



Agenda

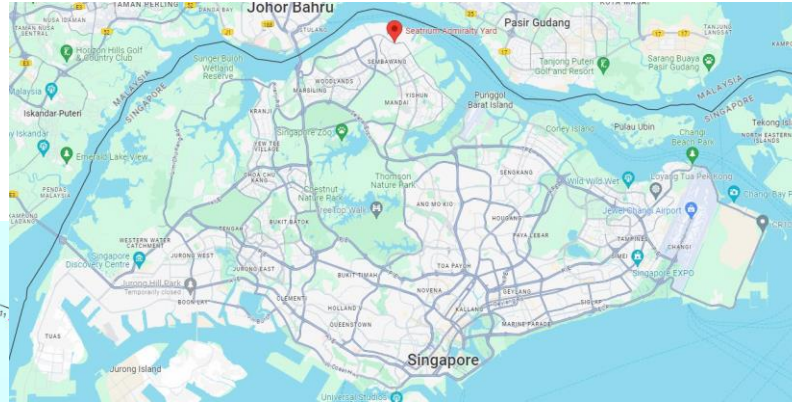
- Background
- Shipyard Specification
- Planned Shipyard Timeline
- Actual Shipyard Timeline
- Shipyard Management Plan
- Completed Shipyard Works
- Paint Specification





Background – Seatrium Admiralty Yard

**Shipyards contract with MMA Offshore
(Acting as owner on CSIRO's behalf)**



**King George VI Graving Dock
(2019 & original build)**



Shipyard Specification – Class & Ship Systems



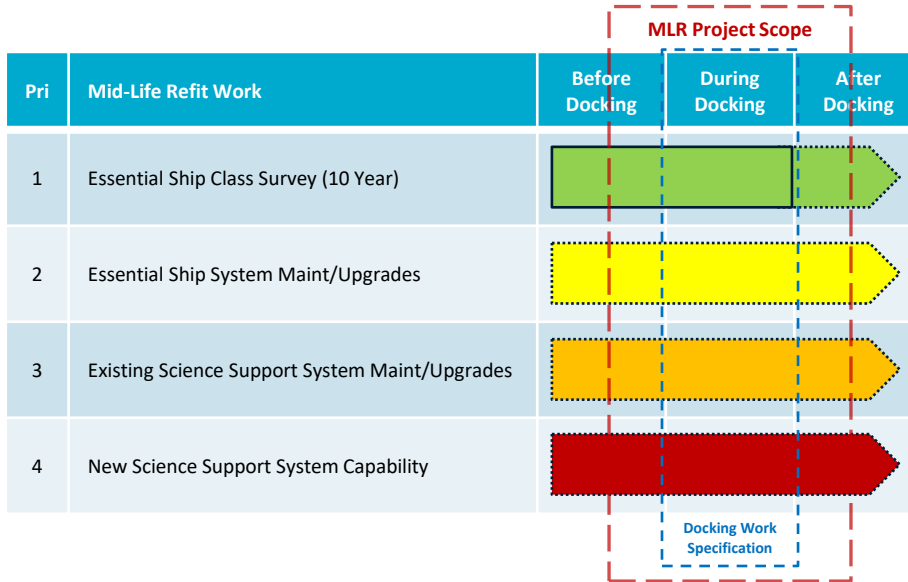
Category	Proposed Works
Class surveys	<ul style="list-style-type: none"> Hull & ballast Propulsion & steering Safety & radio / telecommunications Lifting appliances & tanks Polar code and SPS Ventilation and drainage Deck structures Machinery
Dry docking	<ul style="list-style-type: none"> Bow thruster Rudders / stocks Sea chests Steering gear Propellers, stern tubes & shafts Anodes & sea valves Paint superstructure and hull
Maintenance	<ul style="list-style-type: none"> Engine rooms & tanks Hatches & doors Cranes & gangway Windlass & winches Electrical systems Accommodation & science systems
Special projects	<ul style="list-style-type: none"> Change room/toilets Scupper drains Winch electrics Aft deck protrusions/net hatch/WT doors Incline experiment Bridge HVAC upgrade Raw SW piping Fuel tank / bow thruster breathers Thruster CCTV cameras



VESSEL NAME	RV Investigator
IMO NUMBER	9616888
LOA/BREADTH/DEPTH	93.75 M
BREADTH	18.48 M
DEPTH	9.44 M
DISPLACEMENT (Summer)	5880 MT
DOCKING DATE	27 th July 2024
DOCUMENT NAME	Docking Specification
DOCUMENT VERSION	Rev-2 – Dated 12/11/ 2023 Len Darby



RV Investigator Mid-Life Refit Project Scope





MLR Project 24/25 Outline Program (Planned)

FY24/25	July																														August																														September																														October																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Voyage Schedule	Port (4)				Transit to Singapore (16)												Shipyard - Drydock (28)												Shipyard - Alongside (17)						Transit to Hobart (18)						Port Period / Trials (30)																								Mob																																																										

FY24/25	December																														January																														February																														March																																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Voyage Schedule	Long Maintenance Period (73)																								Sea Trials & Calibrations (18)						Port		Mob		25/V01 - TBA (10)																																																																																									





MLR Project - Outline Shipyard Schedule (Planned v Actual)

28 Aug 24
Departed Dry Dock

21 Aug 24
Depart Dry Dock

9 Sept 24
Departed Singapore

FY24/25	July																															August																															September																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30																																
Voyage Schedule	Voy	Port (4)	Transit to Singapore (16)														Shipyard - Drydock (28)														Shipyard - Alongside (17)														Port	Transit to Hobart (18)														Port Period																																	



Shipyard Management Plan

Shipyard Management Plan

RV Investigator Mid-Life Refit (MLR) Project



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RV Investigator Mid-Life Refit (MLR) Project

Marine National Facility

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Shipyard Management Plan | iii



Shipyard Management Plan Objectives

- Governance and assurance – all activities in Singapore
- Living/working conditions – accommodation & transfers
- Duty of care arrangements – mitigation of risks to health and safety
- Roles & responsibilities – rules, regulations and policy compliance





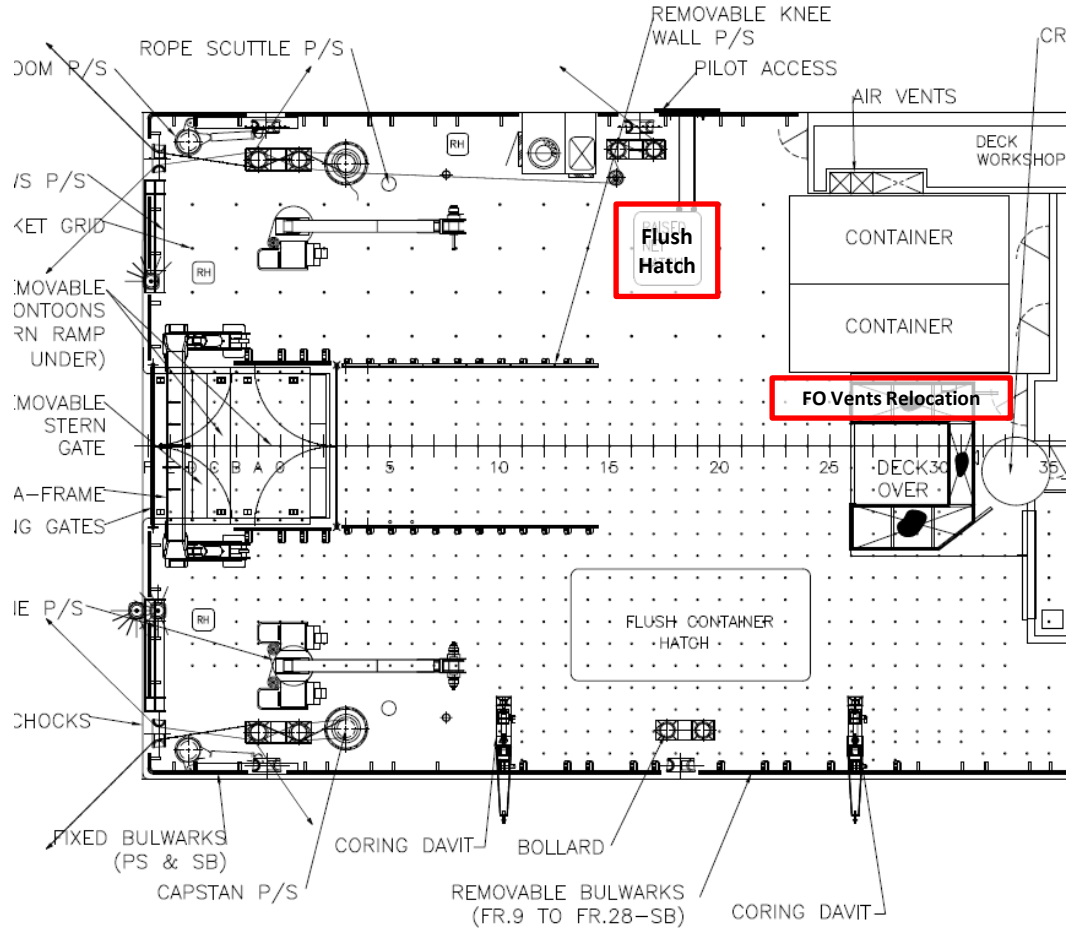
MNF Shipyard Roles & Responsibilities

- MNF Owners Representative – Outwards looking (MMA / Shipyard)
- MNF Coordinator – Inwards looking (*'chef de mission'* per say)
- E&T Project & Support Teams



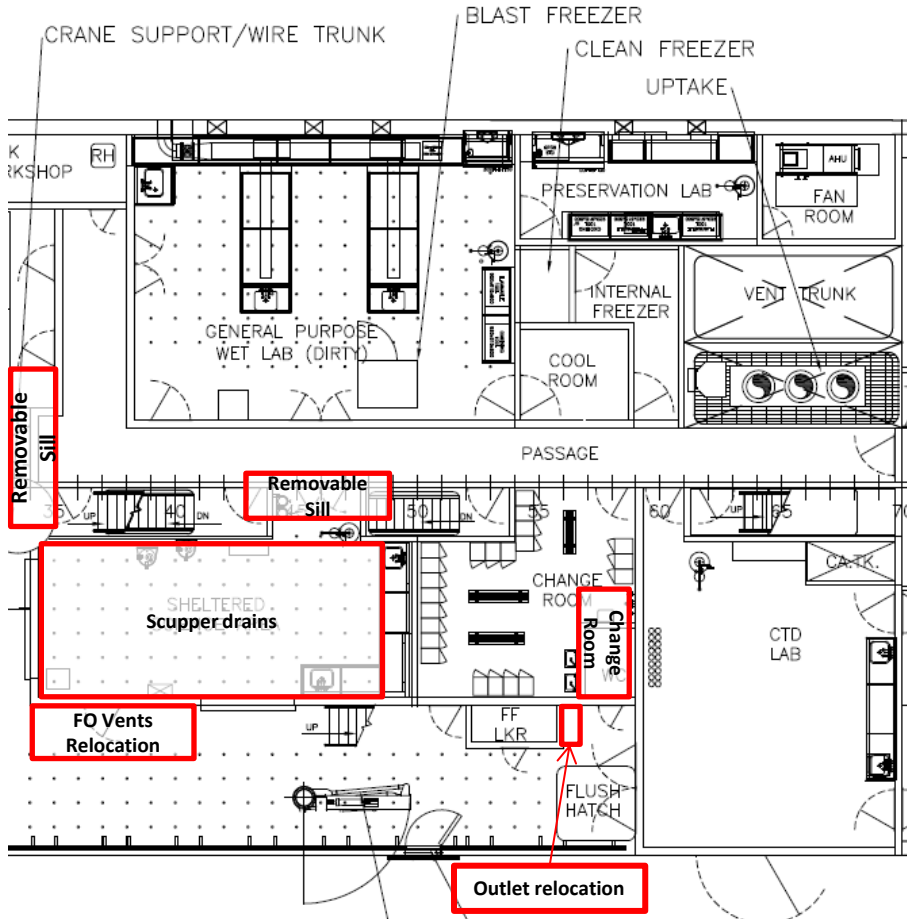


Shipyard Works – Completed – Rear deck



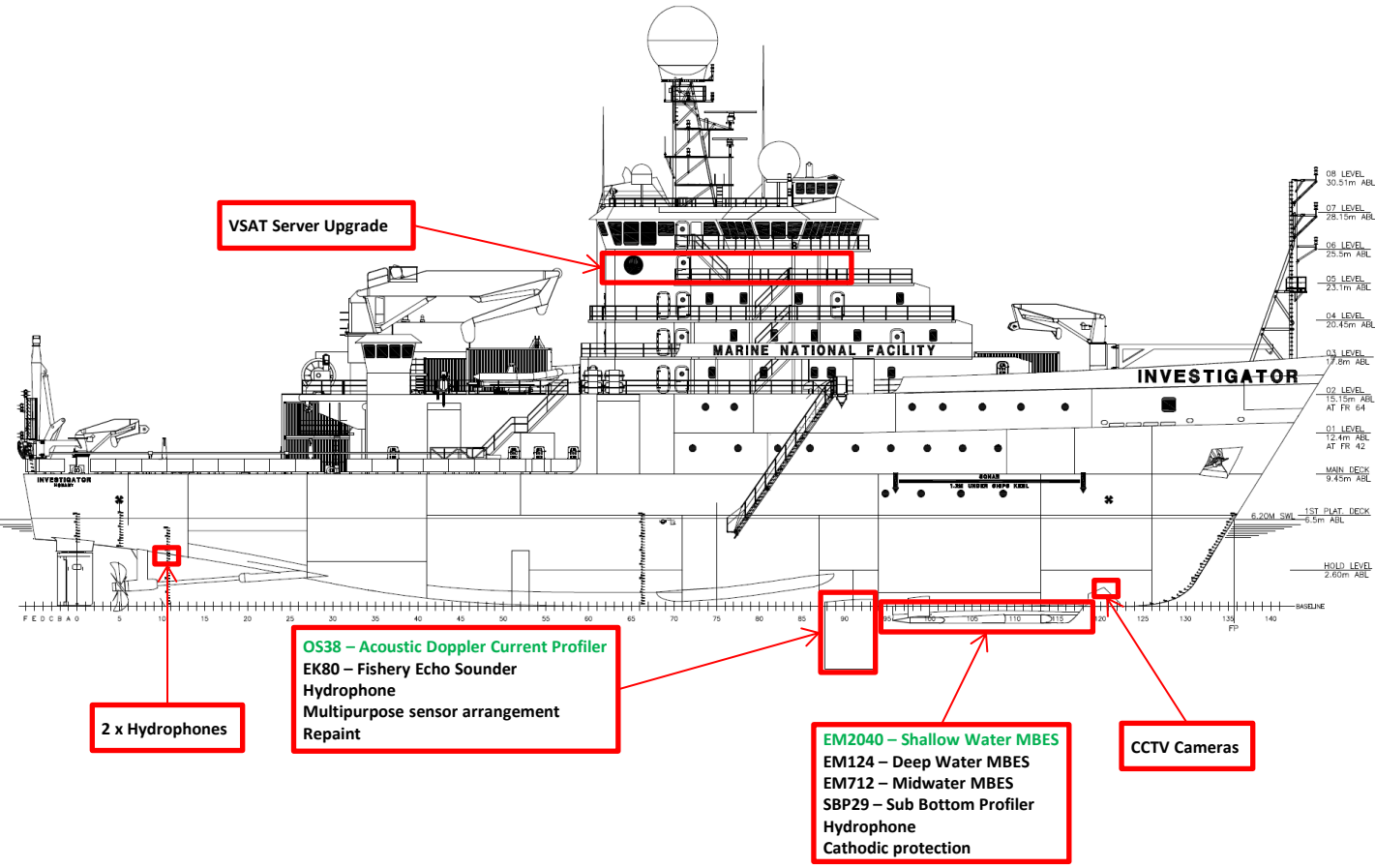


Shipyards Works – Completed Deck 1





Shipyard Specification – Completed





Seafloor Mapping Systems



KONGSBERG EM2040

Shallow Water
Frequency 200-400kHz



KONGSBERG EK80

KONGSBERG EM712

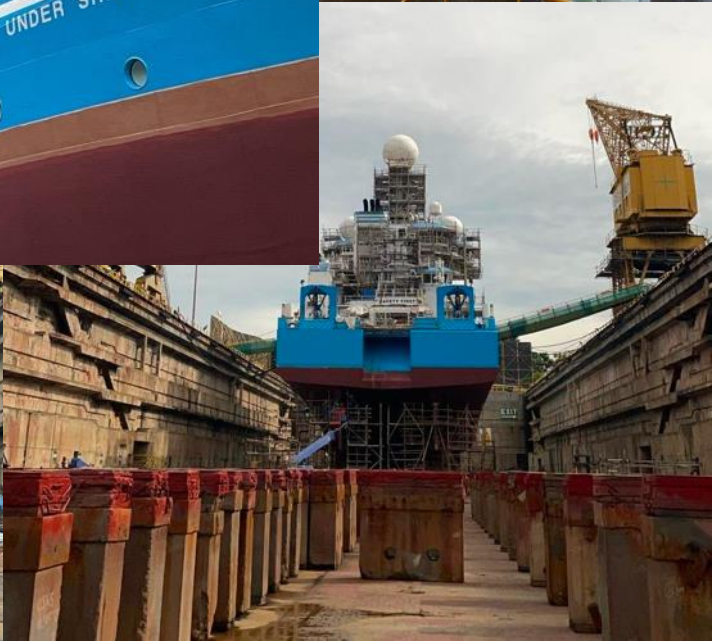
Mid Depth (<3000 m)
Frequency 40-100kHz



KONGSBERG EM124
KONGSBERG SBP29

Full Ocean Depth
Frequency 12kHz

SBP29 Sub-Bottom Profiler
Frequency 2-9kHz
Penetration few hundred metres (depending on several factors)





Questions & Discussion

