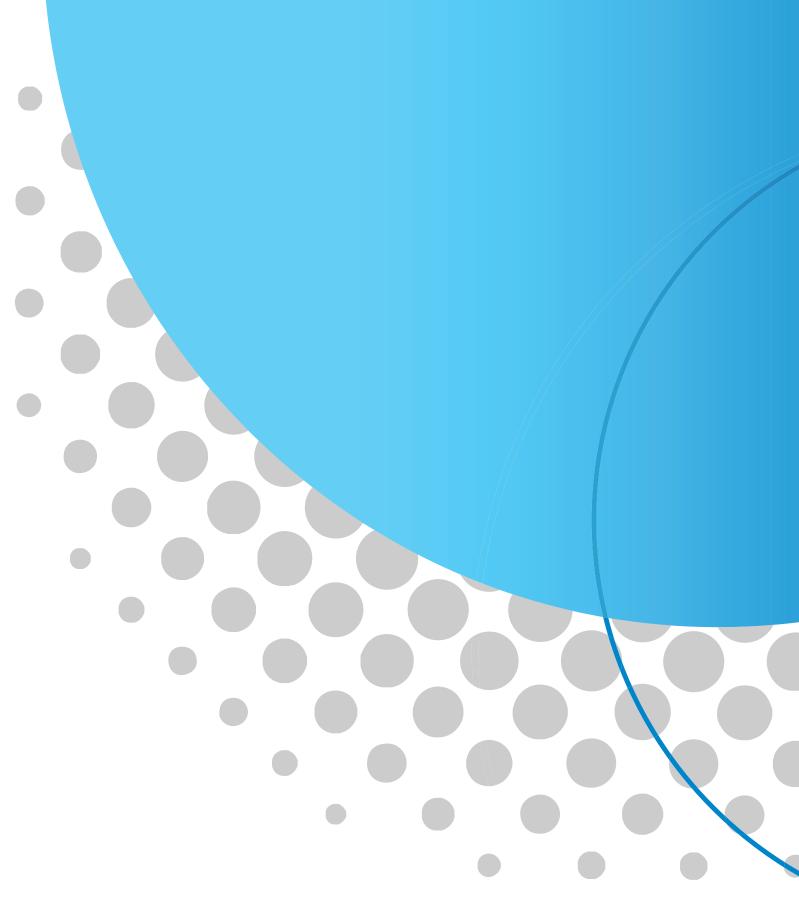
MariApps Marine Solutions eRBooks elogs







Compliance with MARPOL & IMO

MARPOL's requirements

The International Convention for the Prevention of Pollution from Ships (MARPOL) is the main international convention governing prevention of pollution of the marine environment by ships from operational or accidental causes.

IMO requirements

	Complies with RESOLUTION MEPC.312(74)		Easy b
	Secured multi-step password protection	÷	Expor
	Automatic validation of entries	÷	Easily
÷	History achieved and without data storage limitations	÷	Contir Time z
	E- Signature for authorization	4	in loca
÷	Feature to add attachments	÷	Optio
÷	Facility to upload flag circulars and communicate to the vessel	÷	Multi

- back up, restore and audit options
- ort to compatible data formats
- y trackable audit log facility
- inuous software updates and support
- zone selection hence entries remain al time
- on to make entries across Dateline
- i level back up and restore facilities





smartPAL's Electronic Record Books (eRBooks)

eRBooks software application to replace the traditional paper record books

- Oil Record Book Part 1 (ORB Part 1)
- Oil Record Book Part 2 (ORB Part 2)
- Emission Record Book (Annex VI)
- Cargo Record Book 1 (Noxious liquid substances in bulk)
- Ballast Water Record Book
- Garbage Record Book Part 1 (GRB Part 1)
- Garbage Record Book Part 2 (GRB Part 2)
- Biofouling Record Book
- MARPOL Sealogs

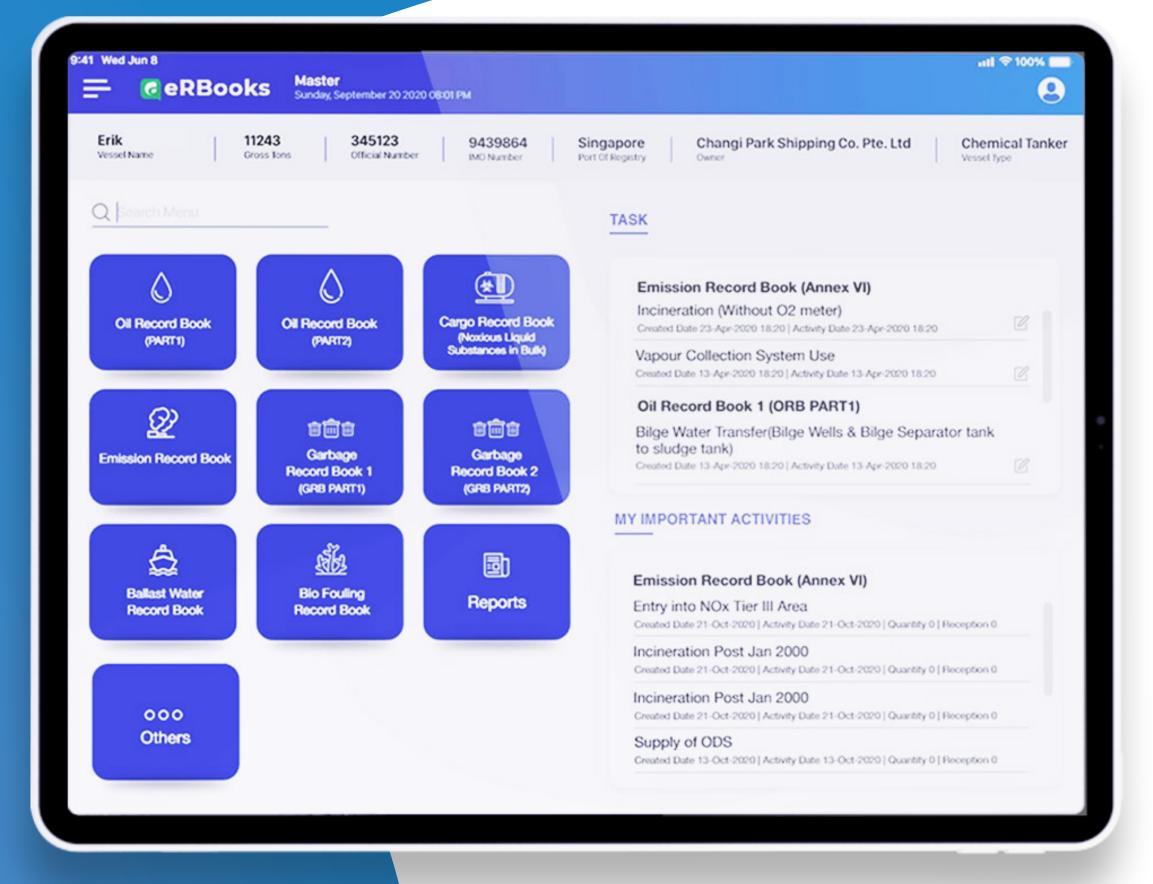
E I PALIO Logged in as Chie Tuesday, February	ef Engineer ii ry 02 2021 03:37 PM		Se	arch Crew, Requisition, Equipmen	nt and more Q	0 0
Oil Record Book 1 (ORB PART 1)				Last Update To OR	B: 28-Jan-2021 15:03 UTC/28-Jan-20	21 17:03 LT 🌏
Accident	Activities	Bilge Water Transfer (Bilge wells)			Date Line Crossed Preview	Save SS
Ballast/Cleaning of Fuel Oil Tanks	Search menu 🗙 📿	Source *				
Bilge Water	Bilge Water 3.3 tank to 3.1 Tank - Manual Transfer	Bilge Well (Aft)				•
Bunkering/Debunkering	Bilge Water 3.3 tank to 3.1 Tank (other than manual)	Destination * Bilge Holding Tank				· •
Equipment	Bilge Water from Cargo Holds to E/R Tanks			-		-
Incinerate/Burn	Bilge Water Transfer (Bilge wells)	Start Date & Time * 02-Feb-2021 15:34	II •	+05:30		-
Initial Entry	Bilge Water Transfer	·	·	Time Zone		
Inventory	wige motel monster	Stop Date & Time * 02-Feb-2021 15:34	0	+05:30		-
Miscellaneous		Volume Transferred From Bilge Well (Aft) (Source) (m ⁹) *				
Missed/Correction Entry		10.000				
Sludge /Oily Water Residues		Volume Retained in Bilge Holding Tank (Destination) (m ⁹) *				
Soot		16.000			ROB: 6.000 m³/Cap: 100.000	m*



eRBooks Available on Tablets

eRBooks can also be accessed using Android and iOS- based portable tablet device











Advantages of smartPAL's eRBooks

eRBooks

- Automated calculations
 & validations
- User-friendly interface
- Web-based
- Record keeping is efficient

- Compliance with IMO
 regulations
- Maintenance & support plan
- Mandatory software updates that ensure compliance with regulations

- Recordkeeping by authorized personnel
- Secured access (Multi layer security)
- E-Signature facility
- Encrypted data with AES-256



- Overview of key operations on one display
- Automated analytical reports
- Increase transparency, reduce human error





Intuitive Data Entry Scree

Oil Record Book 1 (ORB PART 1) Accident Activities Bilge Water Overboard ×Q Search menu Ballast/Cleaning of Fuel Oil Source* Tanks Bilge Water Overboard through 15 Select any Billge Water Start Date & Time * Bilge Water to Shore Reception Bunkering/Debunkering 22-Sep-2020 13:42 **Disposal Sludge Ashore** Equipment Start Position Lat * Disposal of Sludge Drums Ashore Incinerate/Burn Start Position Long * Initial Entry Inventory Stop Date & Time * Miscellaneous 22-Sep-2020 13:42 Missed/Correction Entry Stop Position Lat * Sludge /Oily Water Residues Stop Position Long * Soot To Sea/Shore Reception

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Garbage Record Book 1 (GRB PART 1)

Discharge	Activit
Exceptional Discharge	Searc
Incineration	Discha Specia
Missed Activity	Discha (Outsid
	Discha (Outsid
	Discha
	Discha



Activities Ballast Water Management & **Ballasting of Tanks** ities Other Operations Search menu NQ. Discharge to Destination* ×Q Ballasting rch menu **Ballasting of Tanks** Select Any Start Date & Time * Deballasting Start Date & Time * arge to Sea-Food Waste (In 22-Sep-2020 11:08 Accident al Area) 22-5ep-202011110 Start Position Latitud Port Or Latitude Longitude * rge to Sea-Food waste Special Area) Start Position Longitu arge to Sea-Animal Carcasses ide Special Area) Start Latitude Stop Date Time * arged to Other Ship/ Barge 22-Sep-2020 11:08 Start Longitude arged to Shore Stop Position Latitud Stop Latitude Stop Position Longitu Stop Longitude Category & Code • 🔮 Port* 💿 In 🔿 Outside B - Food waste Remarks* B - Food waste

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Ballast Water Record Book

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Print Formats Matching with IMO Requirement Flow

Name of Ship IMO Number	: Yuan : : 9532599		Official Number : XXXX
Date	Code	Item	Record of operations/Signature of officer in charge
06-5ep-2020	6	22	06-Sep-2020 22:13Hrs
		23	Place or Position: Kochi
		24	Type: 1 and Quantity of oily residue : 1 m ³
		25	Circumstances of the discharge: test MARKED INVALID BY 2ND
			Circumstances of the discharge: test MARKED INVALLE Signature InCharge: 2nd Engineer, 06-Sep-2020 23:54
			Soldevilla Jr. Tushar Pramod 2020 23:54
			Signature Chief Engg:
			*
06-Sep-2020	G	22	06-Sep-2020 22:14Hrs
		23	Place or Position: Koh Samui
		24	Type: 1 and Quantity of oily residue : 1 m ^a
		25	Circumstances of the discharge: test1
			Signature InCharge: 2nd Engineer , 06-Sep-2020 22:44
			Soldevilla Jr. Tushar Pramod

GARBAGE RECORD BOOK RECORD OF GARBAGE DISCHARGES PART I - (All ships) For all garbage other than cargo residues as defined in regulation 1.2 definitions Official Number IMO Number Name of Shin 9532599 Yua XXXXXX Garbage categories A-Plastic B-Food waste C-Domestic wastes(e.g. paper products, rags, glass, metal, bottles, crockery, etc) D-Cooking oil E-Incinerator ashes F-Operational wastes G-Animal carcasses H-Fishing gear I-Electronic waste Operational discharges under MARPOL Annex V regulations 4 (Discharge of garbage outside special areas), 5 (Special requirements for discharge garbage from fixed or floating platforms) or 6 (Discharge of garbage within special areas) or chapter 5 of part II-A of the Polar Code 06-SEP-Estimated amount discharged Position of the ship Estimated Remark: (e.g. start/stop (latitude/longitude) or port To time and position of Certification amount Date/Time if discharged ashore or Category reception incinerated incineration; general Signature Into Sea name of the ship if facilities or remarks) (m3) (m3) discharged to another ship to another ship (m3) Lat:1°2' N, Long:3°4' E 15-Jun-2020 14:08 E 1.000 m³ nchamp Master 22-Jun-2020 16 1.000 m³ 18-Jun-2020 16:49 Lat:1°2' N, Long:3°4' E A Chief Officer 18-Jun-2020 16:



Type Approvals







Flag State Approvals



Marshall Islands Certificate Received



Finland **Certificate Received**



Liberia



Cyprus Certificate Received



Japan **Certificate Pending**



Panama



Bermuda

Pending Red Ensign Group decision on process expected



Cayman Islands Pending Red Ensign Group decision on process expected soon



Germany



India Application process prepared



Indonesia Ongoing disscussion



Isle of Man Approval upon



Mexico Ongoing disscussion



Portugal

To approch via class SMCs need to do for each ship



Spain

Certificate Received



Hong Kong Certificate Received



Singapore **Certificate Received**

Certificate Pending



Bahamas Approval upon shipowner's request



Barbados Approval upon shipowner's request

Ongoing disscussion



Gibraltar Ongoing disscussion



Greece Ongoing disscussion

shipowner's request



Malaysia Ongoing disscussion



Malta Approval upon shipowner's request

Ongoing disscussion



Thailand Ongoing disscussion



UK Application process prepared





THANK YOU

To know more about eRBooks or other digital solutions from MariApps, please visit **www.mariapps.com** or contact Khalil Rehman Aziz mail to: **khalilrehman.aziz@mariapps.com**

