky	14° 12.798' S	144° 37.002' E	9.2	1025.3	0.9	102.6
Singleton	14° 09.978' S	144° 34.302' E	3.9	1029.2	0.4	103.0
Channel	14° 07.362' S	144° 28.590' E	6.1	1035.3	0.6	103.6
Thirteen-One	13° 46.350' S	144° 09.198' E	28.2	1063.5	2.8	106.4
Creech	13° 41.178' S	144° 04.758' E	6.7	1070.3	0.7	107.1
Wideawake	13° 17.280' S	143° 50.898' E	27.5	1097.7	2.7	109.8
Hudson	12° 56.550' S	143° 43.230' E	22.0	1119.8	2.2	112.0
Frederick	12° 52.278' S	143° 39.432' E	5.7	1125.4	0.6	112.6
Sunk	12° 51.180' S	143° 37.518' E	2.2	1127.6	0.2	112.8
Wye (N)	12° 49.152' S	143° 35.598' E	2.8	1130.4	0.3	113.1
Eel (E)	12° 24.798' S	143° 21.852' E	27.8	1158.2	2.8	115.9
Inset	12° 14.598' S	143° 15.300' E	12.1	1170.2	1.2	117.1
Moody (E)	12° 05.100' S	143° 14.400' E	9.5	1179.8	1.0	118.0
Clerke (E)	11° 58.998' S	143° 18.300' E	7.2	1187.0	0.7	118.8
Nob (E)	11° 56.952' S	143° 18.300' E	2.0	1189.0	0.2	119.0
Hannibal (E)	11° 34.602' S	142° 57.852' E	30.0	1219.0	3.0	122.0
Halfway (E)	11° 20.802' S	143° 00.000' E	14.0	1233.0	1.4	123.4
Wyborn (E)	10° 48.372' S	142° 48.648' E	34.3	1267.3	3.4	126.8

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Albany (N)	10° 45.000' S	142° 40.902' E	8.3	1275.7	0.8	127.6
Alpha (N)	10° 37.122' S	142° 34.188' E	10.3	1285.9	1.0	128.7
Ince	10° 29.772' S	142° 18.450' E	17.1	1303.1	1.7	130.4
Hood	10° 29.772' S	142° 16.980' E	1.4	1304.5	0.1	130.5
Nardana	10° 30.528' S	142° 15.072' E	2.0	1306.5	0.2	130.7
Hammond	10° 30.630' S	142° 12.138' E	2.9	1309.4	0.3	131.0
Mecca	10° 32.130' S	142° 10.002' E	2.6	1312.0	0.3	131.3
Harrison (N)	10° 33.690' S	142° 08.082' E	2.5	1314.5	0.2	131.5
Goods (N) / Good	10° 33.858' S	142° 04.428' E	3.6	1318.1	0.4	131.9
Varzin Passage	10° 31.722' S	141° 56.016' E	8.5	1326.6	0.9	132.7
Arafura sea	10° 31.944' S	141° 53.376' E	2.6	1329.2	0.3	133.0
Proudfoot shoal	10° 32.724' S	141° 51.198' E	2.3	1331.5	0.2	133.2
Timor sea	10° 33.576' S	141° 27.912' E	22.9	1354.4	2.3	135.5
East Timor	08° 12.354' S	126° 41.136' E	886.7	2241.1	88.7	224.2
Flores sea	08° 06.504' S	125° 42.522' E	58.4	2299.5	5.8	230.0
Java sea	07° 28.296' S	118° 15.300' E	445.0	2744.5	44.5	274.5
	06° 10.488' S	116° 02.034' E	153.6	2898.1	15.4	289.9
	05° 16.530' S	113° 17.658' E	172.3	3070.5	17.2	307.1
	03° 36.768' S	110° 08.520' E	213.5	3283.9	21.3	328.5
	02° 58.596' S	109° 09.324' E	70.4	3354.3	7.0	335.5
	02° 26.046' S	108° 58.320' E	34.4	3388.7	3.4	338.9
	01° 12.180' N	105° 02.184' E	321.7	3710.4	32.2	371.1
Enter Strait	01° 30.054' N	104° 35.616' E	32.0	3742.5	3.2	374.3
Holsborough light	01° 24.798' N	104° 26.340' E	10.7	3753.1	1.1	375.4
	01° 18.864' N	104° 19.440' E	9.1	3762.2	0.9	376.3
East Johar Strait	01° 16.812' N	104° 07.686' E	11.9	3774.2	1.2	377.5
	01° 20.538' N	104° 03.984' E	5.3	3779.4	0.5	378.0
	01° 22.134' N	104° 01.986' E	2.6	3782.0	0.3	378.3
	01° 23.928' N	103° 59.790' E	2.8	3784.8	0.3	378.5
	01° 24.024' N	103° 58.968' E	0.8	3785.6	0.1	378.6
	01° 23.586' N	103° 57.840' E	1.2	3786.9	0.1	378.8

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	01° 23.562' N	103° 57.138' E	0.7	3787.6	0.1	378.8
	01° 25.620' N	103° 54.972' E	3.0	3790.5	0.3	379.1
	01° 25.680' N	103° 53.748' E	1.2	3791.8	0.1	379.2
	01° 26.214' N	103° 53.004' E	0.9	3792.7	0.1	379.3
	01° 27.492' N	103° 51.900' E	1.7	3794.4	0.2	379.5
	01° 27.996' N	103° 50.922' E	1.1	3795.5	0.1	379.6
Dock	01° 28.278' N	103° 50.250' E	0.7	3796.2	0.1	379.7

## Permits

ABF & Australian Customs requirements – under MMA Offshore management.

### **This voyage will traverse through the following Marine Parks:**

- Great Barrier Reef Marine Park (GBRMP):  
Permit #: G19/41954.2  
Expiry Date: 30th September 2024  
Cetacean permit requirements – MMO management through Biological Important Areas (GBRMP)  
GBRMP MARPOL requirements – under MMA Offshore management.
- Arafura Marine Park – Australian Marine Parks North Network:  
Permit #: PA2020-0041-4  
Permit variation #: PA2020-0041-10  
Expiry date: 6<sup>th</sup> October 2026

**No operations have been planned in these areas under the current approved permits. Engaging in non-approved activities is prohibited in a Marine Park, constitutes an offence under the EPBC Act or Regulations and may result in future permit applications being denied. An assessment of unplanned deployments (e.g. XBTs) is to be carried out onboard before commencing any operations.**

# Signature

Your name	Max McGuire
Title	Voyage Manager
Signature	
Date:	26/06/2024

