



PILOT REFERENCE BOOKLET 2ND EDITION



PILOT REFERENCE BOOKLET

2nd Edition

Compiled by Capt Terence Farrugia

Updated by Capt Tim Fenech

July 2023

PREFACE

“What is the alignment of the berth?”, “What type of connections are available?”, “What is the total length of the jetty?”, amongst others, are all questions that we get asked on a daily basis when, we, pilots are providing our services to the maritime community onboard or ashore. Remembering all the technical details would be a daunting task and it is also not a safe practice to rely solely on memory.

The information in this booklet was mostly available already however it was distributed over several publications and at times not fully up to date. This Pilot Reference Booklet is the outcome of a compilation of this information and additional information that the author thought would be of use to the pilot on duty, together with practices and norms with regards to the pilotage of vessels in the Maltese harbours and terminals that were gathered over the years by the serving pilots of the Malta Maritime Pilots Co-operative.

The booklet is designed to be used by a licensed maritime pilot or a trainee pilot as per the Maltese “Maritime Pilotage Regulations” (S.L.499.26) and by other parties involved in the manoeuvring of vessels in Maltese harbours.

Several updates were included since the previous version of the booklet, including; updates to the standard pilotage practices, the use of tugs as per port notice TM/PYD/PN/01/2021, the inclusion of useful links that may be of use to the pilot on duty, amongst others.

The author would like to thank all the currently serving pilots of the Malta Maritime Pilots Co-Operative, especially Chief Pilot Capt. Jesmond Mifsud, and Capt. Terence Farrugia who was the original author of the 1st edition of this booklet for their guidance in obtaining the information used in writing this booklet. The author would also like to express his gratitude to the administration staff at MaritimeMT for assisting in the editing and reviewing of the booklet to make it as user friendly as possible.

Whilst the author has endeavoured to ensure that the material supplied is suitable and correct at the date of publication, the authors and the Malta Maritime Pilots Co-Operative Ltd. accepts no liability for any damage or loss of any nature arising from the use of this booklet or any information contained within it. The material supplied is used entirely at the reader’s own risk and the information or diagrams may not be reproduced without the authors written consent. The information contained in this booklet has to be read and construed in conjunction with the applicable notice to mariners at that particular time of use.

CONTENTS

Section One: Quick Reference Notes

[1.1 Standard Pilotage Practice in Maltese Ports](#)

[1.2 Tug usage](#)

[1.3 Quays Information](#)

[1.4 Docks Information](#)

[1.5 Position for dropping Anchor at Marsaxlokk](#)

[1.6 Tug Boats](#)

Section Two: Charts and Plans

[2.1 Valletta Port - Break Water to Senglea Point Plan](#)

[2.2 Valletta Port - Senglea Point to Ras Hanzir Plan](#)

[2.3 Valletta Port - Fuel Wharf to Church Wharf Plan](#)

[2.4 Marsaxlokk Freeport and EVOS Plan](#)

[2.5 Mgarr Port Plan](#)

Section Three: Detailed Berths Information

[3.1 EVOS Jetty Information and Acceptance Criteria](#)

[3.2 EVOS Mooring Arrangements](#)

[3.3 EVOS Shore Connections](#)

[3.4 San Lucjan Mooring System](#)

[3.5 Berths Bollard and Fender Information](#)

Section Four: Other Information

[4.1 Navigation Lights](#)

[4.2 Bow Thruster vs Bollard Pull](#)

[4.3 Squat Calculation](#)

[4.4 Beaufort Class vs Wind Speed](#)

[4.5 Short Nautical Distance Tables](#)

[4.6 Static Wind Force Table](#)

[4.7 Sunrise and Sunset](#)

[4.8 Required Boarding Arrangement for Pilots](#)

[4.9 Useful Links](#)

1.1 STANDARD PILOTAGE PRACTICE IN MALTESE PORTS

Grand Harbour Valletta

1. Passenger ships over 300m LOA to take 2 Pilots.
2. Any other vessel over 240m LOA to take 2 Pilots.
3. No night operations for vessels over 200m LOA except for Passenger ships.
4. No night operations at ship building quays and adjoining areas.
5. No night operations at Bighi bay and Fish market wharf.
6. Tankers bound for Flagstone Wharf. V/L +/- 180m LOA to take 2 tugs and daylight restrictions apply to large tankers.
7. If V/L bound for Laboratory Wharf and silo/gantries in way and not shifted as required, tractor tugs to be deployed.

Palumbo Shipyard

1. One Pilot to assist from shore for all docks.
2. Vessels entering or leaving No 4 dock to have operational bow thruster due to no mules at dock.
3. To dock at No 6 dock no vessels to be berthed in way of bollard 23 and beyond.
4. Tractor tugs to be utilised for any vessel entering any dock.

MMH

1. Up to LOA 120m + bunker barges + vessels with multi modal types of propulsion – No night time restrictions
2. Anything above, restrictions apply but may be considered on an ad hoc basis

Malta Freeport Marsaxlokk

1. Vessels over 300m and/or 70,000grt to take 2 Pilots
2. Vessels over 350m moored on terminal 1 to take 3 tugs in or outbound.
3. Vessels exceeding 13.5m draft to take 3 tugs when inbound.
4. For vessels > 200m LOA tugs to secure INM from entrance.
5. For vessels > 300m LOA inbound or outbound from T2S (Stern on bollards 55/56) and T1 occupied, gantry cranes to be boomed up in any weather condition.

Oil Tanking / EVOS Terminal

Vessels berthing on jetty 1 and 2.*¹

1. The combined max beam of the tankers berthed at jetties 3 and 4 and passing tanker shall not exceed 75m for inward and 78m for outward manoeuvres.
2. A min of 2 Tractor/ASD type tugs shall assist in the manoeuvre.
3. Inbound manoeuvres shall be carried out during daylight only.
4. Wind limitations: Tankers LOA up to 150m up to 21knts and Tankers LOA > 150m up to 16knts.

5. Such manoeuvres shall be conducted in circumstances where it is expected that the tankers at jetties 3 and 4 require more than 4hr to vacate berth.

Port Notice no 03/10

*¹ These guidelines apply only when vessels are already berthed at jetties 3 & 4, and may be relaxed after consultation with the pilot on duty taking into account the circumstances of the case which may warrant the adoption of additional resources and/or pilot/s.

Marsaxlokk Power Station

1. No night time restrictions – (pilot tariff x 2 noting MMP have to engage at a cost the oversight of the pilot vessel to monitor mooring buoys at Has Saptan dolphins during manoeuvring).
2. Starboard side preferred berthing arrangement whenever possible subject to Master and position of manifold.

Marsaxlokk Dolphin/San Lucian/31st March Term

1. No night operations at these Terminals.
2. All vessels must have Synthetic mooring ropes, no wire ropes are to be accepted.
3. Extra crew member on the pilot boat required.
4. When practicable, small Pilot boats to be used for the line handling.

Mgarr

1. Vessel to be moored at Mgarr Port, to have an operational bow thruster and one tug in assistance. Max Vessel LOA not more than 80mtr

1.2 TUG USAGE

The suggested guidelines for tug usage found hereunder are being made on the basis of the following:

1. That they do not impinge upon the rights and obligations of ships Master and Pilots undertaking ship movements, to conduct their operations in accordance with ordinary practices of good seamanship.
2. That the Ship's Master always retains the right to require additional tug resources should he deem fit.
3. That the Chief Pilot or the Pilot conducting the movement may recommend additional tug resources as they deem fit and agreed by the Master, on the basis of their professional judgement and after taking into consideration the prevailing circumstances and conditions
4. That regardless of weather and other conditions and considerations, the Harbour Master is the ultimate arbiter when an issue of safety arises in the context of a request being made by the ship owner for the provisions of lesser tug resources than those listed below.
5. The Authority reserves the right, at her own discretion, to alter Tug resources as listed below, taking into consideration the circumstances of the case.
6. These norms apply for normal conditions.
7. Disabled vessels or cold moves, reflecting a vessel that is totally inoperable, at the discretion of the Pilots, tug resources will increase.

[Return to Contents](#)

GRAND HARBOUR

Ricasoli Tank Cleaning Farm		
Ship's Length	Berthing	Unberthing
Up to 100m	1 Tug (i)	1 Tug (i)
>100 — 200m	2 Tugs (i)	2 Tugs (i)
>200 — 239m	3 Tugs (iii)	3 Tugs (iii)
>239m	4 Tugs	4 Tugs

Bighi & Fish Market (on anchors)*		
Ship's Length	Berthing	Unberthing
Up to 130m	1 Tug	0 Tug
>130 — 160m	2 Tugs (i)	2 Tugs (i)
>160 — 200m	2 Tugs	2 Tugs
> 200m	2 Tugs	2 Tugs

Palumbo Shipyards - Wharfs Quays *		
Ship's Length	Berthing	Unberthing
Up to 100m	1 Tug (i)	1 Tug (i)
>100 — 200m	2 Tugs	2 Tugs
>200m	3 Tugs (iii)	3 Tugs (iii)

Palumbo Shipyards - Docks *		
Ship's Length	Berthing	Unberthing
Up to 100m	1 Tug (ii)	1 Tug (ii)
>100 — 200m	2 Tugs (ii)	2 Tugs (ii)
>200 — 239m	3 Tugs (iii)	3 Tugs (iii)
>239m	4 Tugs (i)	4 Tugs (i)
> 300m	4 Tugs (iv)	4 Tugs (iv)

Laboratory / Magazine / Lab South 1 & 2 Wharfs		
Ship's Length	Berthing	Unberthing
Up to 100m	0 Tug	0 Tug
>100 — 150m	1 Tug (i)	1 Tug (i)
>150 — 200m	2 Tugs (i)	2 Tugs (i)
> 200m	3 Tugs (iii)	2 Tugs

Pinto Wharfs and Deep-Water Quays		
Ship's Length	Berthing	Unberthing
Up to 100m	0 Tug	0 Tug
>100 — 150m	1 Tug	1 Tug
>150 — 200m	2 Tugs	2 Tugs (i)
> 200m	3 Tugs (iii)	2 Tugs (iii)

Malta Maritime Hub Basin ***		
Ship's Length	Berthing	Unberthing
Up to 100m	1 Tug (i)	1 Tug (i)
101 — 170m	2 Tugs	2 Tugs (i)
Over 170m	3 Tugs	2 Tugs

Menqa Basin **		
Ship's Length	Berthing	Unberthing
Up to 130m	2 Tugs (i)	1 Tug
>130 — 200m	2 Tugs	2 Tugs

Fuel Wharf		
Ship's Length	Berthing	Unberthing
Up to 100m	1 Tug (i)	1 Tug (i)

Notes:

- (i) If a vessel has a functional bow thruster and /or stern thruster and favourable weather conditions allow, tug resources may be reduced by 1 (one) in line with Port Notice.
- (ii) In case of docking operations depending on the prevailing circumstances, additional tug resources may be used in line with Port Notice.
- (iii) Vessels with more than 40 metres of beam shall be assisted by 4 Tugs.
- (iv) Subject to favourable weather conditions and available sea room apply.

* Daylight restriction applies

** Night time restrictions don't apply anymore, subject that no large tankers are envisaged

*** Up to LOA 120m + bunker barges + vessels with multi modal types of propulsion – No night time restrictions. Any other vessel, restrictions apply but may be considered on an ad hoc basis

[Return to Contents](#)

MARSAXLOKK

Freeport Terminal		
Ship's Length	Berthing	Unberthing
Up to 130m	1 Tug	1 Tug (i)
>130 — 200m	2 Tugs (i)	2 Tugs (i)
>200 — 299m	2 Tugs (ii)	2 Tugs (i) (ii)
>299m OR >70,000GT	3 Tugs (i)	2 Tugs
Terminal 1, >330mtrs	3 Tugs	3 Tugs
Terminal 1 inner & Terminal 2 South inner >299m or 70,000GT	3 Tugs	3 Tugs
>400m (i)	4 Tugs (i)	3 Tugs (i)

St Lucian Terminal *		
Ship's Length	Berthing	Unberthing
Up to 130m	1 Tug	1 Tug
>130 — 160m	2 Tugs (i)	2 Tugs
> 160m	2 Tugs	2 Tugs

Marsaxlokk Dolphin *		
Ship's Length	Berthing	Unberthing
Up to 130m	1 Tug	1 Tug
>130 — 160m	2 Tugs	2 Tugs
>160m	2 Tugs	2 Tugs

EVOS Terminal / Oil Tanking Malta		
Ship's Length	Berthing	Unberthing
Up to 130m	1 Tug	1 Tug
>130 — 200m	2 Tugs	2 Tugs
>200m	3 Tugs	2 Tugs

Dellimara Power Station ***		
Ship's Length	Berthing	Unberthing
Up to 130m	1 Tug	1 Tug
>130m	2 Tugs	2 Tugs

LNG Terminal **		
Ship's Length	Berthing	Unberthing
All	4 Tugs	4 Tugs

31st March Terminal *		
Ship's Length	Berthing	Unberthing
Up to 130m	1 Tug	1 Tug
>130m	2 Tugs (i)	2 Tugs (i)

Notes:

- (i) If a vessel has a functional bow thruster and /or stern thruster and favourable weather conditions allow, tug resources may be reduced by 1 (one) in line with Part Notice.
- (ii) Vessel for Malta Freeport Terminal 2 South and Terminal 1 (Inner), when greater than 250m, one (1) additional tug required.
- * Daylight restriction applies
- ** Daylight restrictions apply for inbound
- *** No night time restrictions – (pilot tariff x 2 noting MMP have to engage at a cost the oversight of the pilot vessel to monitor mooring buoys at Has Saptan dolphins during manoeuvring). Starboard side preferred berthing arrangement whenever possible subject to Master and position of manifold.

MGARR HARBOUR, GOZO

Mgarr Harbour Quay #3 *		
Ship's Length	Berthing	Unberthing
Up to 80m	1 Tug	1 Tug (i)

Notes:

- (i) If a vessel has a functional bow thruster and /or stern thruster and favourable weather conditions allow, tug resources may be reduced by 1 (one) in line with Port Notice.

1.3 QUAYS INFORMATION

BERTH	OPERATOR	LENGTH	MIN DEPTH	HEIGHT	BERTH ALIGNMENT
VALLETTA - GRAND HARBOUR					
Fish Market	T.M	102	2.6	2.57	073° / 253° 029° / 209° (Fast-ferry terminal 023° / 203°)
Barriera Wharf (Stern to)	T.M	300	10m at 50m out	2.38 to 3.03	
Lascares Wharf	T.M	41.3	2.3	2.97	
		58	1.2	1.82	
		38	2.3	2.16	
Pinto 4 and 5	Valleta Cruise Port	250	10.4	2.2	053° / 233°
Pinto 3	Valleta Cruise Port	171	9.8	2.2	015.5° / 195.5°
Pinto 1 and 2	Valleta Cruise Port	307.7	9.9	2.2	036° / 216°
Gun Wharf	Valleta Cruise Port	80	7.4	3.62	026° / 206°
Gun Wharf RoRo		15	7.4		116° / 296°
Whine Wharf	Valleta Cruise Port	73	8.2	3.6	083° / 263°
Whine Wharf RoRo		18.7	8.2		173° / 353°
Deep Wtr Q4	V.G.T	138	8	3.14	045° / 225°
Deep Wtr Q4 RoRo	V.G.T	23.4	8	2.47	135° / 315°
Deep Wtr Q 1 - 3	V.G.T	350	9.2	3.14	045° / 225°
Deep Wtr Q 5	V.G.T	74.5	7.8	3.14	135° / 315°
Flagstone	T.M	217	11.4	2.25	103° / 283°
Moll tal-Injam	T.M	59 + 58	5.9	2.27	193° / 013° 001° / 181°
Moll tal-Braken	T.M	120	0.7 to 2.3	2.25	104° / 284°
Moll tal-Pont	T.M	165.7 + 155.2	0.9 and 1.9	2.22 and 1.74	147° / 327°
Moll tal-Knisja	Bezzina	370	0.3 to 2	-	061° / 241° (inner part)
Quay wall 1	Cassar	148.5	1.8	2.52	029° / 209°
MMH 2W	MMH	272	2.5 to 4.7	2.52	119° / 299°
MMH 1W	MMH	115 + 230 + 45	5.6	2.52	028° / 208°
MMH 1E	MMH	86 + 230 + 45	5.6	2.52	028° / 208°
MMH 2E	MMH	235	4.5 to 5.7	2.54	076° / 256°
Moll tax-Shipwrights	Bezzina	170	6.5	1.66	165° / 345°
Coal Wharf	T.M	125	3.1	1.86	165° / 345°
P-Point	T.M	54	3.3	-	006° / 186°
Fuel Whf no.1	Central Cement	150	10.2	2.18	045° / 225°
Junction btwn. Fuel Whf 1 & 2	Central Cement	25	7.6	2.18	085° / 265°
Fuel Whf no.2	Central Cement	60	7.6	2.18	135° / 315°
Ras Hanzir Dolphin	Enemalta	80	7.2	-	025° / 205°
Ras Hanzir n 2	V.G.T	72	7.9	2.2	065° / 245°
Ras Hanzir n 1	V.G.T	117.6	7.6	2.2	152° / 332°
Laboratory Wf	V.G.T	221	11.4	2.2	062° / 242°
Magazine Wf	V.G.T	222	13.4	2.2	062° / 242°
Parlatorio Wf	Palumbo	434.5	10.1	2.26	152° / 332°
Canteen Wf	Palumbo		8.8		
Boat House Wharf	Palumbo	79.6	8.6	2.25	174° / 354°
Factory Wharf	Palumbo	104.2	7.9	2.26	007° / 187°
Bull Nose	Palumbo	Circular	5.1	-	-
Saw Mill Wf	Palumbo	94.5	8.3	2.22	045° / 225°
Burmola Wharf	Palumbo	123 (111 parallel)	7.9	2.24	001° / 181°
Somerset	Palumbo	147.5 (87.5 + 60)	7.3	2.25	167° / 347° 152° / 332°
Hamilton Wf	Palumbo	131.5 (40 + 91.5)	5.6	2.23	150° / 330° 158° / 338°
Boiler Wharf	T.M	380 (250 + 130)	6.9	2.2	147° / 327°
			8.1		
Store Wharf	T.M/3rd Party	275 (80+50+118+27)	1.2	-	015° / 195° 008° / 188° 178° / 358°
Machinery Wf	T.M/3rd Party	143 (20+123)	2.7	-	012° / 192° 007° / 187°
Oil Wharf	Grand Harbour Marina	72	4	-	018° / 198°
Xatt ir-risq	Grand Harbour Marina	148	6.7	-	164° / 344°
Bakery Wharf	Grand Harbour Marina	257	5.8	-	Pontoons
Vittoriosa Wf	Grand Harbour Marina	145.5	6.3	-	160° / 340°
St. Angelo Wf	Grand Harbour Marina	139 (135+54)	8.5	-	128° / 308° 141° / 321°
Bighi (Stern to)	T.M	245	10m at 50m out	-	-
Ricasoli	T.M	130	9.1	3.06	141° / 321°

BERTH	OPERATOR	LENGTH	MIN DEPTH	HEIGHT	BERTH ALIGNMENT
MARSAMXETT HARBOUR					
San Maison	T.M	120	6	2.13, Roro 2.76	078° / 258° (in use by Marina di Valletta pontoons)
MARSAXLOKK - MALTA FREEPORT TERMINAL					
Term 1 West	M.F.T	290	-	2.5	040° / 220°
Term 1 West RoRo	M.F.T	39	-	2.5	129° / 309°
Term 1 North	M.F.T	1000	14.9	2.5	130° / 310°
Junction Quay	M.F.T	200 (56+105+39)	9.9	-	046° / 226° 066° / 246° 045° / 225°
Term 2 South	M.F.T	653	14.9	3	136° / 316°
Term 2 West	M.F.T	116	14.9	3	046° / 226°
Junction btwn. Term 2 West - Term 2 RoRo	M.F.T	32	-	-	095° / 275°
RoRo Quay Term 2	M.F.T	194	12.4	-	106° / 286°
RoRo Berth Term 2 Ramp	M.F.T	31	12.4	3.5	014° / 194°
Junction btwn. Term 2 RoRo Ramp - Term 2 North	M.F.T	42	-	-	045° / 225°
Term 2 North	M.F.T	520	17	3.5	136° / 316°
MARSAXLOKK - MEDSERV					
Medserv Quay	Medserv	210	10.3	-	046° / 226°
Medserv Quay RoRo	Medserv	34	-	-	136° / 316°
MARSAXLOKK - ENEMALTA					
Delimara P/Stn	Enemalta	337	9.1	2.59	144° / 324°
31st March	Enemalta	-	8.0	3.66	-
Dolphin	Enemalta	-	12.0	-	198°
LNG Terminal	Enemalta	-	14.6	-	179°
MARSAXLOKK - EVOS					
Jetty 1	EVOS	650 (Berths 110+220+280)	9.2	-	046° / 226°
Jetty 2	EVOS		17.4	-	
Jetty 3	EVOS		16.9	-	
Jetty 4	EVOS		218	14	
CIRKEWWA					
North Berth 1	Gozo Channel	92	6.0	1.9	048° / 228°
North Berth 2	Gozo Channel	85	6.0	2.94	048° / 228°
North Berth 3	Gozo Channel	85	6.2	2.94	048° / 228°
Comino Berth	T.M	80.4	1.8	0.88	
South	Gozo Channel	100	5.6	1.86	089° / 269°
MGARR - GOZO					
Berth no 1	Gozo Channel	87	6	1.79	049° / 229°
Berth no 2	Gozo Channel	128	5.8	1.81	034.5° / 214.5°
Head between berths 2 and 3	Gozo Channel	17.5	5.9	1.81	135° / 315°
Berth no 3 (incl. fast ferry berth)	Gozo Channel & T.M	139 (85 + 54)	4.9 to 8.5m rest 2.1	1.78	046° / 226°
COMINO					
Blue Lagoon	T.M	30	0.39	0.67	127° / 307°
Wied Termu landing stage		15	-	-	102° / 282°

Remark: Height of Quay is above chart datum, i.e 0.56m below Mean Sea Level. For Freeport Height of Quay is above Lowest Astronomical Tide.

1.4 DOCKS INFORMATION

PALUMBO DRY DOCKS					
DOCK	LENGTH	BREADTH	DRAFT	DWT	HEADING
Dock no 2	164.13	25	8.83	30000	142°/322°
Dock no 3	143.77	18	8.83	30000	123°/303°
Dock no 4	262	40	8.53	100000	354.5°/174.5°
Dock no 5	216	27.4	8.53	40000	011.5°/191.5°
Dock no 6	362	62	9.30	300000	151°/331°
Dock no 7	98	35	3.03	4000	096°/276°
Dock no 8	40.24	12.5	2.77	350	125°/305°

1.5 POSITION FOR DROPPING ANCHORS AT MARSAXLOKK PORT

LOCATION	LAT	LONG
31ST MARCH STBD ANCH	35°49.486' N	014°32.164' E
SAN LUCJAN STBD ANCH	35°49.481' N	014°32.489' E
SAN LUCJAN PORT ANCH	35°49.539' N	014°32.528' E
DOLPHIN 120M PORT ANCH	35°49.568' N	014°33.030' E
DOLPHIN 180M PORT ANCH	35°49.528' N	014°33.032' E

1.6 TUG BOATS

NAME	BOLLARD PULL (t)		TYPE	LOA (m)	BEAM (m)	EXT DRAFT (m)
	AHEAD	ASTERN				
SPINOLA	81	-	Twin Voith Schneider Terminal / Escort Tug	36.65	13.60	6.60
ST ELMO	75	71	Azimuth Stern Drive Tug	30.6	11.20	5.85
PAWLINA	67.1	62.2	Azimuth Stern Drive Tug	30.6	11.20	5.00
WENZINA	68.1	64.3	Twin Screw Azimuthing Stern Drive Tug	24.55	11.49	4.59
ST ANGELO	83	-	Azimuth Stern Drive Tug	29.10	13.23	5.85
SEA SALVOUR	55	-	Twin Screw Azimuthing Fixed Pitch Propeller Tractor Tug	29.95	10.2	5.00
VITTORIOSA	83	80	Azimuth Stern Drive Escort Tug	29.70	13.30	6.00
SENGLEA	76.2	-	Azimuth Reverse Stern Drive	24.73	13.13	6.20
GOZZO	8.2 – 10	-	Shrouded Twin Screw with conventional rudders	14.06	5.51	2.00

2.1 VALLETTA PORT - BREAK WATER TO SENGLEA POINT PLAN

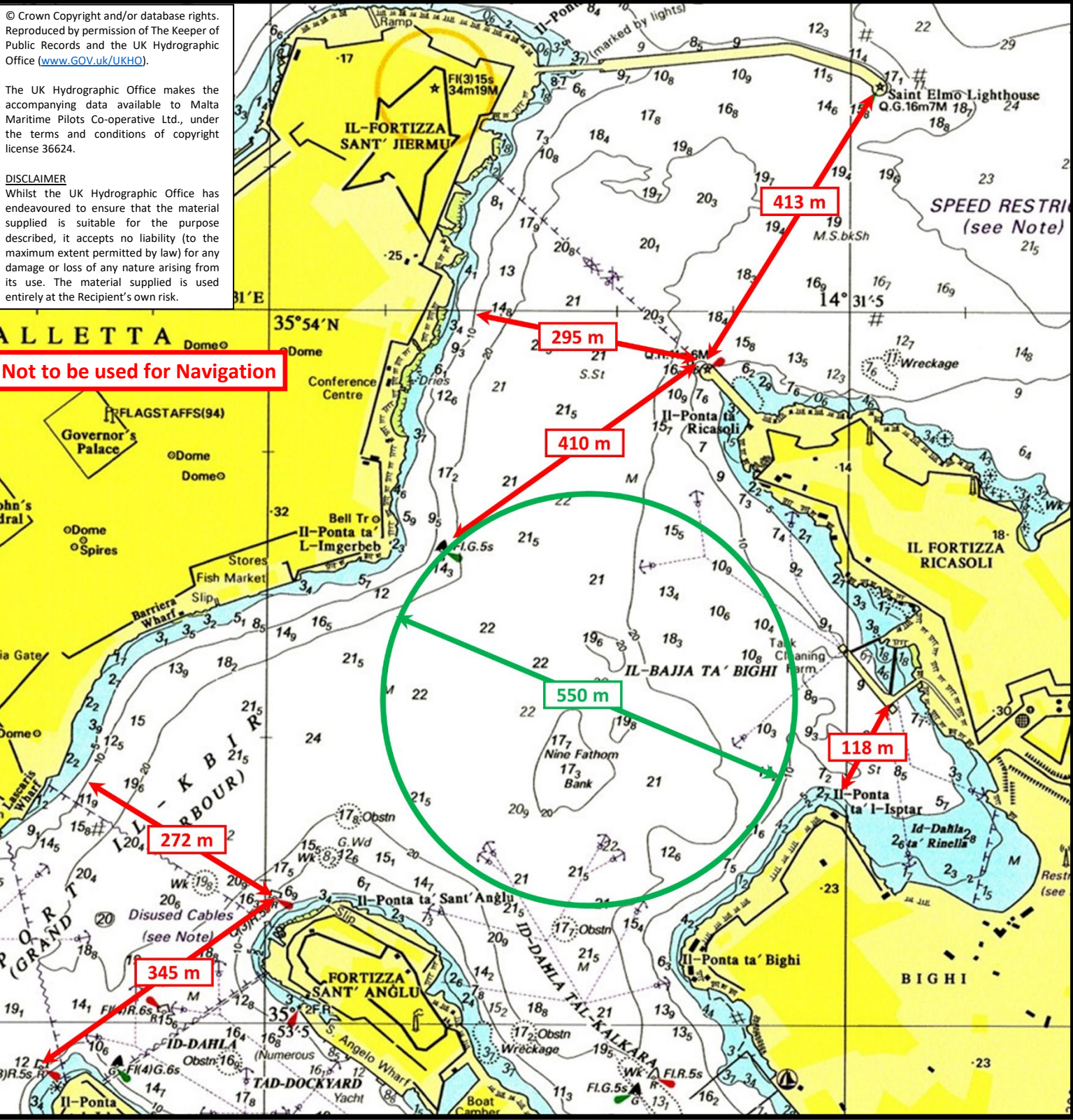
© Crown Copyright and/or database rights. Reproduced by permission of The Keeper of Public Records and the UK Hydrographic Office (www.GOV.UK/UKHO).

The UK Hydrographic Office makes the accompanying data available to Malta Maritime Pilots Co-operative Ltd., under the terms and conditions of copyright license 36624.

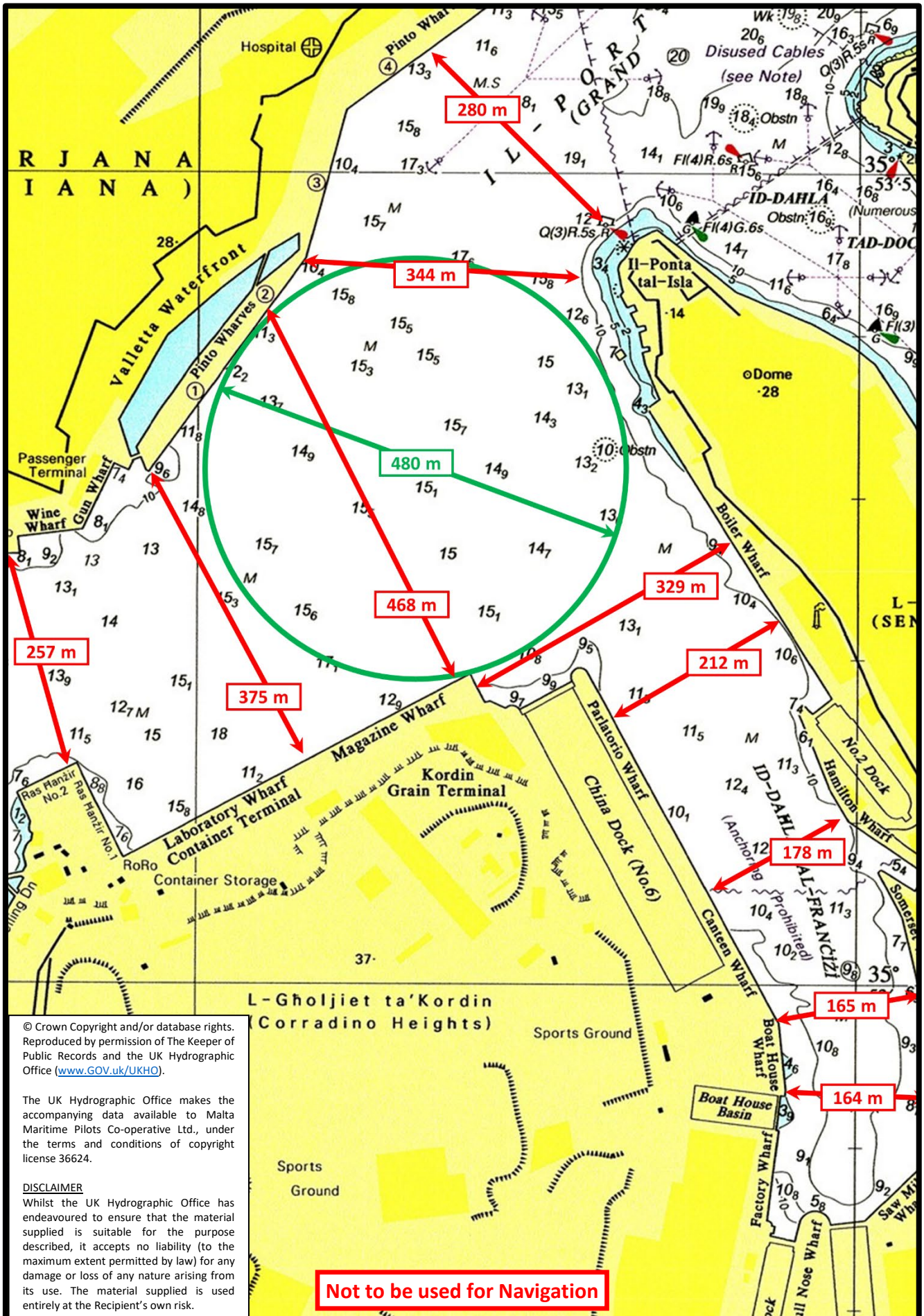
DISCLAIMER

Whilst the UK Hydrographic Office has endeavoured to ensure that the material supplied is suitable for the purpose described, it accepts no liability (to the maximum extent permitted by law) for any damage or loss of any nature arising from its use. The material supplied is used entirely at the Recipient's own risk.

Not to be used for Navigation



2.2 VALLETTA PORT - SENGLEA POINT TO RAS HANZIR PLAN



© Crown Copyright and/or database rights. Reproduced by permission of The Keeper of Public Records and the UK Hydrographic Office (www.GOV.uk/UKHO).

The UK Hydrographic Office makes the accompanying data available to Malta Maritime Pilots Co-operative Ltd., under the terms and conditions of copyright license 36624.

DISCLAIMER
Whilst the UK Hydrographic Office has endeavoured to ensure that the material supplied is suitable for the purpose described, it accepts no liability (to the maximum extent permitted by law) for any damage or loss of any nature arising from its use. The material supplied is used entirely at the Recipient's own risk.

Not to be used for Navigation

[Return to Contents](#)

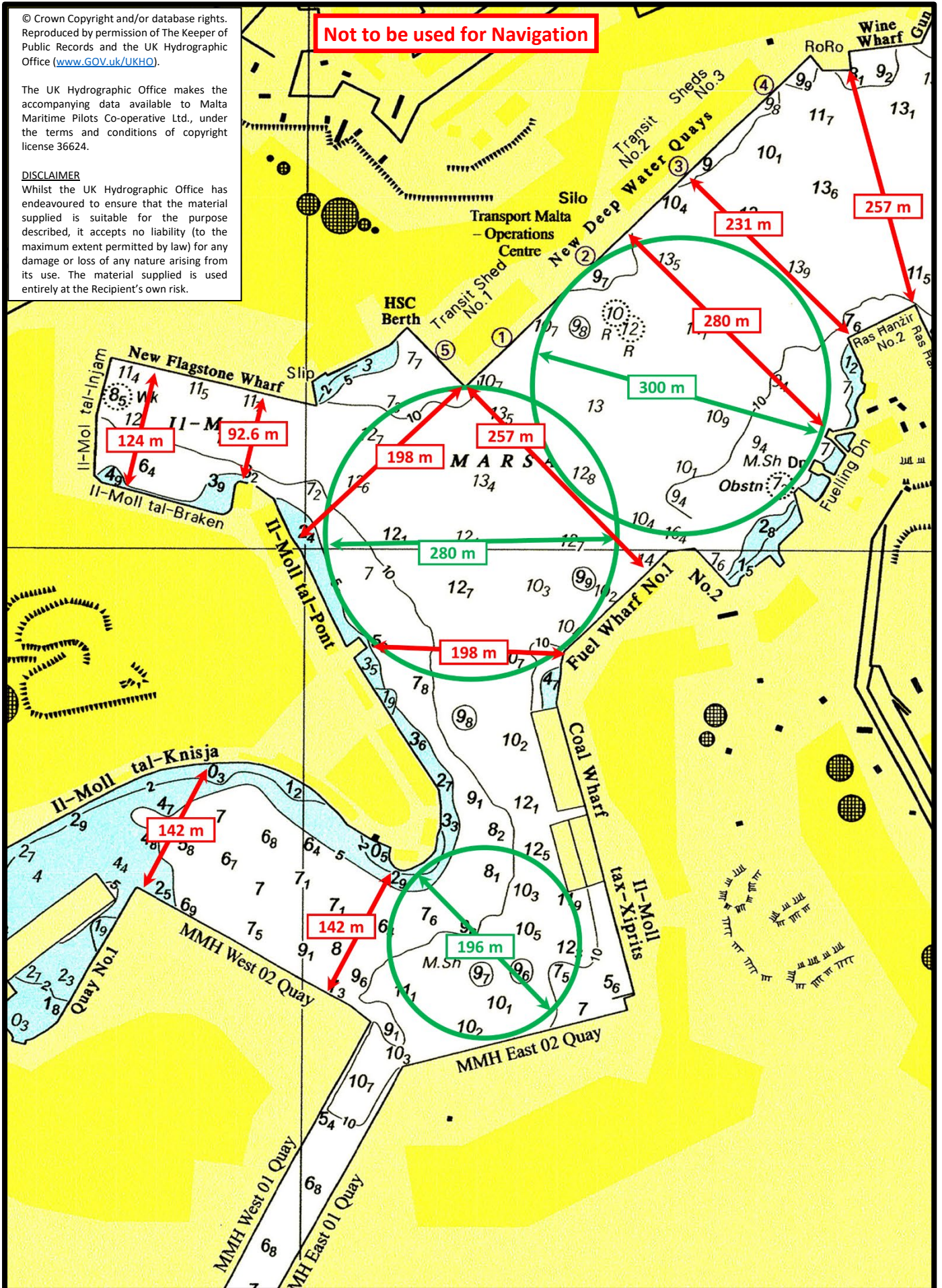
2.3 VALLETTA PORT - FUEL WHARF TO CHURCH WHARF PLAN

© Crown Copyright and/or database rights. Reproduced by permission of The Keeper of Public Records and the UK Hydrographic Office (www.GOV.UK/HKO).

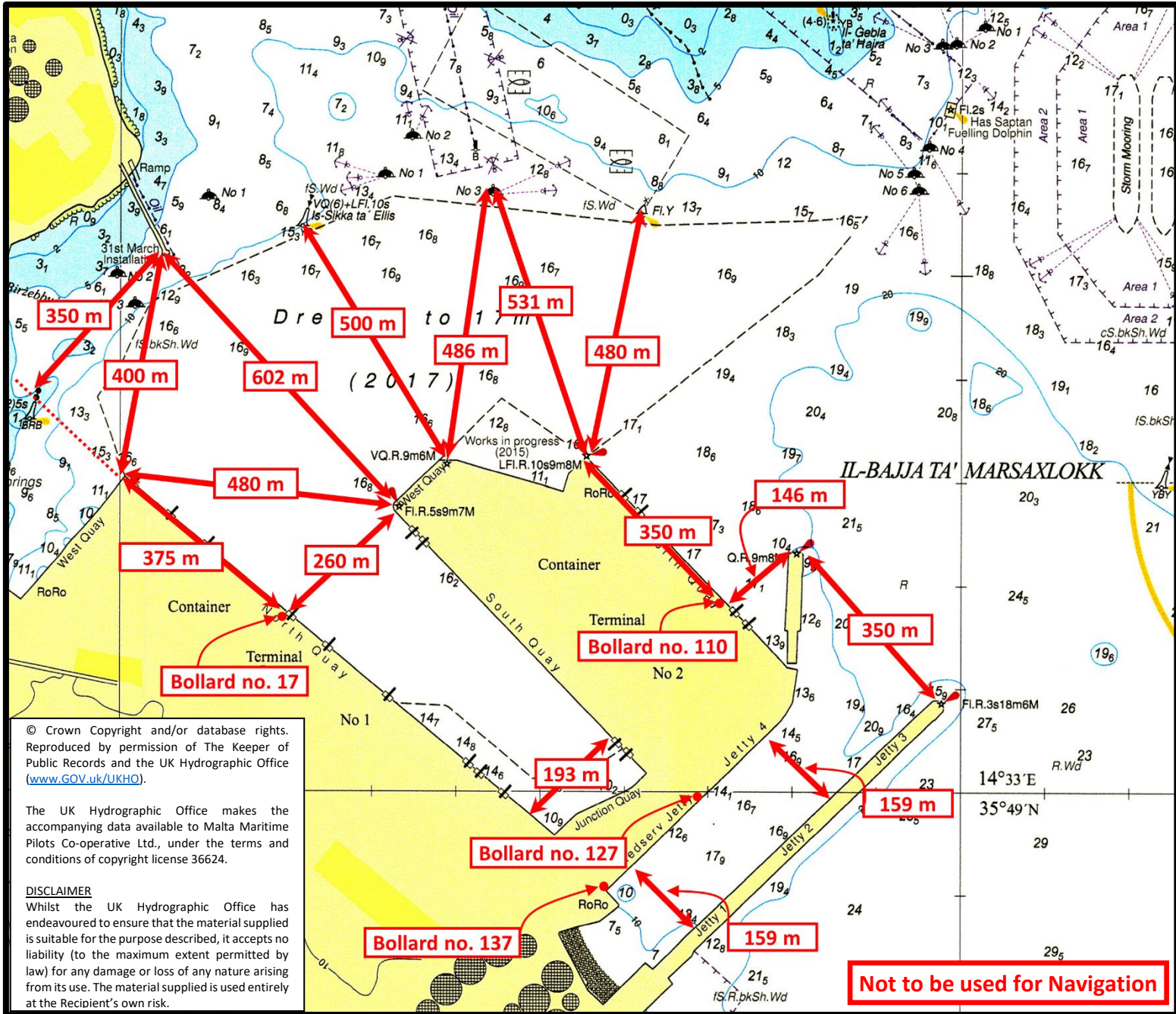
The UK Hydrographic Office makes the accompanying data available to Malta Maritime Pilots Co-operative Ltd., under the terms and conditions of copyright license 36624.

DISCLAIMER

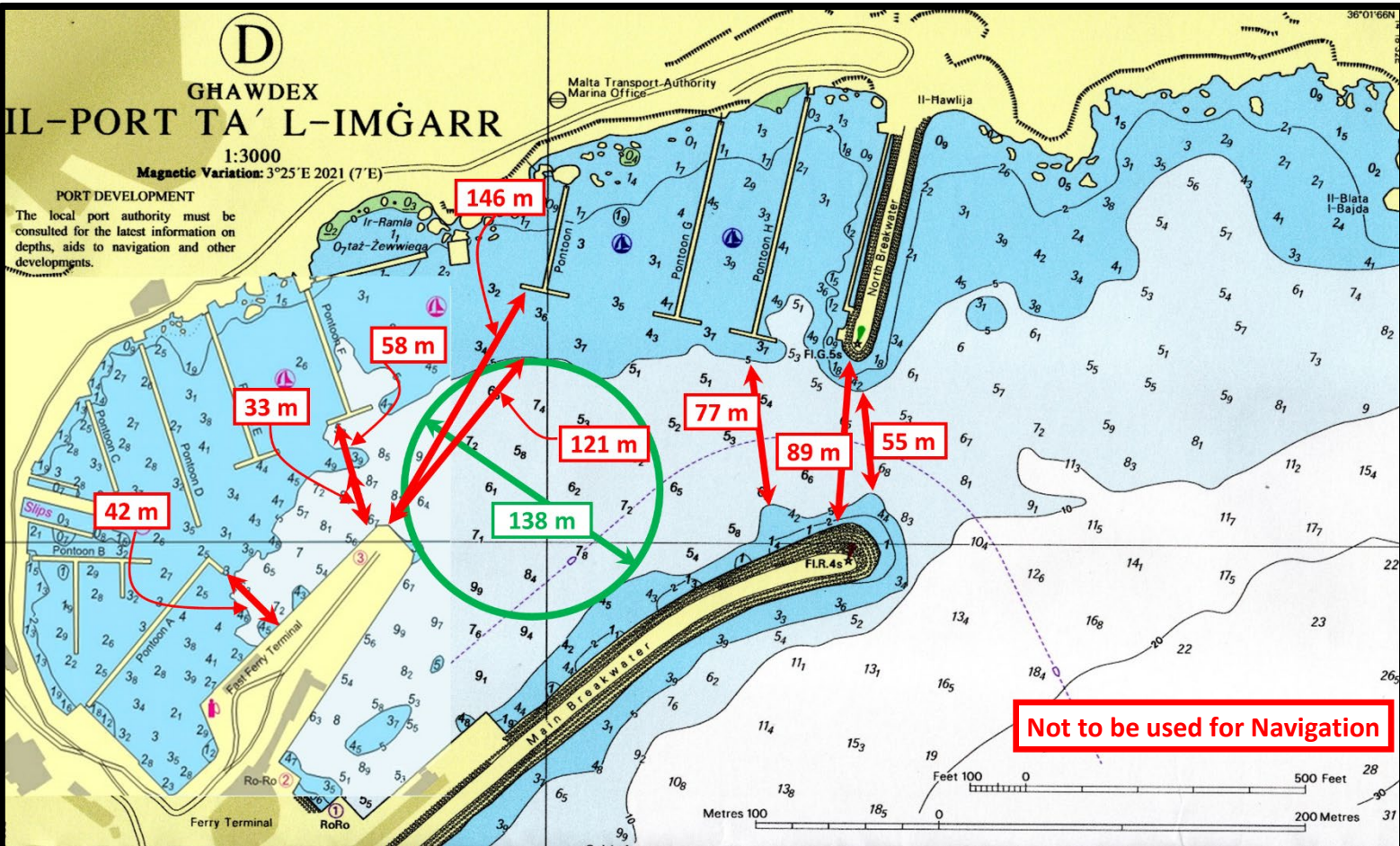
Whilst the UK Hydrographic Office has endeavoured to ensure that the material supplied is suitable for the purpose described, it accepts no liability (to the maximum extent permitted by law) for any damage or loss of any nature arising from its use. The material supplied is used entirely at the Recipient's own risk.



2.4 MARSAXLOKK FREEPORT AND EVOS PLAN



2.5 MGARR PORT PLAN



© Crown Copyright and/or database rights. Reproduced by permission of The Keeper of Public Records and the UK Hydrographic Office (www.GOV.uk/UKHO).

The UK Hydrographic Office makes the accompanying data available to Malta Maritime Pilots Co-operative Ltd., under the terms and conditions of copyright license 36624.

DISCLAIMER

Whilst the UK Hydrographic Office has endeavoured to ensure that the material supplied is suitable for the purpose described, it accepts no liability (to the maximum extent permitted by law) for any damage or loss of any nature arising from its use. The material supplied is used entirely at the Recipient's own risk.

3.1 EVOS JETTY INFORMATION & ACCEPTANCE CRITERIA

SPECIFICATION	JETTY 1	JETTY 2	JETTY 3	JETTY 4
Depth alongside (m)	7.0	14.5	17.0	16.5
Max LOA (m)	110	220	280	220
Max dead weight (t)	6,000	50,000	120,000	50,000
Quick Release Mooring points	2	4	4	6
Platform Height above MSL approx. (m)	4.5	8.0	8.5	2.5

Minimum under-keel-clearance:

- 1.0 m for manoeuvring
- 1.0 m whilst berthed alongside the jetty

Tidal restrictions:

- No restriction for berthing or unberthing

Daylight restrictions:

- No restrictions except those mentioned in the “Standard Pilotage Practice section – 1.1 in this booklet”

Weather operating limits:

- Berthing/Un-berthing as per port authority’s instructions in adverse weather.
- At severe thunder storms or lightning all operations will be stopped.
- Loading arm operations will be stopped at windspeeds > 21m/s (8 Bft).

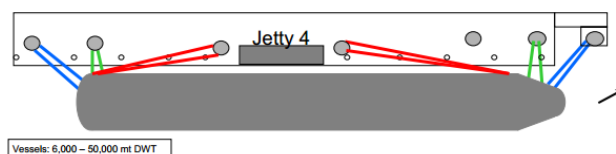
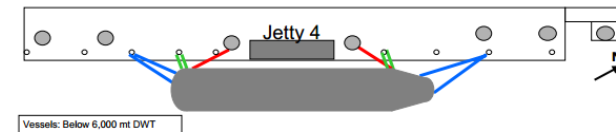
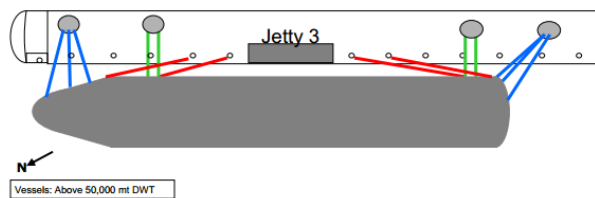
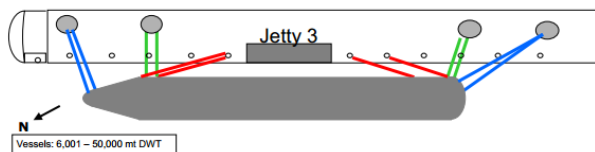
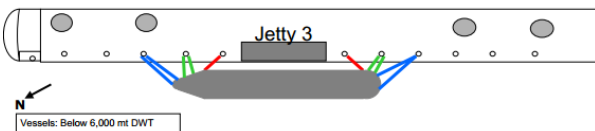
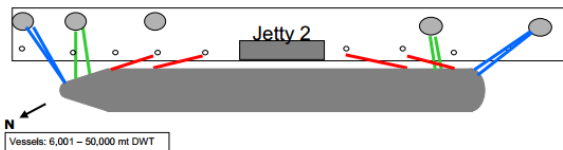
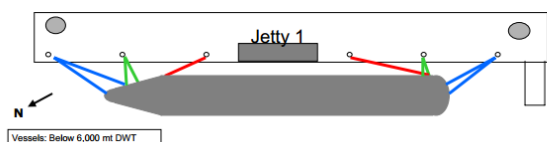
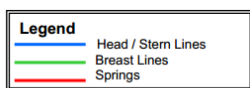
3.2 EVOS MOORING ARRANGEMENTS

The Master shall ensure that ships alongside EVOS berths shall be secured with the minimum number of mooring lines and layout as indicated below:

DWT OF VESSEL	MOORING LINES (FORE & AFT)	
	FORE	AFT
6,000 and below	2 head lines 2 breast lines 1 spring line	2 stern lines 2 breast lines 1 spring line
Between 6,001 – 50,000	2 head lines 2 breast lines 2 spring lines	2 stern lines 2 breast lines 2 spring lines
Above 50,000	3 head lines 2 breast lines 2 spring lines	3 stern lines 2 breast lines 2 spring lines

Notes:

- Mooring lines shall be secured to proper self-stowing winches, mooring bitts or bollards onboard.
- Two or more lines leading in the same direction should always be of the same material and if possible they should have the same length.
- Whenever possible, springs and breast lines shall be of wires.
- All wires shall be attached with nylon tails not exceeding 11 metres in length.
- Quick release hooks are the preferred mooring arrangement.
- Lines that are short in their arrangement shall be avoided.
- Automatic self-tensioning winches must not be left in automatic self-tensioning mode on completion of mooring.
- Emergency towing wires shall be in place at both forward and aft of the vessel.
- The mooring watch shall be maintained to ensure that moorings are properly tended.



3.3 EVOS SHORE CONNECTIONS

BERTH No.	PRODUCT	LOADING ARM	HOSE	VAPOUR RETURN
1	Gas oil Fuel oil Jet fuel Naphtha Gasoline MTBE (etc.)	1 x 8" (clean) 1 x 8" (black)	N/A	N/A
2	Gas oil Fuel oil Jet fuel Naphtha Gasoline MTBE (etc.)	2 x 8" (clean) 2 x 8" (black)	N/A	N/A
3	Gas oil Fuel oil Jet fuel Naphtha Gasoline MTBE (etc.)	2 x 8" (clean) 2 x 10" (black)	N/A	N/A
4	Gas oil Fuel oil	2 x 8" (clean) 2 x 8" (black)	N/A	N/A

3.4 SAN LUCJAN MOORING SYSTEM

Classed by DNV

The following recommendations have been given for the operation:

The test results of the 2nd Class 2 buoy mooring system, carried out on 23-11-2004 has shown the mooring system to be sufficient form mooring vessels of max 45000DWT with the following limitations:

Max Allowable wind speed of 16m/s (31Knots) and Max Current speed of 0.25m/s (0.49Knots)

or

Max Allowable wind speed of 14m/s (27Knots) and Max Current speed of 0.5m/s (0.97Knots)

Technical Specifications

1. Chain & Fittings - 50mm diameter, Grade U2
2. Proof Load - 100t
3. Break Load - 140t
4. Inspection Authority - Lloyds Register

3.5 BERTHS BOLLARD AND FENDER INFORMATION

VALLETTA BERTHS				
BERTH	BOLLARDS	SPACING IN METERS	STRENGTH	FENDER TYPE
Pinto 1 - 2	17	20	1 - 3 & 16 = 50T 4 - 15 = 30T 17 = 200T	Cylindrical 6m x 1.5m
Pinto 3	9	20	1 & 8 = 50T 2 - 7 = 30T 9 = 100T	V-type
Pinto 4 - 5	13	20	1, 5, 9, 13 = 100T 2-4, 6-8, 10-12 = 30T	Cylindrical 6m x 1.5m
Gun Wharf	4	15	-	Cylindrical 1m x 0.8m
Whine Wharf	5	15	30T	Cylindrical 1m x 0.8m
Laboratory Wharf	1 - 12	20	50T	
Magazine Wharf	12 - 23	20	50T	
Boiler Wharf	17	9.8/34.4	-	Cylindrical 1m x 0.8m

MARSAXLOKK BERTHS				
BERTH	BOLLARDS	SPACING IN METERS	STRENGTH	FENDER TYPE
YELLOW BOLLARDS			200T	
TERM 1 W	14 (1-14)	22.6	100T	
TERM 1	45 (1-45)			
JUNCTION Q	9 (46-54)	-		
TERM 2 S	26 (55-80)			
TERM 2 W	-	26.4		
TERM 2 N	19 (95-116)			
TERM 2 RORO	-	-		

4.1 NAVIGATION LIGHTS

VALLETTA PORT			
NAME	CHARACTER	HEIGHT (m)	RANGE (M)
Fairway Buoy	LF(1) W 10s	3.5	
Saint Elmo Lt	Q G	16	7
Ricasoli Pt Lt	Q R	11	6
Channel Green Lateral Buoy	FL G 5s	-	-
Channel Red Lateral Buoy	Q(3) R 5s	-	-

MARSAXLOKK PORT			
NAME	CHARACTER	HEIGHT (m)	RANGE (M)
Main Breakwater	FL R 3s	18	6
Term 2N Breakwater	Q R	9	8
Term 2N RoRo Berth	LF 1 R 10s	9	8
Term 2W RoRo Berth	VQ R	9	6
Term 2S West Corner	FL R 5s	9	7
Marsaxlokk South Cardinal Buoy	VQ (6) + LFl 10s	-	-
Marsaxlokk Benghisa East Cardinal Buoy	Q (3) 10s	-	-
Marsaxlokk Delimara West Cardinal Buoy	VQ (9) 10s	-	-
Marsaxlokk Fishfarms Special Purpose Buoy	Fl. Y	-	-
Ellis South Cardinal Buoy	VQ (6) + LFl 10s	-	-

4.2 BOW THRUSTER VS BOLLARD PULL

KILOWATT	HORSE POWER	APP. BOLLARD PULL
50	67	0.8
100	134	1.5
150	201	2.3
200	268	3.0
250	335	3.8
300	402	4.5
350	469	5.3
400	536	6.0
450	603	6.8
500	671	7.5
550	738	8.3
600	805	9.1
650	872	9.8
700	939	10.6
750	1006	11.3
800	1073	12.1
850	1140	12.8
900	1207	13.6
950	1274	14.3
1000	1341	15.1
1500	2012	22.6
2000	2682	30.2
2500	3353	37.7
3000	4023	45.3
3500	4694	52.8
4000	5364	60.3

4.3 SQUAT CALCULATION

SQUAT IN METERS										
C _B	3Kt	4Kt	5Kt	6Kt	7Kt	8Kt	9Kt	10Kt	11Kt	12Kt
0.50	0.090	0.160	0.250	0.360	0.490	0.640	0.810	1.000	1.210	1.440
0.55	0.099	0.176	0.275	0.396	0.539	0.704	0.891	1.100	1.331	1.584
0.60	0.108	0.182	0.300	0.432	0.588	0.768	0.972	1.200	1.452	1.728
0.65	0.117	0.208	0.325	0.468	0.637	0.832	1.053	1.300	1.573	1.872
0.70	0.126	0.224	0.350	0.504	0.686	0.896	1.134	1.400	1.694	2.016
0.75	0.135	0.240	0.375	0.540	0.735	0.960	1.215	1.500	1.815	2.160
0.80	0.144	0.256	0.400	0.576	0.784	1.024	1.296	1.600	1.936	2.304
0.85	0.153	0.272	0.425	0.612	0.833	1.088	1.377	1.700	2.057	2.448
0.90	0.162	0.288	0.450	0.648	0.882	1.152	1.458	1.800	2.178	2.592
0.95	0.171	0.304	0.475	0.684	0.931	1.216	1.539	1.900	2.299	2.736
1.00	0.180	0.320	0.500	0.720	0.980	1.280	1.620	2.000	2.420	2.880

4.4 BEAUFORT CLASS VS WIND SPEED

WIND FORCE	DESCRIPTION	WIND SPEED				PROBABLE WAVE HEIGHT		SEA STATE
		km/h	m/s	mph	knots	metres	Max	
0	Calm	<1	0 – 0.2	<1	<1	--	--	0
1	Light Air	1-5	0.3 – 1.5	1-3	1-3	0.1	0.1	1
2	Light Breeze	6-11	1.6 – 3.3	4-7	4-6	0.2	0.3	2
3	Gentle Breeze	12-19	3.4 – 5.4	8-12	7-10	0.6	1.0	3
4	Moderate Breeze	20-28	5.5 – 7.9	13-18	11-16	1.0	1.5	3-4
5	Fresh Breeze	29-38	8.0 – 10.7	19-24	17-21	2.0	2.5	4
6	Strong Breeze	38-49	10.8 – 13.8	25-31	22-27	3.0	4	5
7	Near Gale	50-61	13.9 – 17.1	32-38	28-33	4.0	5.5	5-6
8	Gale	62-74	17.2 – 20.7	39-46	34-40	5.5	7.5	6-7
9	Strong Gale	75-88	20.8 – 24.4	47-54	41-47	7.0	10.0	7
10	Storm	89-102	24.5 – 28.4	55-63	48-55	9.0	12.5	8
11	Violent Storm	103-117	28.5 – 32.5	64-72	56-63	11.5	16.0	8
12	Hurricane	118+	32.6+	73+	64+	14+	---	9

4.5 SHORT NAUTICAL DISTANCE TABLE

SHACKLE	METERS	NAUTICAL MILES	FATHOMS
1	27.43	0.015	15
2	54.86	0.030	30
3	82.30	0.044	45
4	109.73	0.059	60
5	137.16	0.074	75
6	164.59	0.089	90
7	192.02	0.104	105
8	219.46	0.118	120
9	246.89	0.133	135
10	274.32	0.148	150
11	301.75	0.163	165
12	329.18	0.178	180

NAUTICAL MILES	METERS	NAUTICAL MILES	METERS
0.01	18.52	0.16	296.32
0.02	37.04	0.17	314.84
0.03	55.56	0.18	333.36
0.04	74.08	0.19	351.88
0.05	92.6	0.20	370.40
0.06	111.12	0.21	388.92
0.07	129.64	0.22	407.44
0.08	148.16	0.23	425.96
0.09	166.68	0.24	444.48
0.1	185.2	0.25	463.00
0.11	203.72	0.26	481.52
0.12	222.24	0.27	500.04
0.13	240.76	0.28	518.56
0.14	259.28	0.29	537.08
0.15	277.8	0.30	555.60

4.6 STATIC WIND FORCE TABLE

	Wind		Surface Area (m ²)															
	kt	m/s	5000	6000	7000	8000	9000	10000	11000	12000	13000	14000	15000	16000	17000	18000	19000	20000
CY=1.1	10	5	8	10	12	14	15	17	19	20	22	24	25	27	29	30	32	34
	15	7.5	19	23	27	30	34	38	42	46	49	53	57	61	65	68	72	76
	20	10	34	41	47	54	61	68	74	81	88	95	101	108	115	122	128	135
	25	12.5	53	63	74	84	95	105	116	127	137	148	158	169	179	190	200	211
	30	15	76	91	106	122	137	152	167	182	197	213	228	243	258	273	289	304
	35	17.5	103	124	145	165	186	207	227	248	269	289	310	331	351	372	393	413
	40	20	135	162	189	216	243	270	297	324	351	378	405	432	459	486	513	540
	45	22.5	171	205	239	273	308	342	376	410	444	478	513	547	581	615	649	684
	50	25	211	253	295	338	380	422	464	506	549	591	633	675	717	759	802	844

[Return to Contents](#)

4.7 SUNRISE & SUNSET

(As observed from Valletta, corrected for daylight saving time) – for 2023

JANUARY	Sunrise	Sunset
1	07:12	16:58
5	07:12	17:01
10	07:12	17:06
15	07:11	17:11
20	07:09	17:16
25	07:07	17:21
30	07:04	17:26
FEBRUARY	Sunrise	Sunset
5	06:59	17:32
10	06:54	17:37
15	06:49	17:43
20	06:43	17:47
25	06:37	17:52
MARCH	Sunrise	Sunset
5	06:27	18:00
10	06:20	18:04
15	06:13	18:09
20	06:06	18:13
25	05:59	18:17
30	06:51	19:21
APRIL	Sunrise	Sunset
5	06:43	19:26
10	06:36	19:30
15	06:29	19:35
20	06:23	19:39
25	06:16	19:43
30	06:11	19:47
MAY	Sunrise	Sunset
5	06:05	19:51
10	06:01	19:56
15	05:56	20:00
20	05:53	20:04
25	05:50	20:08
30	05:47	20:11
JUNE	Sunrise	Sunset
5	05:45	20:15
10	05:45	20:17
15	05:45	20:19
20	05:45	20:21
25	05:46	20:22
30	05:48	20:22

JULY	Sunrise	Sunset
5	05:50	20:21
10	05:53	20:20
15	05:56	20:18
20	06:00	20:16
25	06:03	20:12
30	06:08	20:07
AUGUST	Sunrise	Sunset
5	06:12	20:03
10	06:16	19:57
15	06:20	19:52
20	06:24	19:46
25	06:28	19:39
30	06:31	19:32
SEPTEMBER	Sunrise	Sunset
5	06:36	19:24
10	06:40	19:17
15	06:44	19:09
20	06:48	19:02
25	06:51	18:55
30	06:55	18:47
OCTOBER	Sunrise	Sunset
5	06:59	18:40
10	07:03	18:33
15	07:08	18:26
20	07:12	18:20
25	07:17	18:14
30	06:21	17:08
NOVEMBER	Sunrise	Sunset
5	06:27	17:02
10	06:32	16:58
15	06:37	16:54
20	06:42	16:51
25	06:47	16:49
30	06:52	16:48
DECEMBER	Sunrise	Sunset
5	06:56	16:47
10	07:00	16:48
15	07:04	16:49
20	07:07	16:51
25	07:10	16:53
30	07:11	16:56

4.8 REQUIRED BOARDING ARRANGEMENTS FOR PILOT

REQUIRED BOARDING ARRANGEMENTS FOR PILOT



INTERNATIONAL MARITIME ORGANIZATION

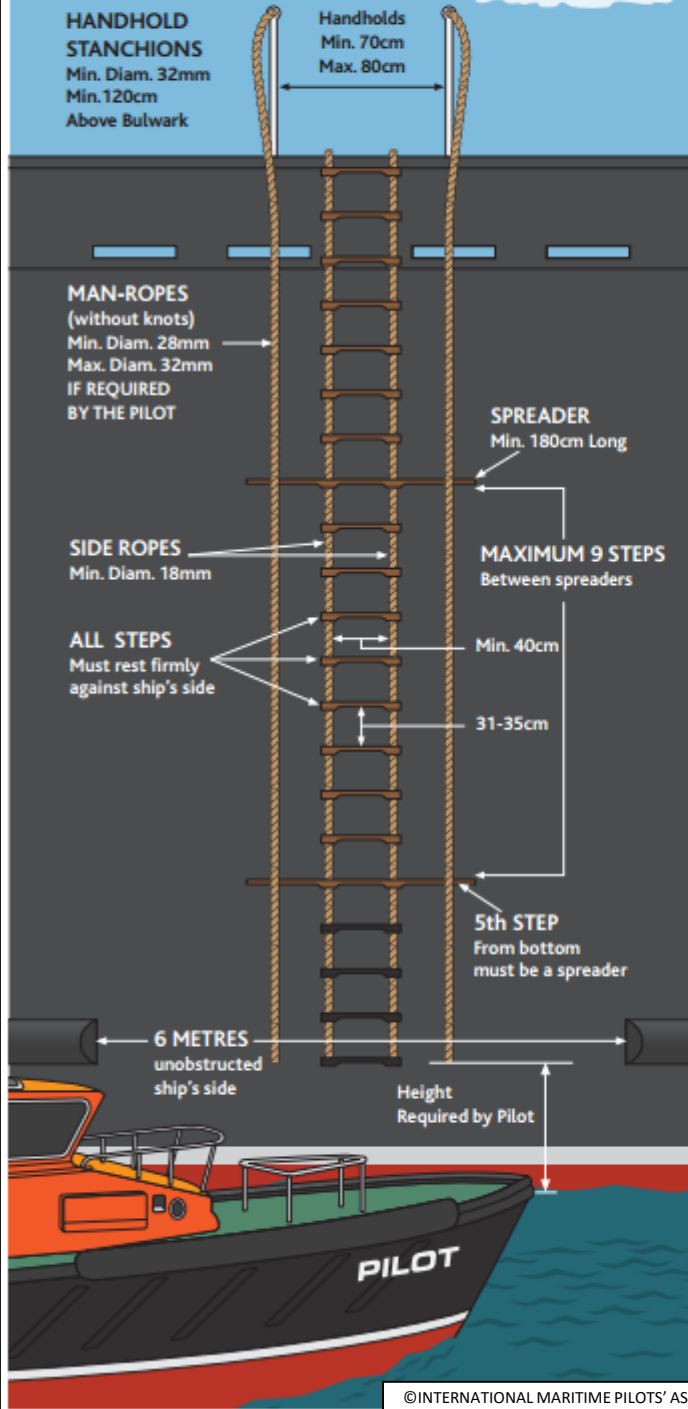
In accordance with SOLAS Regulation V/23 & IMO Resolution A.1045(27)

INTERNATIONAL MARITIME PILOTS' ASSOCIATION

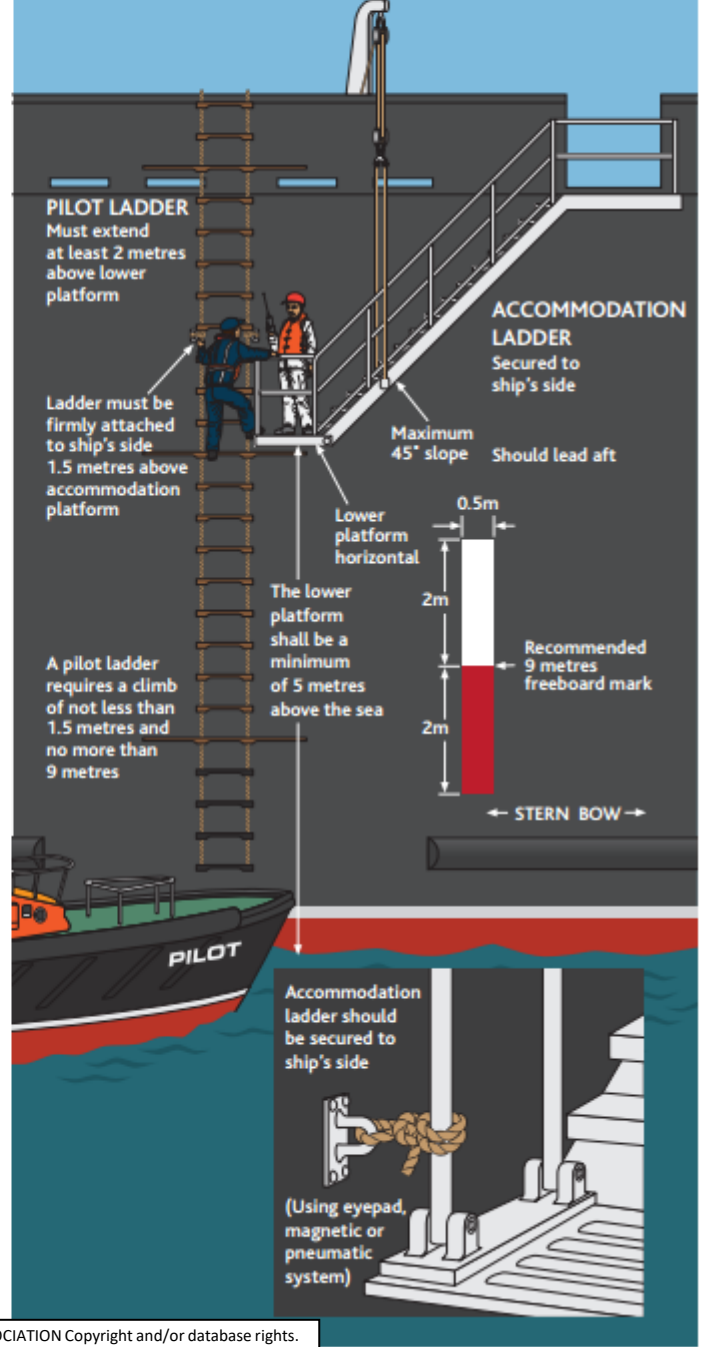
H.Q.S. "Wellington" Temple Stairs, Victoria Embankment, London WC2R 2PN Tel: +44 (0)20 7240 3973 Fax: +44 (0)20 7210 3518 Email: office@impahq.org
This document and all IMO Pilot-related documents are available for download at: <http://www.impahq.org>



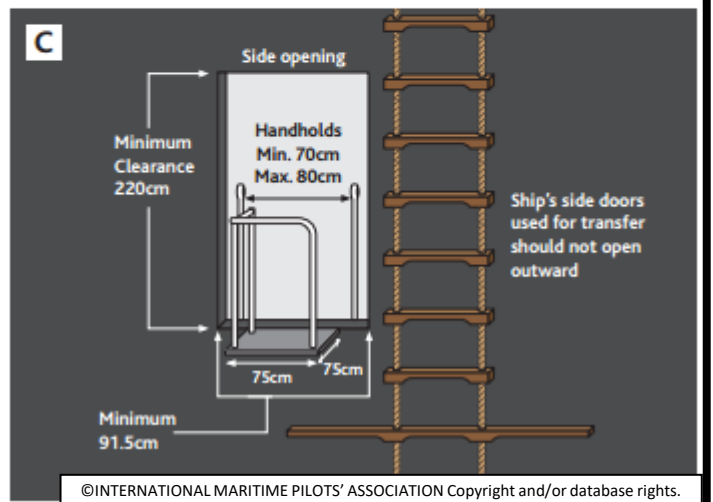
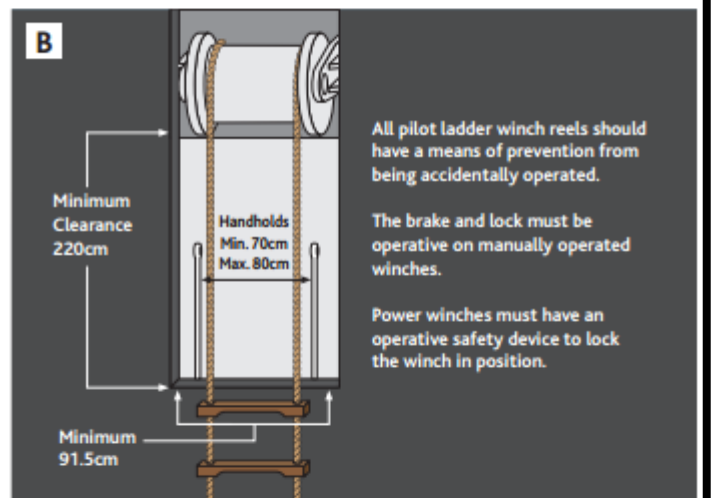
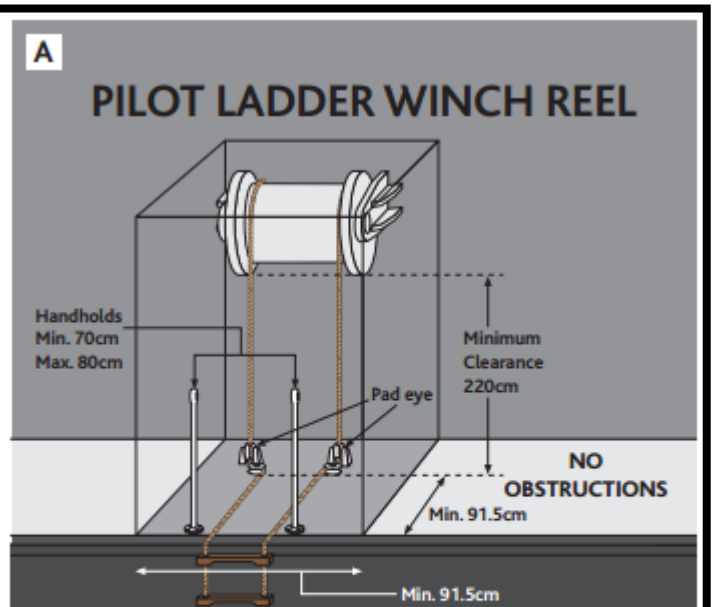
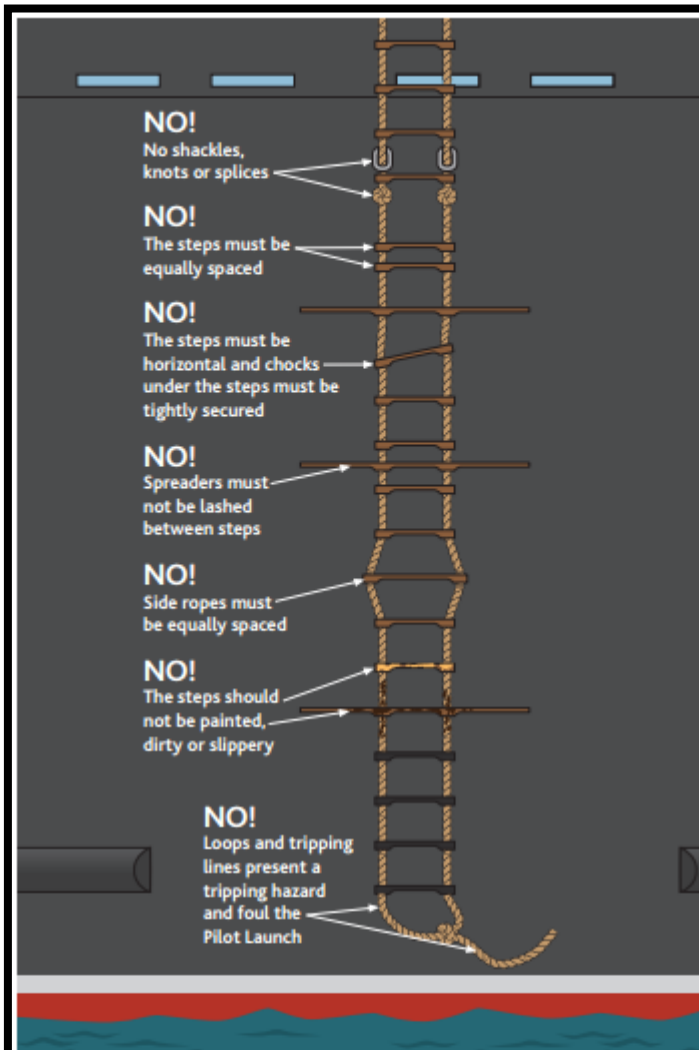
RIGGING FOR FREEBOARDS OF 9 METRES OR LESS



COMBINATION ARRANGEMENT FOR SHIPS WITH A FREEBOARD OF MORE THAN 9 METRES WHEN NO SIDE DOOR AVAILABLE



©INTERNATIONAL MARITIME PILOTS' ASSOCIATION Copyright and/or database rights.



©INTERNATIONAL MARITIME PILOTS' ASSOCIATION Copyright and/or database rights.

4.9 USEFUL LINKS

Calypso South – Kordin weather observation station	http://ioi.research.um.edu.mt/porto-stations/index.php/welcome/open/KRDN/meteo/0
Calypso South – Dellimara weather observation station	http://ioi.research.um.edu.mt/porto-stations/index.php/welcome/open/DLMR/meteo/0
TM Maritime Single Window login	https://tmsw.transport.gov.mt/
TM Local, Coastal and Port Notices to Mariners	https://www.transport.gov.mt/maritime/local-waters/official-notice-122
TM Merchant Shipping Notices to Mariners	https://www.transport.gov.mt/maritime/merchant-ship-notice-92
NAVIONICS Chart Viewer	https://webapp.navionics.com/#boating@8&key=kqjzEupiwA
Marine Traffic	https://www.marinetraffic.com/en/ais/home/centerx:14.5/centery:36.0/zoom:10
MIA Mariners' Forecast	https://www.maltairport.com/weather/3-day-forecast-for-mariners/
MIA Weather Radar	https://www.maltairport.com/weather/radar-images/
Calypso South - Senglea tidal level gauge	http://ioi.research.um.edu.mt/porto-stations/index.php/welcome/open/SNGL/marine/0
Freeport Community	https://portal.maltafreeport.com.mt/ZappAreas/Community/Community.aspx