RISK ASSESSMENT

This risk assessment is intended to help identify risks that have the potential to cause harm to any crfewmembers onboard the vessel. You are required to protect people as far as "reasonably practicable". A risk assessment is simply a careful examinition of what, in the workplace, could cause harm to people, so that you can determine whether you have taken enough precautions or should do more to prevent harm.

Risk assessmewnt should be made simple, and ensure that all crew members read it once complete. If you take a

PAGE 1 OF 7

Activity Type	Identify Hazards	Identy	Implications	Identify the control	Person Responsible	Identify Action if
(List all different	(List all potential and real	Consequences	How sever are its implic	measures	For ensuring that measu	incident Occurred
types of activity)	hazards associated with	List the consequence	ation if the hazard does	That are inplace to reduce	are implemented	What action will you take if
	each activity type	of each hazard and the	not occur?	the risk of the hazard happening		the hazard does occur?
		possibility that this hazard	(high, medium, low)			
		will occure(High/ Med/Low)				
1. Maintenance on deck						
.1 Painting vessel aloaft	falling from height	injury (Low)	medium	use safety harness	Chief Officer/Bosen	seek medical attention
C	falling from ladder	injury (Low)	medium	use safety harness		report the office
	ship whistle sounded while	injury on ears(Low)	medium	do not sound whistle		safetry meeting
	working					hospitalization
	Falling object from above	injury (Low)	medium	clear above	Chief Officer/Bosen	insurance claims
.2 working over the side	falling from height	injury (low)	medium	use of safety harness	Chief Officer/Bosen	seek medical attention &
of the ship	falling to the water(sea)	drowning(Low)	medium	use of safety harness	Cinici Gineci/Bosen	report the office
or the ship	falling from ladder	injury (low)	medium	life bouy standby		hospitalization
	I was a substitution of the substitution of th	injury (io ii)				
.3 working and painting	skin irritation	skin itching(low)	medium	use glove and long sleeves	Chief Officer/Bosen	seek medical attention &
on deck	inhaling chemical vapor	short of breath(low)	medium	cover the noze		report the office
	sun exposure	sun burn(Low)	medium	use cover all w/ long sleeves		safety meeting
	explosion	fire(Low)	medium	standby fire extingusiher		hospitalization
	heat exhaustion	collapse(low)	medium	stay in shaded area		insurance claims
.4 chipping /sanding on	sun exposure	exhaustion(low)	medium	stay in shaded area	Chief Officer/Bosen	seek medical; attention &
on deck	broken sanding disk	eye injry(low)	medium	use mask		report the office
	caught by machine	hand injury(Low)	Low	Installed wheel cover		safety meeting
	wet equipment	electricution(Low)	medium	dry up equipment and fixed		hospitalization
<u> </u>	struck by moving hatch cover	injury(low)	medium	do not open hatch cover		•
.5 sweeping/ cleaning on	sun exposure	ezhaustion(Low)	medium	stay on shaded area	Chief Officer/Bosen	seek medical attention
on deck	slipping on deck	body injury(Low)	medium	stay out from wet areaq		report the office
	inhaling of dust	short of breath(low)	medium	cover nose with masks		safety meeting
	struck by moving hatch cover	injury (low)	medium	do not open hatch cover		insurance claims

PAGE 2 OF 7

Activity Type (List all different types of activity)	Identify Hazards (List all potential and real hazards associated with each activity type	Identy Consequences List the consequence of each hazard and the possibility that this hazard will occure(High/ Med/Low)	Implications How sever are its implic ation if the hazard does not occur? (high, medium, low)	Identify the control measures That are inplace to reduce the risk of the hazard happening	For ensuring that measur	Identify Action if incident Occurred What action will you take if the hazard does occur?
.6 repair of vsl structure on deck	smoke inhalation sun exposure cutting of oxy/actylene hose possible broken welding cable falling from height falling object from above Crushing by shipping seas ondeck struck by moving hatch cover exosure to heat	short of breath(low) exhaustion(low) fire(Low) electricution(Low) body injury(Low) head injury(Low) injury. Death(Low) body injury(Low) hand redness(low)	medium	cover noze with mask use cover all w/ long sleeves set the hose properly connect cable tightly use safety harness use hard hat,stay awat from objectg above stay on leeward side do not move hatch cover use long leather gloves,wear cxiver all with long sleeves designate area for this tasks develop & follow safe practice for cutting,welding,burning	Chief Officer/Bosen	seek medical attention report to the office conduct safety meeting hospitalization insurance claims
.7 Painting hatch cover partially open	Falling from hatch cover chemical inhalation	injury(low) dizzines(low)	medium medium	Barricade the open space use safety harness use nose masks		seek meical attention report to the office insurance claims
2.Working enclosed space .1 cargfo hold	respiratory problem exhaustion/falling lack of oxygen possible flooding of ballast tank Fainting/ suffocation	loose of breath(Low) injury(Low) falling/ injury(Low) drowning(low) injury(low)	medium medium medium medium medium	breathing apparatus on standby establish communication use supply fan do not operate ballast put signage" crew working inside"	Chief Officer/Bosen	seek medical attention, & report to the office hospitalization insurance claims
.2 Ballast tank(DbT)	poor oxygen quality fire expulsion limited visibility noise chemical exposure	short of breath(low) injury(low) injury(low) injury to ears(low) suffocation(low)	medium low medium medium medium	installed portable air duct no hotr work to be carried out install lightning in the passage no working on top supply more air inside		seeK medical attention & report to the office hospitalization insurance claims
.3 cofferdam (eng room)	poor oxygen quality fire expulsion noise limited visibility	short of breath(low) injury(Low) injury to ears(low) injury/fall down(low)	medium medium medium medium	use of breathing apparatus hot work not to be carried out no working on top of tank installed lighting use signage"crew working isnide" usage of life lines avoid working alone develop safe working practice	Chief Officer/Bosen	seek medica;l attention & report to the office hospitalization insurance claims
.4 duct keel(eng room)	poor oxygen quality exhaustion fainting noise falling from hegiht slipping limited visibility	short of breath(Low) injuryLow) injuryLow) injury to ears(Low) injury(low) injury(low) Injury(Low)	medium medium medium medium medium medium medium medium	use of breathing apparatus install supply air standby first aid kit no working on top of the tank use safety harness keep the arera dry while working installed additional lightning use signage"crew working isnide" avoid working alone develop safe working practice		seek medica;l assistance & report to nthe office hospitalization insurance claims

PAGE 3 OF 7

	_	_			1	PAGE 3 OF 7
Activity Type	Identify Hazards	Identy	Implications	Identify the control	Person Responsible	Identify Action if
(List all different	(List all potential and real	Consequences	How sever are its implic	measures	For ensuring that measur	
types of activity)	hazards associated with	List the consequence	ation if the hazard does	That are inplace to reduce	are implemented	What action will you take if
	each activity type	of each hazard and the	not occur?	the risk of the hazard happening		the hazard does occur?
		possibility that this hazard	(high, medium, low)			
		will occure(High/ Med/Low)				
.5 void space(deck)	Falling from height	injury(Low)	medium	use of harness	Chief Officer/Bosen	seek medical assistance &
•	falling from ladder	injury (Low)	medium	use of harness		report to the office
	slipping / and falls	injury (Low)	medium	keep area dry when working		hospitalization
	noise	Injury to ears(Low)	medium	no nwork on top of void space		insurance claims
	limited visibility	head injury(Low)	medium	installed additional lightning		
		J. J. J.		use of signage:crew working side"		
				develop safe working practice		
3. Rope Handling during	1					
Arrival/Departure Port	l .	inium (laura)	4:	de not stand inside the block	Chief Office /D	
.1 Arrival / Departure	stricke by ropes	injury (low)	medium	do not stand inside the bight	Chief Officer/Bosen	seek medical attention &
Manuevers	caught by machine	injury(nLow)	medium	keep of the machine, exposed	Chief Officer/Bosen	report to thie office
	1			gear of the machine must be		hospitalization
				protected with guard		insurance claims
	falling from the side	drowning/injury(low)	medium	kee of the side of the vsl	Chief Officer/Bosen	
	slipping/tripping	injury(Low)	medium	Keep all ropes close to capstan	Chief Officer/Bosen	
				maintain good housekeeping		
				keep ropes in designated areas		
	Strike against object	Injury(Low)	medium	Maintain machinery in good cond	Chief Officer/Bosen	
				Indicate safe zone on deck		
				Cl.ear all obstruction any time		
	sun exposure	heat burns(Low)	medium	look for shaded area	Chief Officer/Bosen	
4.77.1.11. 0	exposure to weather(rain)	sickness(low)	medium	use working rain coat		
4. Hoisitng Operations	folling from baight	inium(I ov)	medium	use of harness	cc\zhief Officer/Bosen	seek medica:l attention &
.1 provisions crane, davit cranes, provisioning	falling from height	injury(Low)	medium		cc\zinei Officei/Boseii	,
cranes, provisioning	strike against object	injury(Low)		develop inspection program for		report to the office
	slipping/ falling	injury(Low)	medium	controls,cabled, hooks,guardrail		hospitalization
	swinging of load	damage to property(low)	Low	clearance		insurance claims
	falling down of load	injury(Low)	medium	don't stand under the load		
				adhere to safe work limit of the		
				hoists		
				post sign at hoist inidcatring :"only		
				qualified person		
	1			install guardrail from hoist or hoist		
				flatform to prevent persons from		
				falling inside ot in the water when		
				operating the hpoisrt.		
.2 preparation of gangway/	failling to the sea	possible downing(Low	medium	use of harness or safety belt	Chief Officer/Bosen	seek m,edical attention, &
accommodationm ladder,		injury (Low)	medium	use of harness & safdety belt		report to the office
(underway)	slipping/falling	injury (Low)	Low	wipe the slippery area		hospitalization
•	caught by hoisting wire	hand injury(Low)	Low	avoid running the motor		insurance claims
	crushed by ladder	body injury(Low)	medium	avoid running the motor		The Diality Challing
	oracioa of induct	injury(LOW)	incaram.	ensure that gangway is secured		
	1			ensure handrail and safety net		
				secured.		
	1			do not work alone, always tanden		
				ao not work alone, always tallucii	l	

PAGE 4 OF 7

Activity Type	Identify Hazards	Identy	Implications	Identify the control	Person Responsible	Identify Action if
List all different	(List all potential and real	Consequences	How sever are its implic	measures	For ensuring that measu	•
pes of activity)	hazards associated with	List the consequence	ation if the hazard does	That are inplace to reduce	are implemented	What action will you take if
• • • • • • • • • • • • • • • • • • • •	each activity type	of each hazard and the	not occur?	the risk of the hazard happening		the hazard does occur?
		possibility that this hazard	(high, medium, low)			
		will occure(High/ Med/Low)	, , ,			
preparation of pilot	falling to the water	drowning(low)	medium	use of safety harness	Chief Officer/Bosen	seek medical attention &
	falling from height	injury (Low)	medium	secured by safety belt		report to the office
ussist iudusi (under (u)	slipping/falling	injury (Low)	medium	wipe slippery area		hospitalizatiojn
	crushed by ladder	body injury(Low)	medium	check the condition of wire		insurance claims
		essy injury (20 m)		avoid operating the equipment		
				without confirmation		
				do not work alone, always tanden		
securing of gangway,	falling into the water	drowning(Low)	medium	use of safety harness	Chief Officer/Bosen	seek medical attemtion &
		1	medium	use of safety belt	Cinci Officei/Duscii	
accommodation(berth)	falling into the height	injury(Low)	medium	wipe out slippery area		report to the office hospitalization
	slipping crushed by hand rails	injury(Low) body injury(Low)	medium	avoid operating the equipment		insurance claims
	crushed by the accommodation	body injury(Low)	medium	without confirmation		misurance cianns
	crushed by the accommodation	body injury(Low)	medium	without confirmation		
				do not work alone, always tanden		
5 securing of pilot assist	falling into the sea	drowning(Low)	medium	use of safty harness	Chief Officer/Bosen	seek medica;l attention &
ladder(departure)	falling from height	injury(low)	medium	use of safety belt		report to the office
	slipping/ falling	injury(low)	medium	wipe out slippery area		hospitalization
	crushed by hand rails	body injury(low)	medium	avoid operating the equipment		insurance claims
	crushed by pilot assist ladder	injury(low)	low	do not work alone, always tanden		
5 operation of lifeboat	crushed by the lifeboat	injury(Low)	medium	do not stand uder the lifeboaT	Chief Officer/Bosen	seek medical attention n&
(Boat drill/ testing)	crushed by davit	injury(Low)	medium	keep away from davit		report to the office
	caught by davit hoisting wire	injury(ow)	medium	do not operate the equipment		hospitalization
	hit by davit hoisting wire	injury(Low)	medium	stay away from the wire		insurance claims
	fall from height	injury(low)	medium	use of safety harness		
	fall into the sea	possible downing(Low	medium	use of safety harness		
	slipping/falling	injury(Low)	medium	wipe out slippery area		
	sudden release of davit	injury(low)	medium	do not operate the emergeny lever		
				adhere to safe work limit of the		
				hoists		
				developed inspection program for		
				controls,cabled, hooks,guardrail		
operation of lifeboat	crushed by lifebaot	inmjury(Low)	medium	do not stand under the load	Chief Officer/Bosen	seek medical attention &
(fire drill/releasing)	crushed by lifeboat davit	injury(Low)	medium	keep oway from the davit area		report to the office
	fall into the sea	downing(Low)	medium	use of safety harness		hospitalization
	slipping/ falling	injury(Low)	medium	wiped out slippery area		insurance claims
	caught by releasing wire	injury(Low)	medium	stay away from the running wire		
	hit by manual lever (handle)	injury(Low)	medium	adhere to safe operation of the		
		J. J //		equipment		
				only competent personnel operate		
				the equipment		
				develop inspection program for		
				controls, cabled, hooks		

Activity Type (List all different types of activity)	Identify Hazards (List all potential and real hazards associated with each activity type	Identy Consequences List the consequence of each hazard and the	Implications How sever are its implication if the hazard does not occur?	Identify the control measures That are inplace to reduce the risk of the hazard happening	Person Responsible For ensuring that measu are implemented	PAGE 5 OF 7 Identify Action if incident Occurred What action will you take if the hazard does occur?
		possibility that this hazard will occure(High/ Med/Low)	(high, medium, low)			
.8 handling of fire hoze (Fire & explosion)	hit by pressurized hose hit by water pressure slipping/ fall fall from hatch cover fall from the stair	injury(Low) injury (Low) injury (Low) injury (Low) injury (Low)	medium medium medium medium	do not point the pressure fire hose do not point the pressure fire hose wiped out slippery area use safety harness install safety railing adhere to safe operation of the develop inspection program for the equipment post emergency contact number in highly visble area post appropriate fire extinguisher and ensxure accessible post "No smoking /No open flame" signed at the from the station develop an inspection program to ensure that all fire fighting appliances are availble I good condition	Chief Officer/Bosen	seek medical attentiopn & report to the office hospitalization insurance claims
9 provisioning (over gangway & ramp)	fall from gangway/ ramp and end up between ship side and dockside	prossible drawning(low injury(low)	medium medium	ensure that gangway/ramp is fastened securely onboard and on dock. ensure that nhandfrail and safety nets had been rigged. line with life bouy had been rigged where the lifebouy floats in the water underneath the gangway. inflatable lifejact should be used.	Chief Officer/Bosen	seek medical attention & reporet to the office. hospitalization insurance claims
5. Bunkering Operation .1 Bunkering operation	oil spillage / water pollution chemical inhalation skin irritation	water pollution(med) dizziness(Low) itching(Low)	medium low low	secure the oil containment box post environmental emergency contact number post "No smoking /No open flame" sign at the refilling station.Designate areas for the tasks provide spill kit on decki fire extinguisher on standby and sign at the refilling station.Designate areas for the tasks provide spill kit on decki fire extinguisher on standby and ensure easily accxessible. provide spill kit on deck	Chief Officer/Bosen	seek medical attention & report to the office hospitalization insurance claims

Activity Type	Identify Hazards	Identy	Implications	Identify the control	Person Responsible	Identify Action if
List all different	(List all potential and real	Consequences	How sever are its implic	measures	_	incident Occurred
ypes of activity)	hazards associated with	List the consequence	ation if the hazard does	That are inplace to reduce	_	What action will you take if
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	each activity type	of each hazard and the	not occur?	the risk of the hazard happening	-	the hazard does occur?
	January sypt	possibility that this hazard	(high, medium, low)			
		will occure(High/ Med/Low)	(ingil, incoloni, io ii)			
24	F'	demonstrate (M. I)	and the second		Chief Officer/Bosen	1 1' 1
2 transfer of waste oil	Fire	damage to property(Med)	medium	develop proper procedures	Chief Officer/Bosen	seek medical attention &
	Spillage	water pollution(Med)	medium	keep the MSDS on site		repoert to the office
				ensure that the contractor removing		hospitalization
				the waste oil have the appropriate		insurance claims
				training.(transport of D/G).		
				conduct inspection of the contractor		
				to ensure proper procedures are being		
				adhered to.		
				post "No Ignition Source" at the waste		
				tank		
				keep all combustibyle materials a safe		
				distance away from the waste oil tank		
Maintenance (eng.dept	falling object from above	injury(Low)	medium	keep overhead clear object, use hard	Chief Officer/Bosen	seek medical attention &
overhauling of main	slipping/ falling	Injury(Low)	medium	hat.		report to the office
engine	penned down by piston	Injury or death(low)	medium	used of safety helmit and wear proper		hoispitalization
	cutting of hositing wire during	injury(low)	medium	attire.		insurance claims
	hoisting					
	oil contamination with skin body	skin irritation	medium			
2 welding work/repair	damage to eyes	injury (Low)	medium	Ensure welder wear appropriate attire	Chief Officer/Bosen	seek attendion and report
(inside engine room)	Electrecution	injury/shock(Low)	medium	develop and follow safe working		report to the office
	fire	Injury/loss of property	medium	practice for wel;ding/cutting and		hospitalizationh
	explosion	fire(Low)	medium	burning.		insurance claims
	fumes	falling down	medium	ensure fire extinguisher is easily		
	gases	suffocation(low)	medium	accessible		
				designate specific area for these tasks		
				do not work near the fammable area		
				make sure that the area is safe, and clean		
3 cleaning of m/e sump	limited visibility	head injury(Low)	medium	install fire proof lightning	Chief Officer/Bosen	seek medical attention and
tank	oil contamination	skin irritation(Med)	medium	make sure that the person working in		report to the office
	slipping/ falls	head injury(Low)	low	the sump tank wear proper attire.		hospitalization
	gas poisoning	fainting/injury(Low)	medium	clean and wipe out oil along the path.		insurance claims
				ventlate the area, make sure contineous		
				supply of air is maintained.		
				develop and adapt safe working practice		
				standby at the ewntrance SCBA equipment		
				always working with tanden, avoid working		
				alone.		

Activity Type	Identify Hazards	Identy	Implications	Identify the control	Person Responsible	PAGE / OF :
(List all different	(List all potential and real	Consequences	How sever are its implic	measures	For ensuring that measu	•
types of activity)	hazards associated with	List the consequence	ation if the hazard does	That are inplace to reduce	are implemented	What action will you take if
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	each activity type	of each hazard and the	not occur?	the risk of the hazard happening		the hazard does occur?
		possibility that this hazard	(high, medium, low)			
		will occure(High/ Med/Low)				
.4. rigging of spare part (crane operation)	possible cutting of wire rope hit by falling onject	injury(low) injury(low)	medium medium	develop and adapt safe working area ensure that all pepersonnel area wearing hard hat.	Chief Officer/Bosen	seek medical attention and to the office. hospitalization
				do not stay under the load.		insurance claims
.5 overhauling/repair of generator engine.	hit by falling object slipping/ falling fall from height oil contamination dyhydration fire	injury (low) head injury(Low) injury (low) skin irritation(lowe) fainting/injury(Low) idamage to property(Low)	medium medium medium medium medium medium	stay away form the load use hard hat use safety harness or safety belt install railing or guard rails on the work site. personnel working on the generator shall use appropriote working clothes. develop and adapty safe working area avoid flammable materials	Chief Officer/Bosen	seek medical attention & report to the office insurance claims
7. Cargo operation (loading/unloading)	falling object from above slipping/ falls cutting of wire ropes falling from height crushed by cargo load	injury(Low) injury(Low) injury(Low) injury(Low) injury(Low)	medium medium medium medium medium	stay away under the load wipe out slippery area check of wire rope before using used of safety helmit and wear proper stay away from cargo	Chief Officer/Bosen	seek medical attention & report to the office hospitalization
Navigation Operation inrestricted area	grounding bottom touch	damage to property and injury(Med)	high	make sure thast the officer on duty is taking care of his watchkeeping. use of anti collision device"ARPA and Radar". post additional look out if required. do not leave the bridge with reliever use appropriote jusdgement. report the no go area avoid swallow water make sure that the gyro is giving the rifhrt direction. develope accurate voyage planning. use updated chartrs. Update the charts to notice of mariners consult admiralty saiiling direction and other aid to navigation information.	Chief Officer/Bosen	seek modecal attention & repoert to the office hospitalization insurance claims
2. Recovery of persons from the water	capsising man overboard abandonship	death death death	high high high	Put as many layers of clothes as much as possible, Avoid entering the as long as possible. Do not forget to waer your lifevest. Float your back with minimum feet movement Stay Calm, Float as still as possible, legs together, elbows closed to your side, and arm folded accros the chest. Keep your skin from the water as much as possible.	Master	sent SOS report to authorities hospitalization insurance claims