

## DAFTAR PUSTAKA

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**Ship's Particulars**

<b>Name</b>	<b>ELISABETH SCHULTE</b>
<b>Ship Type</b>	Product oil/Chemical IMO II Tanker
<b>Hull Type</b>	Double hull
<b>Registered Owner</b>	<b>Cooldarry Shipping Ltd, Isle of Man</b>
<b>Operator</b>	<b>Bernhard Schulte Shipmanagement (UK) Ltd</b>
<b>Flag</b>	British (Isle of Man)
<b>Call sign</b>	<b>2CVZ9</b>
<b>Port of registry</b>	Douglas
<b>Official number</b>	741941
<b>Imo number</b>	9439840
<b>MMSI</b>	235 076 265
<b>Radio Accounting Authority</b>	Tel account Overseas CY03
<b>Classification society / Class number</b>	American Bureau of Shipping (ABS) /YY178053
<b>Class notation</b>	+A1 CHEMICAL CARRIER, OIL CARRIER, (E), +AMS, +ACCU, TCM, ES, ESP, UWLD, CRC
<b>Year build / Hull no.</b>	14 October 2010 / JZ1011
<b>Next Dry Dock</b>	<b>October 2015</b>
<b>Date of building contract</b>	October 20 2007
<b>Built in</b>	Jiangxi Jiangzhou Unite Shipbuilding Co. Ltd, Juijiang
<b>Main engine</b>	STX-MAN B&W 6S35MC MCR; 4440kW @ 173 RPM; CSR (90% MCR) 3996 kW @ 167 RPM / 5358 BHP; HFO 380 cSt
<b>Aux. Engines</b>	3 x 600 kW; HFO 380 cSt
<b>Steering gear</b>	Electro-Hydraulic, Ram Type; two pumps
<b>Propeller</b>	Fixed pitch type, 4 blades, material Mn-Al-Bronze
<b>Rudder</b>	<b>Hanged streamlined semi-balanced</b>
<b>Fuel capacity 100 %</b>	<b>HFO - 750.7 m<sup>3</sup>, MDO - 92.1 m<sup>3</sup></b>
<b>Fuel consumption</b>	<b>ME ~16.94 mt/day @ 90%MCR; AE ~3.8 mt/day</b>
<b>Speed (loaded)</b>	Abt 13,5 kts
<b>Speed (ballast)</b>	Abt 14,5 kts
<b>Bow thruster</b>	Type -HRP 750 kW / 1005 BHP
<b>GRT</b>	11,246
<b>NRT</b>	4961
<b>LOA</b>	145.15 m
<b>LBP</b>	135.6 m
<b>Lightship</b>	5707.0 mt      Corresponding Draft 4.8 m
<b>Summer deadweight &amp; TPC</b>	16,371 mt (16,850 mt)      TPC 28.1 t/cm
<b>Summer draught</b>	8.80 m      Corresponding Freeboard 3714 mm
<b>Fresh Water draught</b>	<b>8.996 m      Fresh Water allowance 196mm</b>
<b>Tropical draft</b>	SW - 8.983 m/ FW - 9.179 m
<b>Normal ballast draft</b>	
<b>Suez Canal Tonnage</b>	Gross - 11956.22 / Net - 9802.10
<b>Panama Canal Net Tonnage</b>	9,467
<b>Height from keel to top of mast</b>	39.2 m
<b>Depth moulded</b>	12.50 m
<b>Breadth moulded</b>	23.0 m
<b>Cargo tanks no.</b>	1-6 P/S + 2 Slop Tanks
<b>Cargo &amp; slop tanks coating</b>	Sigma Phenguard
<b>Cargo tanks capacity 100 %</b>	<b>19,397.8 m<sup>3</sup></b>
<b>Cargo tanks capacity 98%</b>	18,800 m <sup>3</sup>
<b>Slop tanks capacity</b>	423.99 m <sup>3</sup> - 98 %
<b>Cargo residual tank capacity 98%</b>	
<b>Cargo tanks P/V &amp; High Velocity valves setting</b>	Pressure +2000 mmWC / Vacuum -350 mmWC) / High velocity valves min. 20 m <sup>3</sup> /sec
<b>Cargo specific gravity</b>	1.025 t/m <sup>3</sup> (up to 100 % filling of CCTs)
<b>Cargo max temperature</b>	+70°C
<b>Cargo segregation 98%</b>	7 grades (No.1 2374.45m3 1p & 1S) (No.2 3460.76 m3 2P &2S) (No.3 3566.92 m3 3P &3S) (3576.16m3 4P & 4S) (3482.95 m3 5P & 5S) (2338.74 m3 6P & 6S) (423.99m3 Slop P & Slop S)

<b>Cargo pumps &amp; capacity</b>	Framo Deepwell 300m <sup>3</sup> /hr
<b>Stripping pumps &amp; capacity</b>	Framo
<b>Max loading rate homogenous cargo</b>	Abt 2,166 m <sup>3</sup> /hr
<b>Max loading rate per manifold</b>	Manifold No.1 – abt 2,166 m <sup>3</sup> /hr Manifold No.2 – abt 2,166 m <sup>3</sup> /hr Manifold No.3 – abt 2,166 m <sup>3</sup> /hr Manifold No.4 – abt 2,166 m <sup>3</sup> /hr Manifold No.5 – abt 2,166 m <sup>3</sup> /hr Manifold No.6 – abt 2,166 m <sup>3</sup> /hr
<b>Ballast tanks capacity 100 %</b>	7720 m <sup>3</sup>
<b>Ballast tanks coating</b>	Sigma Prime 200
<b>Ballast pumps &amp; capacity</b>	500 m <sup>3</sup> /hr
<b>Ballast ejector capacity</b>	
<b>Type of anodes in ballast tanks</b>	Zinc
<b>Inert gas plant capacity</b>	2,500 m <sup>3</sup> /hr
<b>IG fans &amp; capacity</b>	2 x 2,800 m <sup>3</sup> /hr
<b>Tank cleaning pumps &amp; capacity</b>	1 x abt 100 m <sup>3</sup> /hr; two tanks cleaning simultaneously
<b>Tank cleaning machines</b>	Fixed single nozzle type x 14,5 x 8 Bar (24 sets), Fixed double nozzle type x 27.5 x 8 Bar ( 2 sets)
<b>Distance Bridge - Bow</b>	117.18 m (382.5 ft)
<b>Distance Bridge - Stern</b>	27.97 m (89.9 ft)
<b>Distance Bow - Center Manifold</b>	71.5 m
<b>Distance Stern - Center Manifold</b>	72.5 m
<b>Distance Bridge – Center Manifold</b>	41.10 m
<b>Distance between manifolds</b>	1500 mm
<b>Distance manifold - ship's side/rail</b>	5200 mm / 5200 mm
<b>Height above main deck (flange axis)</b>	2100 mm
<b>Height above manifold trip tray</b>	800 mm
<b>Height above sea level</b>	Loaded - 5.80 m / Ballast – 8.50 m
<b>Length of parallel body</b>	Loaded -----/ Ballast – 82 m / Light ship – 70.5 m
<b>Cargo manifold size &amp; type</b>	6 x 300 mm (12") ANSI 150 10"x10" – 6 pcs / 10"x8" – 4 pcs / 8"x 6" – 1 pcs 8"x8" – 2 pcs / 6"x6" 2 pcs.
<b>Cargo reducers</b>	HFO 150 mm (6") / MDO 80 mm (3") ANSI 150
<b>Bunker manifold size &amp; type</b>	2 x 250 mm (10") ANSI 150
<b>Vapor &amp; IG manifold size &amp; type</b>	SWL 10.0 mt @ 4-17.5 m
<b>Hose handling crane</b>	SWL 2.0 mt @ 2.2-6.45 m
<b>Provision crane</b>	Stockless type 5310 kg
<b>Bow anchor</b>	56 mm diam. (10 & 11 sch. x 27.5 m)
<b>Anchor chain</b>	Stockless type 2680 kg
<b>Stern anchor</b>	
<b>Inmarsat F (Fleet 77)</b>	Tel: + 870 765 067 768 (Bridge) Fax: + 870 765067769
<b>Inmarsat C (Station No.1)</b>	423592537 EMSC
<b>Inmarsat C (Station No. 2) / SSAS</b>	423592536 EMSC
<b>E-Mail</b>	<a href="mailto:master@elisabetn.schulte.bsmfleet.com">master@elisabetn.schulte.bsmfleet.com</a>

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## HASIL WAWANCARA

Wawancara yang penulis lakukan di kapal MT. Elisabeth Schulte dengan Nahkoda dalam hal analisis penyebab kegagalan pelaksanaan *rescue boat drill*.

Nama : Sergejs Pancenko

Jabatan : Nahkoda

Kebangsaan : Latvian

1. Apakah peranan awak kapal dalam pelaksanaan *rescue boat drill* di kapal MT.

Elisabeth Schulte ?

Jawab : Peranan awak kapal dalam pelaksanaan *rescue boat drill* terutama dalam penurunan *rescue boat* yaitu mempersiapkan semua peralatan yang digunakan untuk menurunkan *rescue boat*, menggunakan peralatan keselamatan dengan baik dan benar, dan melakukan tugas dan tanggung jawabnya sesuai dengan sijil menurunkan *rescue boat*.

2. Apakah awak kapal sudah melakukan tugasnya dengan baik dalam pelaksanaan *rescue boat drill* ?

Jawab : Dalam pelaksanaan *rescue boat drill* awak kapal melakukan tugasnya dengan baik, namun ada beberapa orang terutama untuk awak kapal yang baru pertama bekerja di kapal tanker dia mengalami kesulitan dalam melaksanakan tugasnya karena tipe dari *rescue boat* yang berbeda dan metode penurunan yang tidak seperti *rescue boat* di kapal kargo.

3. Apakah semua awak kapal sudah mengetahui prosedur-prosedur dalam melaksanakan *rescue boat drill* ?

Jawab : Semua orang yang berada diatas kapal mempunyai tugas masing-masing yang harus dilakukan baik dalam kegiatan operasional diatas kapal maupun apabila terjadi keadaan darurat,dan mempunyai tugas sesuai dengan sijil kapal. Namun dalam pelaksanaannya masih ada beberapa awak kapal kurang mengerti dan bahkan lupa terhadap tugasnya dalam melaksanakan *recue boat drill*

4. Apakah anda sering memberikan pengarahan terhadap awak kapal ?

Jawab : Saya sering memberikan pengarahan-pengarahan kepada awak kapal agar kegiatan yang akan dilaksanakan dapat berjalan sesuai yang direncanakan. Dalam *safety meeting* saya sering memberikan penjelasan-penjelasan kepada semua awak kapal agar mereka mengerti pentingnya pengetahuan dan latihan diatas kapal untuk mencegah kedaan darurat terutama dalam melaksanakan *rescue boat drill*.

Wawancara yang penulis lakukan di kapal MT. Elisabeth Schulte dengan Muallim 1 dalam hal analisis penyebab kegagalan pelaksanaan *rescue boat drill*.

Nama : Cezary Olejnik Stanislaw

Jabatan : Muallim 1

Kebangsaan : Polish

1. Bagaimana pelaksanaan *rescue boat drill* di kapal MT. Elisabeth Schulte berdasarkan aturan yang terdapat di dalam buku SOLAS dan STCW ?

Jawab : Pelaksanaan *rescue boat drill* pada saat kapal berlabuh jangkar di perairan Fawley, Inggris mengalami kegagalan dan sangat jauh dari yang diharapkan. Menurut pendapat saya, apabila pelaksanaan *rescue boat drill* tersebut memakan waktu lebih dari 30 menit menunjukkan kesiapan para awak kapal sangat kurang, seharusnya *rescue boat* dapat diturunkan dalam waktu secepatnya. Awak kapal juga tidak mengerti prosedur menurunkan *rescue boat* hal ini tentu tidak sesuai dengan aturan yang terdapat di dalam STCW, padahal mereka mempunyai sertifikat *Survival Craft And Rescue Boat*.

2. Bagaimana pemahaman awak kapal dalam menjalankan tugasnya pada saat pelaksanaan *rescue boat drill* ?

Jawab : Pemahaman awak kapal dan terutama untuk *crew* baru kurang memahami dalam melaksanakan tugasnya. Ini diakibatkan karena kurangnya pengetahuan dan pengalaman bekerja di kapal, serta kurangnya kesadaran awak kapal akan pentingnya pengetahuan tentang pelaksanaan *rescue boat drill* dan menurunkan *rescue boat*.

3. Mengapa awak kapal tidak mempunyai pengetahuan dan keterampilan yang baik dalam pelaksanaan *rescue boat drill* ?

Jawab : kurangnya pengetahuan dan keterampilan awak kapal dalam menurunkan *rescue boat* adalah akibat dari tidak adanya disiplin yang baik dalam melaksanakan *rescue boat drill* , selain itu sistem

pelatihan yang di atas kapal yaitu *Videotel* dan *Onboard Training Manual* kurang dimaksimalkan oleh awak kapal

4. Apakah pelaksanaan *rescue boat drill* sudah sesuai dengan yang direncanakan ?

Jawab : Pelaksanaan *rescue boat drill* dilaksanakan sesuai dengan jadwal namun hal ini kadang tidak dilaksanakan karena adanya kegiatan operasional kapal seperti pada saat bongkar muat, *tank cleaning*, bungkering dan lainnya.

Wawancara yang penulis lakukan di kapal MT. Elisabeth Schulte dengan Mualim 3 dalam hal analisis penyebab kegagalan pelaksanaan *rescue boat drill*.

Nama : Vladimir Filippov

Jabatan : Mualim 3

Kebangsaan : Ukrainian

1. Sebagai orang yang bertanggung jawab terhadap perlengkapan yang ada di dalam *rescue boat*, hal-hal apa yang sudah anda lakukan untuk memastikan perlengkapan tersebut sesuai dengan aturan SOLAS ?

Jawab : Saya melakukan cek dan inspeksi terhadap peralatan tersebut dengan menggunakannya dan melihat apakah perlengkapan tersebut sudah *expired* atau masih dapat digunakan. Apabila terdapat kekurangan saya selalu melaporkan kepada Mualim 1 untuk meminta perlengkapan yang baru. Selain itu saya juga selalu mencatat pengecekan dan perawatan terhadap perlengkapan tersebut di *Plan Maintenance System*.

2. Apakah anda selalu melakukan familiarisasi terhadap awak kapal dalam melaksanakan *rescue boat drill* ?

Jawab : Saya tidak pernah melakukan familiarisasi terhadap awak kapal karena sistem pelatihan awak kapal tentang *rescue boat drill* sudah sangat lengkap yaitu dari *Videotel*, *Onboard Training Manual* dan dari *SOLAS Training Manual*.

3. Selain mengecek perlengkapan *rescue boat*, hal-hal apa yang anda lakukan untuk merawat *rescue boat* agar selalu siap untuk digunakan ?

Jawab : Saya melakukan inspeksi manual dengan mengecek ganco *rescue boat*, mengecek *lifting sling*, membersihkan *rescue boat* setiap bulannya, dan mengganti *SOLAS Reflector Tape* apabila sudah rusak dan tidak dapat memantulkan cahaya baik pada pagi hari atau malam hari

4. Apakah anda sudah familiar dengan pelaksanaan *rescue boat drill* di kapal MT. Elisabeth Schulte ?

Jawab : Saya sudah familiar dengan pelaksanaan *rescue boat drill* di kapal MT. Elisabeth Schulte, karena saya sudah bekerja sebanyak 4 kali kontrak di *sister ship* yaitu MT. Edzard Schulte, tipe *rescue boat* dan metode penurunan yang terdapat di kapal MT. Elisabeth Sculte juga sama. Sebagai Mualim 3 saya harus memahami prosedur-prosedur yang harus dilakukan dalam melaksanakan *rescue boat drill*.

Wawancara yang penulis lakukan di kapal MT. Elisabeth Schulte dengan Masinis 2 dalam hal analisis penyebab kegagalan pelaksanaan *rescue boat drill*



Nama : Jaroslaw Mackiewicz

Jabatan : Masinis 2

Kebangsaan : Polish

Pertanyaan :

1. Apakah penyebab mesin *rescue boat* tiba-tiba berhenti setelah diturunkan di air ?

Jawab : Mesin *rescue boat* tiba-tiba berhenti bisa disebabkan oleh berbagai faktor diantaranya, mesin kurang panas, bahan bakar yang sudah mulai bercampur dengan air dan adanya kebocoran yang menghubungkan pipa bahan bakar dengan mesin. Pada saat saya berada di *rescue boat* saya sudah memberitahu Nahkoda agar *rescue boat* hanya berolah gerak disekitar kapal saja karena pipa bahan bakar terdapat kebocoran, namun Nahkoda meminta untuk kapal berolah gerak lebih lama sehingga air masuk di mesin *rescue boat*.

2. Sesuai dengan sijil dalam pelaksanaan *rescue boat drill* mengapa anda tidak mengecek permesinan *rescue boat* dan memanaskan mesinnya?

Jawab : Saya telah mengecek permesinan *rescue boat* dan pada saat saya hidupkan mesin dapat berjalan, namun saya tidak melaporkan kepada Nahkoda bahwa terdapat sedikit kebocoran yang terdapat di pipa bahan bakar *rescue boat*.

3. Sebagai orang yang bertanggung jawab terhadap permesinan *rescue boat*, perawatan apa yang harus anda lakukan ?

Jawab : Perawatan yang saya lakukan yaitu mengecek keadaan permesinan *rescue boat*, mengecek sistem perapian, dan bahan bakar yang terdapat di dalamnya. Namun hal ini saya lakukan hanya sebelum *rescue boat* diturunkan, karena menurut saya mesin *rescue boat* ini masih baru dan sangat jarang dioperasikan.

4. Pada saat *rescue boat* berhenti di laut, apakah tindakan yang harus anda lakukan ?

Jawab : Saya mengaktifkan mode *dead man switch* karena mesin *rescue boat* masih bergerak, hal ini dapat mengakibatkan kerusakan terhadap mesin *rescue boat*. Setelah mesin benar-benar berhenti lalu saya mencoba menghidupkan mesin kembali namun air sudah terlalu banyak masuk ke dalam mesin.

Wawancara yang penulis lakukan di kapal MT. Elisabeth Schulte dengan Masinis 2 dalam hal analisis penyebab kegagalan pelaksanaan *rescue boat* drill.

Nama : Myo Tun

Jabatan : Bosun

Kebangsaan : Myanmar

Pertanyaan :

1. Sudah berapa lamakah anda bekerja diatas kapal, terutama untuk bekerja diatas kapal tanker ?

Jawab : Saya bekerja sebagai pelaut sudah hampir 10 tahun, namun untuk bekerja diatas kapal tanker ini merupakan kontrak pertama saya.

2. Apakah kesulitan anda bekerja diatas kapal tanker ?

Jawab : Kesulitan saya bekerja diatas kapal tanker, saya kurang mengetahui nama-nama peralatan, prosedur-prosedur dalam kegiatan operasional kapal.

3. Apakah anda mengetahui tentang peralatan-peralatan yang harus disiapkan dalam melaksanakan *rescue boat drill* ?

Jawab : Saya kurang mengetahui tentang peralatan-peralatan tersebut karena pada saat pertama kali naik ke atas kapal Mualim 3 hanya memberikan sedikit familiarisasi berkaitan dengan *rescue boat*, selain itu tipe *rescue boat* di kapal MT. Elisabeth Schulte juga berbeda sehingga pada saat diminta Mualim 1 untuk mempersiapkan peralatan saya agak sedikit bingung.

4. Apakah pelaksanaan *rescue boat drill* dilakukan setiap bulannya ?

Jawab : pelaksanaan *rescue boat* dilakukan setiap bulannya namun kurang optimal karena kapal selalu berlayar di eropa dan pelayaran dari satu pelabuhan ke pelabuhan lain sangat singkat. Pada pelaksanaan *rescue boat drill* sebelumnya Mualim 1 hanya meminta seluruh awak kapal untuk berkumpul di pos penurunan *rescue boat* dan meminta beberapa orang untuk menjalankan mesinnya. Selain itu perusahaan juga menyediakan sistem pelatihan yaitu videotel dan onboard training manager namun padatnya kegiatan operasional kapal membuat saya kurang berminat untuk menonton videotel

**DRILL PLAN FOR YEAR 2015**

**MV ELISABETH SCHULTE / CHEMICAL IMO TANKER CLASS II / ISLE OF MAN**

**I. SAFETY DRILLS**

**A. Lifeboat, Rescue Boat & Emergency Steering Drills**

Drill Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lifeboat moving from stowed position	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x
Lifeboat abandon ship - Lower life Boat to embarkation deck Explain operation of Liferrafts	X 07, 21	X 05, 12	X 17	X 08	X 06, 20	X 04	X 14	X 15	X 23	X 30	X 11, 25	X 18
Lower rescue boat in water, maneuver & try out engine <i>(Ships to mark schedule here. First drill not more than three months from last drill)</i>	X 18		X 24, 25		X 16		X 02		X 30			X 18
Emergency steering drill (SOLAS) (out at Sea / Approaching Port) <i>(Ships to mark schedule here. First drill not more than three months from last drill)</i>		X 20			X 07			X 18			X 11, 24	

*Crew shall be given training on use of the ship's life-saving appliances in severe weather and severe sea conditions.*

**B. Fire and Explosion Drills**

Drill Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Fire in Galley (SOLAS)	X 07						X 14					
Fire in Paint locker (SOLAS)	X 21	X 12						X 04				
Fire in Accommodation (SOLAS)			X 18						X 23			
Fire and Explosion in Engine Room (SOLAS) (include CO2 release simulation)				X 08						X 30		
Fire and Explosion in Pump Room (SOLAS)						X 04						X 04
Fire on Mast riser						X 10					X 25	
Explosion on board in fuel tank.					X 20						X 11	

DRILL PLAN FOR YEAR 2015												
Fire in Cargo hold/Tanks - in port (SOLAS)						X 23						X 30



## DRILL PLAN FOR YEAR 2015

C.Pollution Prevention drills												
Drill Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cargo / Bunker oil spill near manifold due hose burst / leaking flanges (SOPEP) **	X 16			X 20			X 21			X 22		
Vapour Release -- At terminal / Sea / Anchorage.		X 12						X 04				
Emergency Towing Arrangement (ETA) Drill /Salvage		X 12						X 11				
Bunker / cargo tank overflow** (SOPEP)		X 19			X 06			X 18	22		X 11	
Hull failure leading to Pollution (Bunker / Cargo) leakage (SOPEP)			X 11			X 10			X			X 22

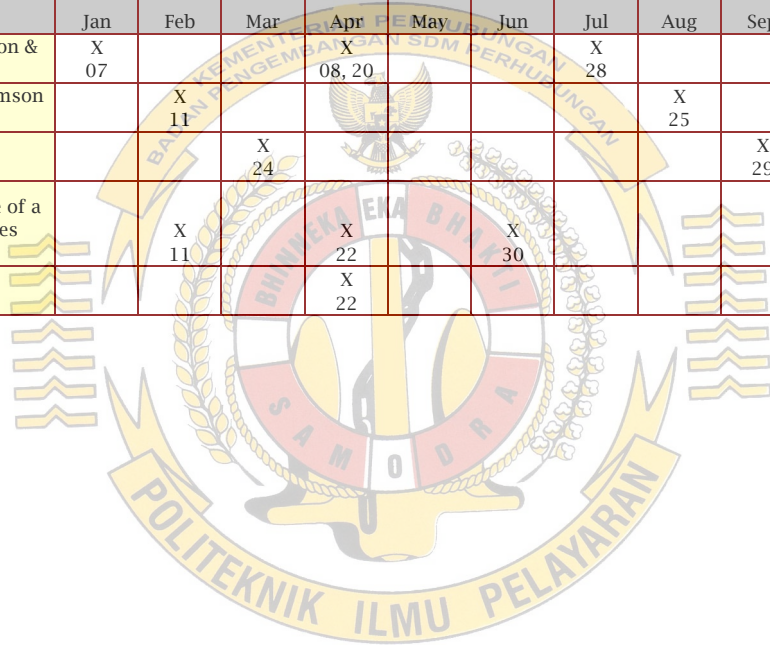
### ii. COMMON DRILLS FOR ALL VESSEL TYPES

A. Structural damage/Equipment failure drills												
Drill Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Grounding / Stranding / Beaching	X 16			X 14			X 28			X 22		
Collision with another vessel in heavy traffic area.		X 12			X 12			X 11			X 26	
M/E failure / breakdown - coastal voyages /congested waters, Open sea with request for salvage			X 11			X 10			X 15			X 22
Critical Equipment Drill - Pump room gas detection systems failure					X 12						X 26	
Electrical power supply failure in narrow waters			X 18			X 23			X 15			X 04
Flooding in Cargo spaces/ Engine room both breached due to hull damage	X 16						X 28					
Heavy weather damage to cargo Hold or Hatch Covers / Eqpt / Fittings and Deck Cargo				X 14						X 22		
Critical Equipment Drill - Cargo Pump Temperature monitors failure			X 25						X 08			
Breakaway from Jetty / Ship while transferring cargo				X 22						X 24		

## DRILL PLAN FOR YEAR 2015

Loss of Stability during cargo operations					X 27							X 26	
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B. Personnel Rescue drills												
Drill Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Tanks, Holds, Engine room, Accommodation & evacuation to hospital by stretcher.	X 07			X 08, 20			X 28			X 30		
Search & Rescue , Man over board & Williamson Turn		X 11						X 25				
Casualty evacuation by helicopter			X 24						X 29			
First aid treatment for a Hypothermia case of a crew member and other First aid procedures e.g. burns, bleeding etc		X 11		X 22		X 30				X 24		
Cardio pulmonary Resuscitation (CPR) exercise				X 22						X 30		



## DRILL PLAN FOR YEAR 2015

C. Table top drills												
Drill Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Critical Equipment drill - Failure of following equipment: Oil Mist Detector Failure, Oily Water Separator Failure Sewage Treatment Plant failure Oil Discharge Monitoring Equipment (ODME) failure ( <i>Only for Tankers fitted with ODME</i> )		X 11						X 25				
Ballast water/Garbage/Sewage discharge in prohibited area							X 29					
Gyro and Radar failure drills ECDIS failure ( <i>on applicable ships</i> )			X 25			X 30			X 08			X 04
Substantial Inter Tank Leakage (Table top) Precautions during vessels visit to countries with Epidemic ( <i>Only discussion</i> )				X 27								X 22
Death due to illness / injury											X	
D. Ship Shore Safety Exercises(refer also General Instructions)												
Drill Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ship Shore Safety Exercise ( <i>Ships to mark when carried out</i> )												
Exercises as per 33 CFR 155.1060 ( <i>Vessel to mark type and when completed</i> )												
E. Security Drills												
Drill Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Attack from Seaward at berth / Anchorage and while at sea (Piracy) ( <i>Try out Zig Zag Manuver</i> )		X 04										
Security level 2 drill		X 25										



**DRILL PLAN FOR YEAR 2015**

Security Alert Level 3 on receiving advice from Flag / CSO					X 27								
Stowaway on Board						X 29							
Attempted hijacking of vessel including activation of citadel								X 30					
Bomb threat / Bomb search, Damage to vessel by explosion, Arson or Sabotage.											X 20		
<b>F. Ship Shore Security Exercise(Refer also General Instructions)</b>													
Ship Shore Security Exercise <i>(Ships to mark when carried out)</i>													

*Note: The Periodicity, Schedule and types of Security Drills are to be conducted as detailed in your SSP onboard with suitable substitution to the suggested drills (as above) where appropriate. Please consult your CSO in this regard.*

**Notes:**

*\*\* When carrying out Bunker spill Drill one of these drills should preferably include a situation where the air pipes/sounding pipes are located in an inaccessible place to introduce a level of difficulty in containment of the overflow through them.*



No.	RANK	NAME	ABANDON SHIP DUTIES
1	Master	Pancenko Sergejs	Overall In Command on Bridge
2	Chief Officer	Cezary Olejnik Stanislaw	Incharge of Life Boat including releasing pins & Launching etc
3	2nd Officer	Sinekopov Alexander	Carry Ship's Documents, Bridge Log Book, Nav Charts
4	3rd Officer	Vladimir Phillipov	Carry Nav instruments GMDSS VHF/ EPIRB
5	Deck Cadet	Parasara, I Gede	Assist Bosun as required
6	Chief Engineer	Witold Apanasewicz	In-charge of Life Boat engine
7	2nd Engineer	Jaroslav Mackiewicz	Assits Chief Engineer
8	3rd Engineer	Daunis Algia	Disconnect Battery charging connection

9	4th Engineer	Subramanian Sivakumar	Assist engineers as required
10	Elec. Engineer	Chvalun Alexander	Emergency Lights Embarkation lights
11	Bosun	Myo Tun	Remove Lashings
12	Pump Man	Kyaw San Lin	Emergency release if needed
13	AB-1	Ko Ko Hein	Helmsman
14	AB-2	Kyaw Swar Win	Bring Pyrotechnics
15	AB-3	Than Thun	Bring SART
16	O/S	Castullo Ian Carisma	Secure Bottom Plug
17	Fitter	Balalitan Eric F	Assist Engineers As required
18	Motorman	Balicao Kim Salaya	Bring Extra Fuel
19	Chief Cook	Thu Ya	Bring Extra Provision Food & Water
20	Messman	Kyaw Htoo	Bring blankets & First Aid Kit

**EMERGENCY DUTIES****RANK****FIRE DUTIES****SOPEP DUTIES****RESCUE BOAT /  
MOB PARTY**

Overall Command on Bridge

Overall Command on Bridge

Overall Command on Bridge

Master

Incharge of Deck Fire

Stops Cargo Operations and takes charge of spill containment/cleanup. Organize on board clean up equipment.

In Charge of Rescue Boat

Chief Officer

In-charge of First Aid / Preparing Rescue Boat

Incharge of First Aid. Preparing Rescue Boat (If necessary) for containment of Oil Spill

In-charge of Launching &amp; Recovery of Rescue Boat

2nd Officer

Assist Master in Communication and record minutes

Assist Master in Communication and record minutes

Communications on the Bridge

3rd Officer

Bring Fire extinguisher: Assist Fire Fighter in Donning Fire Fighters outfit

Assist 2nd Officer as required

Assist 2nd Officer As required

Deck Cadet

Incharge of Engine Room &amp; assist fire party as required

Stops Bunkering and Co-ordinates with Ch. Off in containment and cleanup.

Overall Incharge in Engine Room. Engines for manoeuvring may be required

Chief Engineer

Incharge of Engine Fire

Assist Chief Engineer in Containment

In-charge of Rescue Boat engine

2nd Engineer

Start Emergency Fire Pump

Assist 2nd Engineer in Containment

Assist Chief Engineer in Engine Room

3rd Engineer

Assist Chief Engineers as required	Assist 2nd Engineer as required	Assist Chief Engineers as required	4th Engineer
Isolate Power switches & assist Deck / Engine Fire party as required	In Charge of Power Supply, Circuit Isolation, Lighting etc. Assist Chief Engineer as necessary	Embarkation Lights. Check Rescue Boat Crane power supply	Elec. Engineer
Shut Vents , Fire & Watertight Doors	Assist in Containing Spill on Board, Deploy SOPEP equipments & start clean up as directed by Chief Officer	Prepare for Recovery of Rescue Boat	Pump Man
Bring Fire Hose; Boundary Cooling; Closing of Fire Dampers		In Charge of Launching & Recovery of Rescue Boat	Bosun
Main Fire Fighter wearing Fire Fighters Outfit (Deck Fire) & Back Up for Engine Fire		Helmsman on Bridge	AB-1
Standby Fire Fighter wearing Fire Fighters Outfit (Deck Fire) & Back Up for Engine Fire		(In Rescue Boat) Assist in Rescue Operation	AB-2
Helmsman		Look Out Duty	AB-3
Bring Fire Hose; Boundary Cooling; Closing of Fire dampers		Look Out Duty	O/S
Standby Fire Fighter wearing Fire Fighters Outfit (Engine Fire) & Back Up for Deck Fire		Prepare for Recovery of Rescue Boat	Fitter
Main Fire Fighter wearing Fire Fighters Outfit (Engine Fire) & Back Up for Deck Fire		Prepare for Recovery of Rescue Boat	Motorman
First Aid & Stretcher / Prepare Escue Boat		First Aid & Blankets	Chief Cook
First Aid & Stretcher / Prepare Escue Boat		First Aid & Blankets	Messman



**BERNHARD SCHULTE SHIPMANAGEMENT  
UNITED KINGDOM  
SAFETY-RECORD OF MAINTENANCE RESCUE BOAT**

**Reference : SOLAS Chapter III Regulation 19**

NO	DETAILS	MONTH	PERSON IN CHARGE	REMARKS	SIGN
1	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	January	Jaroslav Mackiewicz	Done	
2	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	February	Jaroslav Mackiewicz	Done	
3	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	March	Jaroslav Mackiewicz	Done	
4	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	April	Jaroslav Mackiewicz	Done	
5	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	May	Jaroslav Mackiewicz	Done	
6	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	June	Jaroslav Mackiewicz	Done	
7	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	July	Jaroslav Mackiewicz	Done	
8	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	August	Jaroslav Mackiewicz	Done	
9	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	September	Jaroslav Mackiewicz	Done	
10	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	October	Jaroslav Mackiewicz	Done	
11	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	November	Jaroslav Mackiewicz	Done	
12	Engine condition, electrical, fuel oil tank, steering system, and lubricate engine	December	Jaroslav Mackiewicz	Done	

Master of MT. ELISABETH SCHULTE” \_\_\_\_\_ Capt Alexey Smaznov



**BERNHARD SCHULTE SHIPMANAGEMENT  
UNITED KINGDOM  
SAFETY-RECORD OF MONTHLY RESCUE BOAT DRILL**

**Reference: SOLAS Chapter III Regulation 18**

NO	ACTIVITY	Month	Remarks
1	Mustering, testing engine, and lowering procedure	January	Done
2	Mustering, testing engine, and lowering procedure	February	Done
3	Mustering, testing engine, and lowering procedure	March	Done
4	Mustering, testing engine, and lowering procedure	April	Done
5	Mustering, testing engine, and lowering to water carried out	May	Done
6	Mustering, testing engine, and lowering procedure	June	Done
7	Mustering, testing engine, and lowering procedure	July	Done
8	Mustering, testing engine, and lowering procedure	August	Done
9	Mustering, testing engine, and lowering procedure	September	Done
10	Mustering, testing engine, and lowering procedure	October	Done
11	Mustering, testing engine, and lowering procedure	November	Done
12	Mustering, testing engine, and lowering procedure	Desember	Done

Master of MT. ELISABETH SCHULTE” \_\_\_\_\_ Capt Alexey Smaznov



**BERNHARD SCHULTE SHIPMANAGEMENT  
UNITED KINGDOM  
SAFETY-RECORD OF MAINTENANCE RESCUE BOAT**

**Reference: SOLAS Chapter III Regulation 19**

NO	DETAILS	MONTH	PERSON IN CHARGE	REMARKS	SIGN
1	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	January	Vladimir Fillipov	Done	
2	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	February	Vladimir Fillipov	Done	
3	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	March	Vladimir Fillipov	Done	
4	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	April	Vladimir Fillipov	Done	
5	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	May	Vladimir Fillipov	Done	
6	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	June	Vladimir Fillipov	Done	
7	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	July	Vladimir Fillipov	Done	
8	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	August	Vladimir Fillipov	Done	
9	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	September	Vladimir Fillipov	Done	
10	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	October	Vladimir Fillipov	Done	
11	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	November	Vladimir Fillipov	Done	
12	Inspection of SOLAS reflection tape, loose equipment, and lifting sling.	December	Vladimir Fillipov	Done	

Master of MT. ELISABETH SCHULTE” \_\_\_\_\_ Capt Alexey Smaznov



FOTO-FOTO PELAKSANAAN *RESCUE BOAT DRILL* DI KAPAL MT.  
ELISABETH SCHULTE

1.



Persiapan *embarkation ladder* oleh Kelasi dan *Deck Cadet*

2.



*Painter Line* yang bertanda merah

3.



Permesinan *rescue boat* MT. Elisabeth Schulte

4.



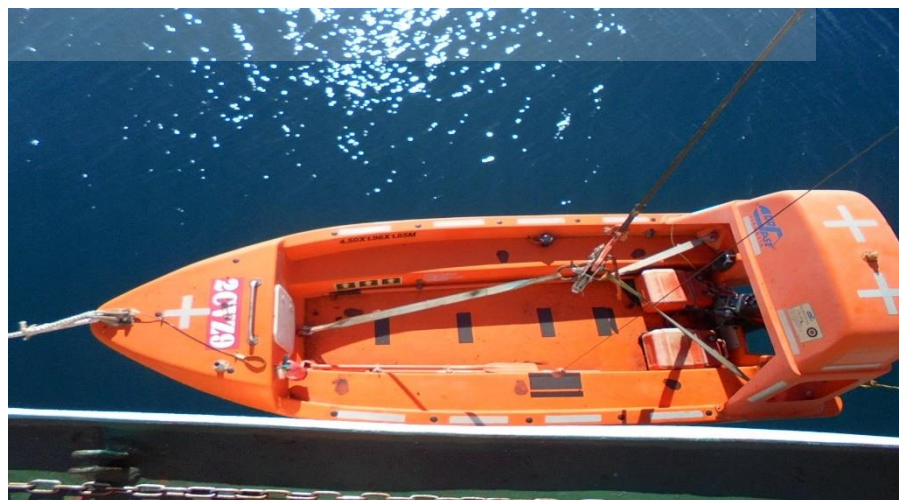
*Lifting sling yang terdapat di ganco rescue boat*

5.



*Bosun mengoperasikan provision crane untuk rescue boat*

6.



*Rescue boat mulai diturunkan*

7.



Masinis 2 turun ke *rescue boat*

8.



Awak kapal telah berada di *rescue boat*

9.



*Rescue boat* mulai berolah gerak, berada di buritan

10.



Awak kapal mulai menyimpan rescue boat





**BERNHARD SCHULTE SHIPMANAGEMENT  
UNITED KINGDOM  
SAFETY-RECORD OF RESCUE BOAT DRILL**

**Reference: SOLAS Chapter III Regulation 19**

Record the date and details of rescue boat drill conducted in Fawley United Kingdom.

Date	Result of inspection	Sign
16.05.2015 09:00	Alarm sounded.	
16.05.2015 09:05	Initiate "Rescue Boat" Drill.	
16.05.2015 09:10	Crew mustered. Individual duties checked.	
16.05.2015 09:20	Rescue boat prepared for launching.	
16.05.2015 09:25	Condition of launching appliances checked. Found in good order.	
16.05.2015 09:35	Engine tested-ok.	
16.05.2015 09:40	Commence lowering rescue boat to the water.	
16.05.2015 09:50	Rescue boat released. Commenced manoeuvring.	
16.05.2015 10:00	Testing on different courses and speed carried out. After 10 Minutes Suddenly engine stop. 2nd Engineer Examined, Failure with engine system.	
16.05.2015 10:40	Commence heaving up rescue boat.	
16.05.2015 10:50	Rescue boat moored alongside the ship and picked up on the B Deck.	
16.05.2015 11:00	All secured. Drill completed.	

Master of MT. ELISABETH SCHULTE" \_\_\_\_\_ Capt Alexey Smaznov

Made by: P. Pettersen Approved by: B. Skaala	<b>MATRIX 450 RESCUE BOAT</b>	Rev. date: 02.02.10 Rev. No: 03
Valid from: 20.02.02	<b>Document No. TEK - 140</b>	Page 1 of 3

### 1. TECHNICAL INFORMATION

#### Dimensions

Length overall	4,50 m
Beam	1,96 m
Height	1,86 m
Height, keel to lifting point	1,75 m

#### Boat Data

Capacity, maximum	6 persons
Weight, boat with equipment	450 kg
Davit load, with 6 persons	945 kg
Lifting arrangement	3-point lifting sling
Standard propulsion	≥15 Hp outboard engine
Colour	Orange (RAL 2004)

#### Operational Performance

Speed, approx. with 6 persons	Minimum 6 knots
Endurance, fully loaded	4 hours at 6 knots

### 2. MATERIALS

Hull and deck	Fire retardant glassfibre reinforced polyester (GRP)
Buoyancy material	Polyurethane foam
Deck fittings	Galvanised steel and stainless steel
Painter release	Galvanised steel

### 3. GENERAL DESCRIPTION

Rescue boat designed and manufactured according to latest SOLAS, Classification Society and National Authority requirements.

The rescue boat has excellent reliability, manoeuvrability, and seakeeping abilities in order to fulfil its prime function - to provide an effective means of search and recovery for persons missing at sea. Design and construction fulfil the need for reliable, low maintenance standby and operation.

The lay out and performance of the boat allow it to perform other roles including, dive support, inspection, survey and work boat duties.

Made by: P. Pettersen Approved by: B. Skaala	<b>MATRIX 450 RESCUE BOAT</b>	Rev. date: 02.02.10 Rev. No: 03
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#### **4. HULL AND DECK**

The rescue boat is fabricated in fire retardant glassfibre reinforced polyester (GRP).

The hull is a planing, deep-V type with transom, giving optimum seakeeping ability at all speeds in all sea conditions.

The space between hull and inner liner is filled with polyurethane buoyancy foam. If damaged below the waterline, the boat will float at safe level in fully flooded and loaded condition. The boat is self-bailing through a drainage outlet at the stern.

The deck has an anti-slip surface. Lifelines are fitted on the gunwale.

#### **5. LIFTING ARRANGEMENT**

Lifting is by a 3-point lifting sling with ring for connection to davit hook.

#### **6. PROPULSION SYSTEM**

The rescue boat is fitted with an SOLAS approved outboard engine with the following features:

- Fuel capacity sufficient for 4 hours operation
- Propeller protection guard
- Dead man switch to shut down engine in case driver is removed from seat

#### **7. DECK FITTINGS**

The boat has been designed to provide a protected and safe working environment for the crew, engine and equipment. It has the following features:

- Equipment box with watertight hatch
- On load painter release hook
- Towing/mooring attachment mounted at each aft corner
- Secure grab handles throughout the boat
- Sprayhood to protect persons on deck
- Bench seats

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## 8. ELECTRICAL EQUIPMENT

Electrical equipment consists of:

- Searchlight ,navigation light, compass powered from engine take off

## 9. CAPSIZE EQUIPMENT

In the event of capsizing, the engine is automatically shut off. The boat can be returned to the upright position by 2 persons according to the regulations. A rear mounted GRP frame is fitted to aid righting of the boat.



*Typical specification - subject to revision according to customer requirement.*

*All products are subject to continuous review. Norsafe as reserve the right to change specification without prior notice.*



