

# PORT SUPPLIED ROUTES & PASSAGE PLANS

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AUSTRALASIAN  
MARINE PILOTS INSTITUTE

# Who are we?

- Represent Marine Pilots in Australia
- Member of IMPA
- Continuous Professional Development Program
- Mentoring Program
- Peer Support Network

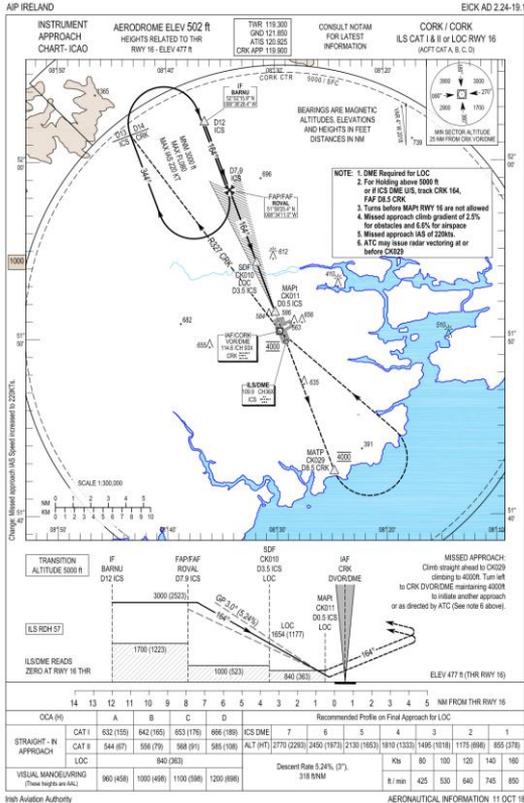
## Marine pilotage

### Safety concern

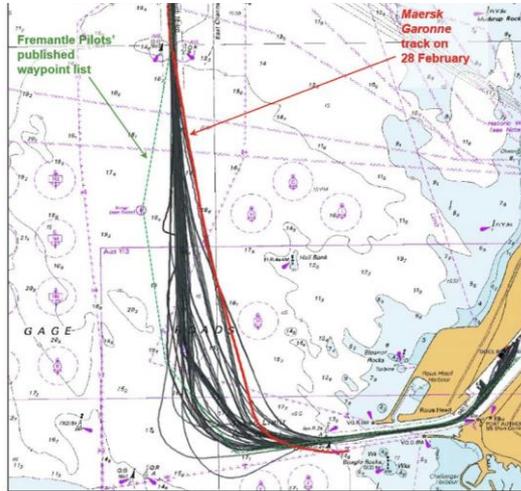
Navigation through confined waters under pilotage is a high-pressure situation where errors can easily lead to serious incidents.



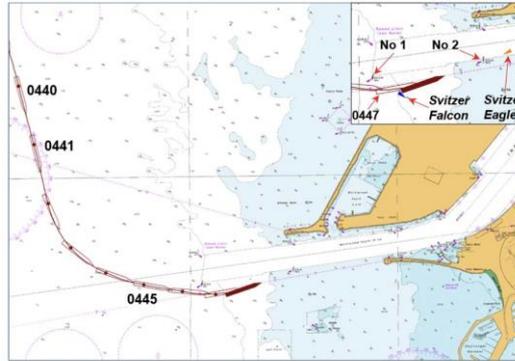
# Cork Airport Approaches



# Recent Accidents



Source: Australian Hydrographic Service (annotated by ATSB)



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The giant ship stuck in the Suez Canal is costing the global economy an estimated \$400 million per hour

# Existing Passage Planning Guidance

- Admiralty Ocean Passage of the World
- Weather Routing
- Traffic Separation Schemes
- Queensland Coastal Passage Plan
- Finland & Sweden (Port and Coastal Passage Plans)

# Reconceptualisation of Marine Pilotage



# What is a port provided passage plan?



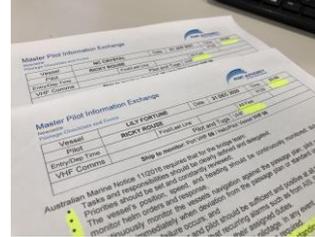
# Case Study : Newcastle, Australia

Newcastle Port Passage Planning Standard Routes  
Newcastle

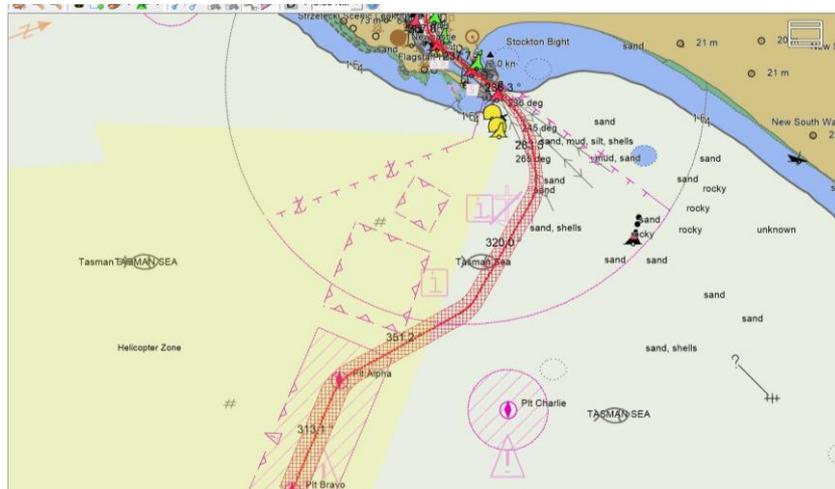
Pilotage Operations Procedures



## APPENDIX 1 – Newcastle Port Passage Planning Standard Routes Description and Waypoint Construction



Passage Description .....	Page
Inward via PBG 'Bravo and Alpha' to Buoy 15 .....	4
Inward via PBG 'Bravo and Alpha' to The Basin .....	5
Inward via PBG 'Bravo and Alpha' to The Horseshoe .....	6
Inward via PBG 'Charlie' to The Horseshoe (Tanker Only) .....	7
Inward via PBG 'Charlie' to M7 Berth (Tanker Only) .....	8
Inward via PBG 'Charlie' to K3 and K2 Berth (Tanker Only) .....	9
Outward from South Arm (NCIG) Channel via Southern Departure .....	10
Outward from Buoy 15 via Southern Departure .....	11
Outward from The Basin via Southern Departure .....	12



### External Publication

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Owner:	Grade 3 Marine Pilot	Version no:	7	Approval Date:	15/07/2019	Page 3 of 12
Approver:	Harbour Master	Objective Id:	A69956	Review Date:	15/07/2022	

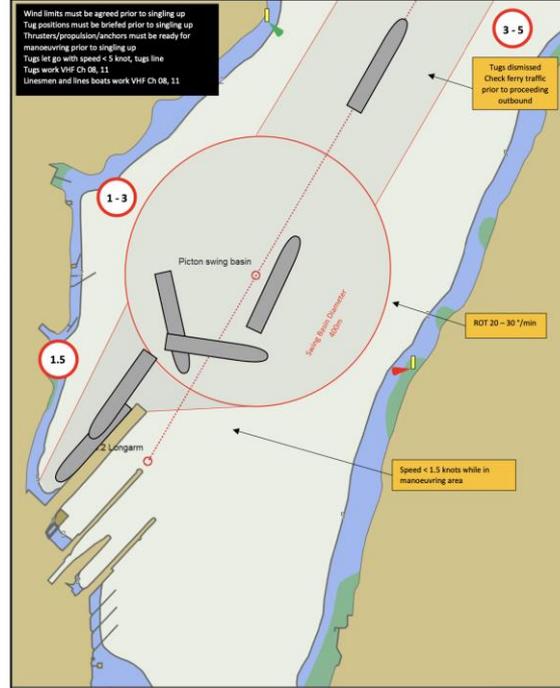
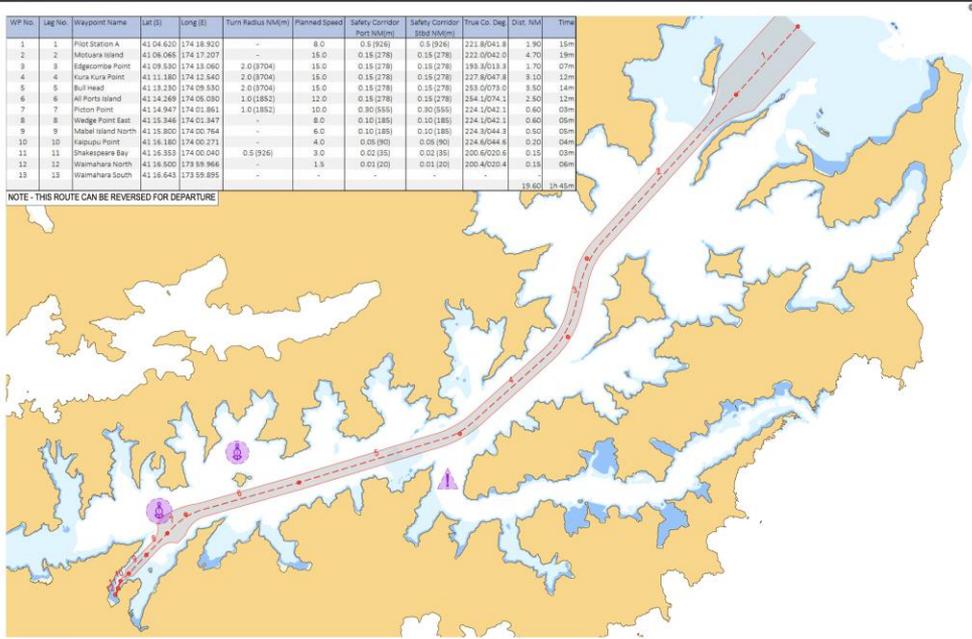
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# Example: Port Marlborough

WP No.	Lag No.	Waypoint Name	Lat (S)	Long (E)	Turn Radius (NM/m)	Planned Speed	Safety Corridor Port (Miles/m)	Safety Corridor Starboard (Miles/m)	True Co. Deg.	Dist. (NM)	Time
1	1	Pilot Station A	41 04 620	174 18 920	-	8.0	0.5 (0.926)	0.5 (0.926)	212.8/043.8	1.90	15m
2	2	Motuara Island	41 06 065	174 17 207	-	15.0	0.15 (278)	0.15 (278)	222.0/042.0	4.70	19m
3	3	Edgewood Point	41 09 530	174 13 060	2.0 (3704)	15.0	0.15 (278)	0.15 (278)	183.3/013.9	1.70	07m
4	4	Kaua Kupa Point	41 11 180	174 12 560	2.0 (3704)	15.0	0.15 (278)	0.15 (278)	207.8/047.8	8.30	12m
5	5	Bull Head	41 13 130	174 09 530	2.0 (3704)	15.0	0.15 (278)	0.15 (278)	263.0/079.0	8.50	14m
6	6	All Ports Island	41 14 289	174 05 050	1.0 (1852)	12.0	0.15 (278)	0.15 (278)	254.1/074.1	2.50	12m
7	7	Picton Front	41 14 947	174 01 861	1.0 (1852)	10.0	0.30 (556)	0.30 (556)	214.1/042.1	0.60	03m
8	8	Wedge Point East	41 15 346	174 01 347	-	8.0	0.10 (185)	0.10 (185)	224.1/042.1	0.60	05m
9	9	Mabel Island North	41 15 900	174 00 764	-	8.0	0.10 (185)	0.10 (185)	224.3/044.3	0.50	06m
10	10	Kaipoua Point	41 16 180	174 00 271	-	8.0	0.08 (90)	0.08 (90)	214.4/044.6	0.20	04m
11	11	Shakespeare Bay	41 16 353	174 00 040	0.5 (926)	3.0	0.02 (35)	0.02 (35)	200.6/020.6	0.15	03m
12	12	Waimahara North	41 16 650	173 59 966	-	1.5	0.01 (20)	0.01 (20)	200.4/020.4	0.15	06m
13	13	Waimahara South	41 16 643	173 59 895	-	-	-	-	-	19.60	1h 45m

NOTE - THIS ROUTE CAN BE REVERSED FOR DEPARTURE



# Development of a passage plan



The New Zealand Maritime Pilots' Association



## GOOD PRACTICE GUIDE TO PILOTAGE PLANNING



A GUIDE TO THE PROCESS OF PRODUCING FIT FOR PURPOSE  
PASSAGE PLANS FOR PILOTAGE OPERATIONS

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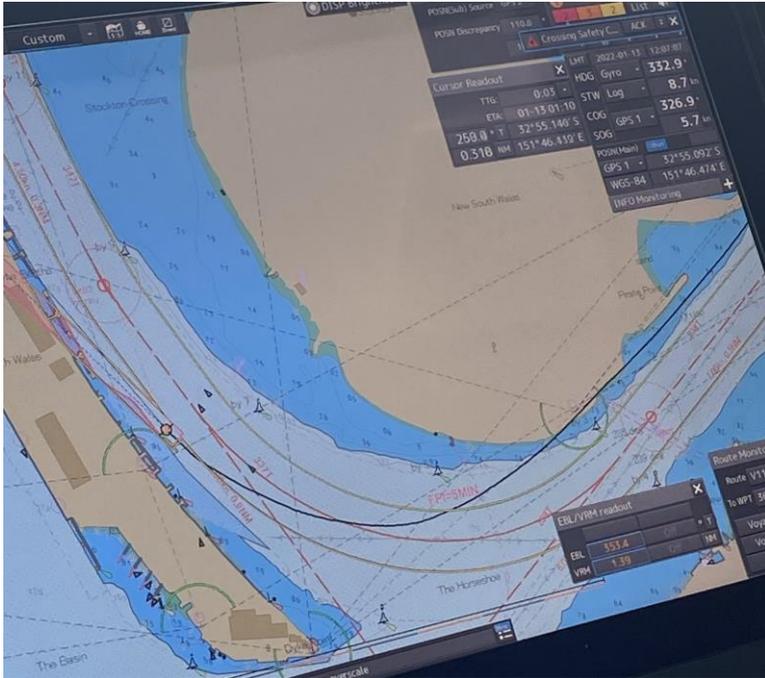
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# Maritime Autonomous Surface Ships



Why is a pilot talking about autonomous ships?

# Challenges



## Route Exchange

- RTZ Format – IEC 61174:2015
- S100 / S421
- Cyber Security
- Performance standards & manufacturer differences

## Port State Control

## Legal issues

## Proprietary Data

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