ε-ORB
Electronic Oil Record Book

The First Electronic Oil Record Book Approved by a Major Flag State

LIBERIAN REGISTRY

Prevention at Sea

Challenges of Using Paper Oil Record Books

MARPOL, the ISM code and Port State Control have become stricter and emphasize recording every event onboard. As a result, this affects crew efficiency, adds administrative work, and calls for a more effective and efficient system.

Challenges

- Inaccurate recordkeeping of operations
- Erroneous entries
- Failure to properly maintain adequate records onboard
- False statements which cannot be verified
- Time consuming and inefficient process
- Heavy paperwork and administrative burden

Consequences of Deficiencies in Oil Record Books

- Criminal and civil action by the U.S. Department of Justice against shipowners and crew
- Costly and lengthy court battles
- Fines for vessel managers and owners
- Career damage and seafarer criminalization
- Vessel detentions
- Potential pollution through illegal actions onboard
- Adverse effect on fleet trading abilities
- Damage to ship operator reputation

Solution: Electronic Oil Record Book (ε-ORB)

An electronic oil record book is a software application designed to replace the traditional paper oil record books (ORB) (Part I and Part II) and facilitate accurate ORB entries into an efficient electronic format, while complying with international conventions and flag State requirements.

The ε-ORB is designed in accordance with the MARPOL Annex I regulations 17 & 36 as well as IMO Circ 736/Rev 2.

The software is tested in order to establish

transparency, credibility & traceability

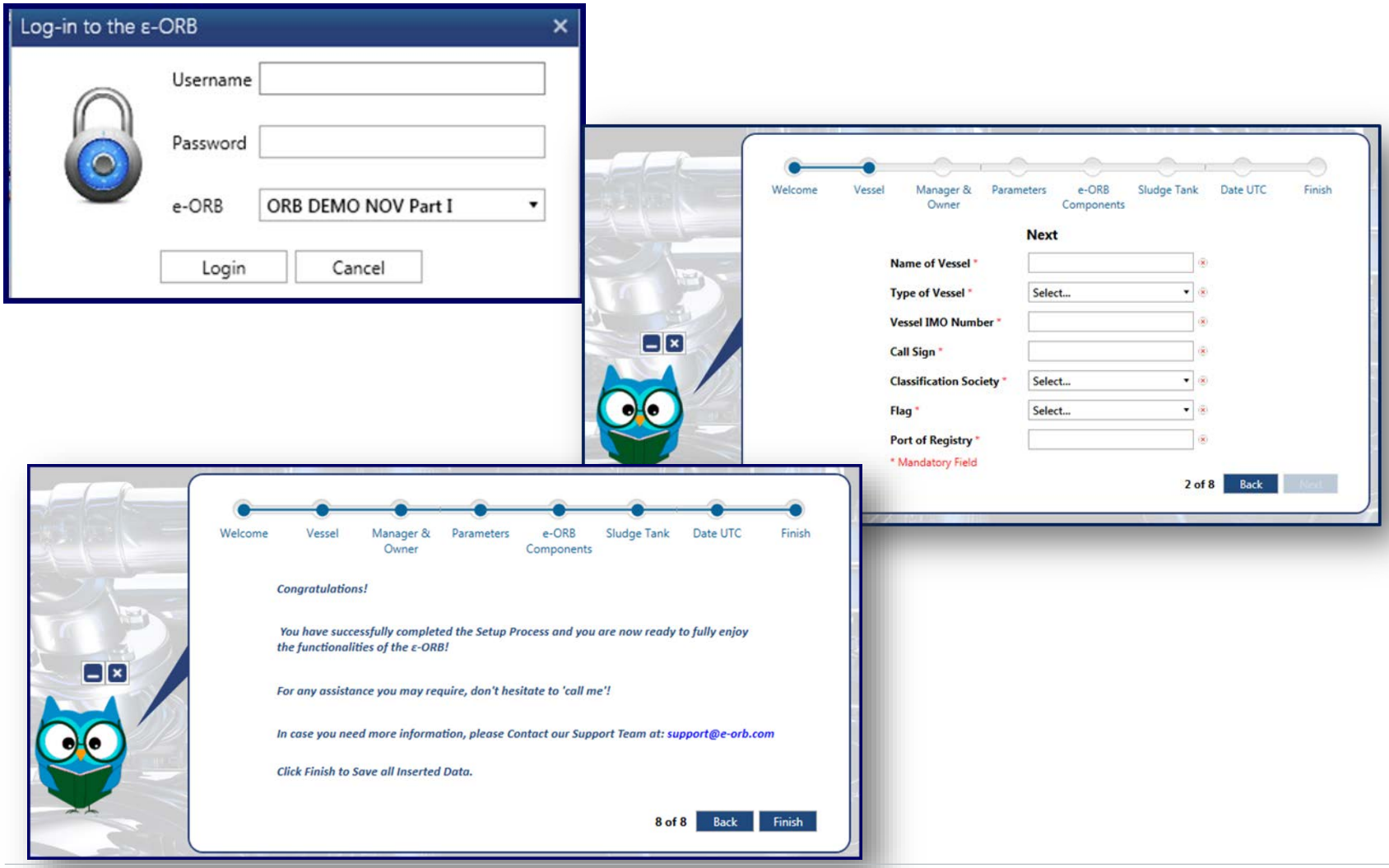
Advantages of ε-ORB

Features	Advantages	Benefits
✓ Automated calculations	✓ Prevent vague entries and mistakes	✓ Ease of mind pulling into ports knowing your vessel maintains accurate information ✓ Prevent detentions, avoid delays at ports ✓ Prevent law suits and criminal charges
✓ User friendly software	✓ Recordkeeping is efficient and effortless ✓ Paperless solution assists seafarers in their duties	✓ Save man hours onboard and saving on overtime costs ✓ No chance of having oil record books go missing onboard
✓ Secured access	✓ Ensured transparency and accountability	✓ Prevents unauthorized access or making copies without permission
✓ Unique e-signature required	✓ Recordkeeping is only performed by authorized personnel ✓ Ensure traceability of operations	✓ Peace of mind that only authorized officers are recording oil record book entries onboard
✓ Maintenance and support plan available	✓ Mandatory software updates provided in a timely manner and ensure compliance with regulations ✓ IT technical support to user in less than 24 hours	✓ Always have the Liberian Registry and Prevention at Sea in your corner to step in at any time should an issue arise onboard regarding the software

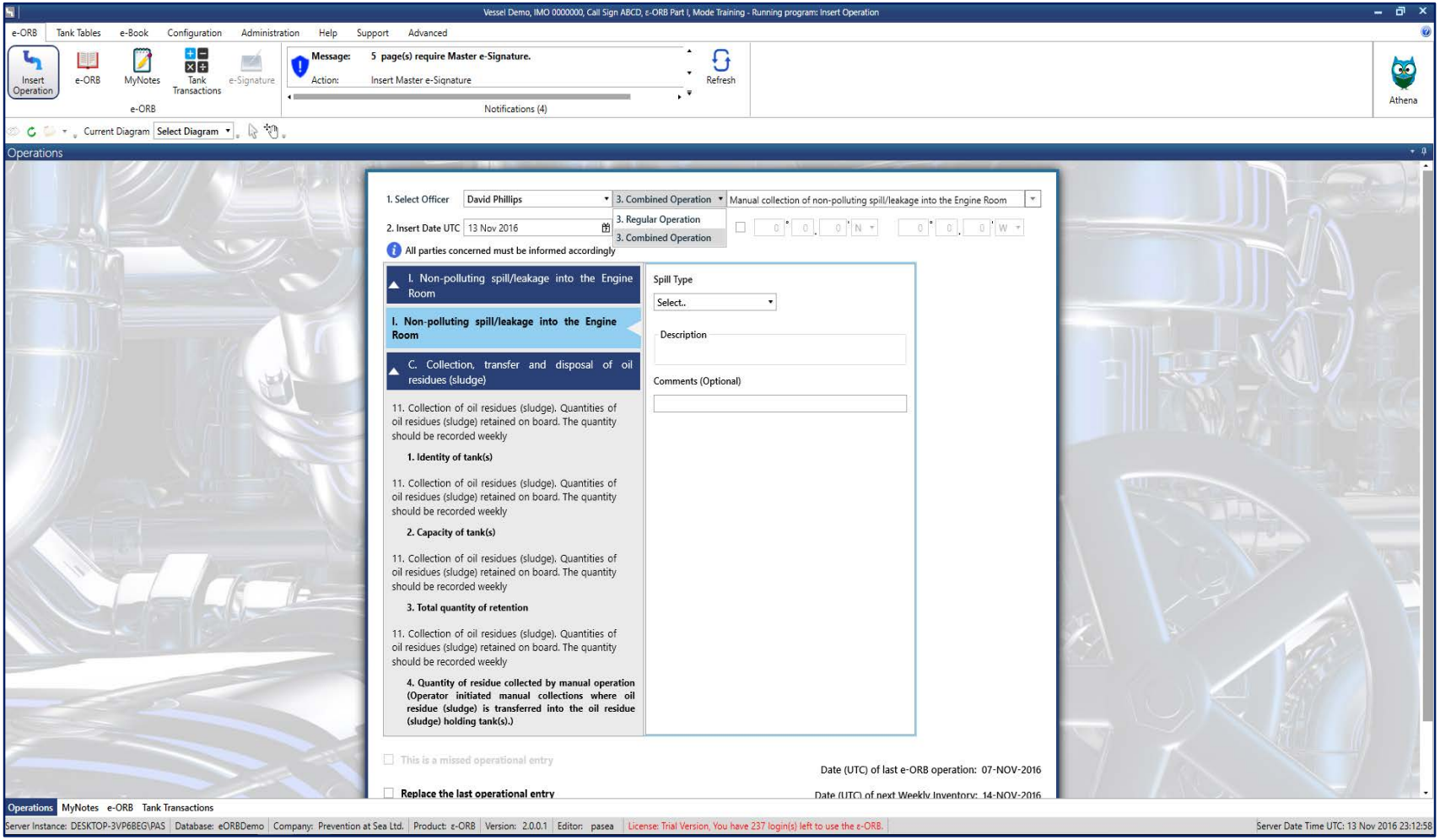
Advantages of ε-ORB Con't

Features	Advantages	Benefits
✓ Compliance with IMO regulations and requirements	✓ Software designed using MARPOL and the MEPC 66/7, as guidance, dated 20 December 2013 "Report of the correspondence group on the use of electronic record books under MARPOL"	✓ Software meets flag State and international regulatory requirements
✓ A 'piping diagram' module	✓ User is assisted in designing the ship's piping diagram, and recording operational entries by simply dragging/dropping icons	✓ Ship owner is confident in the authenticity of a vessel specific piping diagram ✓ Easy and fast to make ORB entries without errors
✓ A 'sounding tables' module	✓ User is assisted in the rapid calculation of the current content inside a tank by simply inserting the height measurement, trim and list	✓ Save man hours onboard
✓ ε-ORB cloud portal	✓ Ship owners are able to access all their vessels' ε-ORBs from ashore, run reports, search and benchmark data across their fleet	✓ Save time during internal audits by pre-checking logbooks ✓ Compare one vessel's activities against others in your fleet
✓ Backup system	✓ It is easy to archive and retrieve past data ✓ Data security	✓ Convenient access to ε-ORB data ashore and at sea upon need

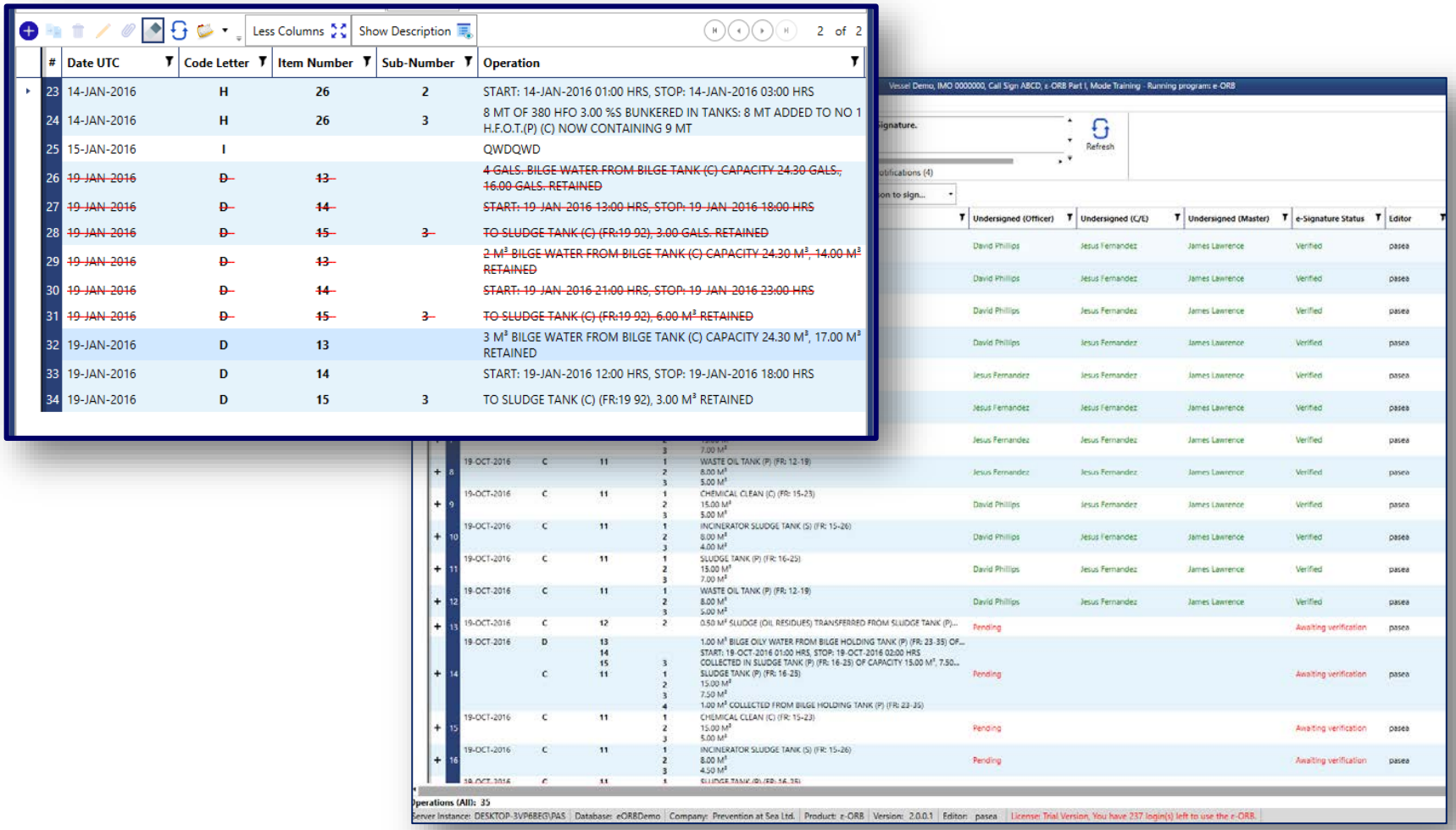
Configuring the software



Inserting an Operation



ε-ORB Tab

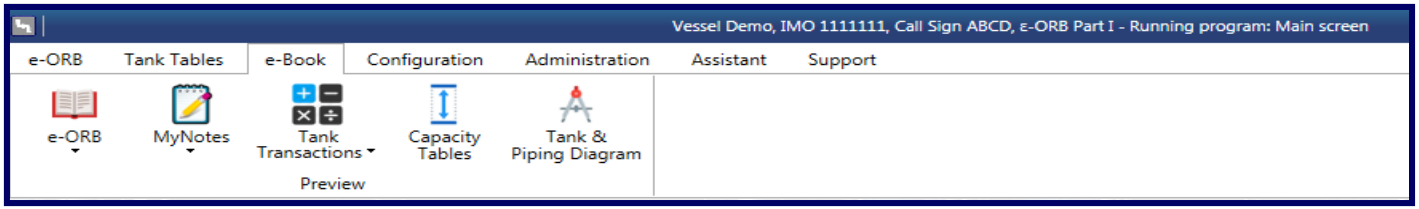


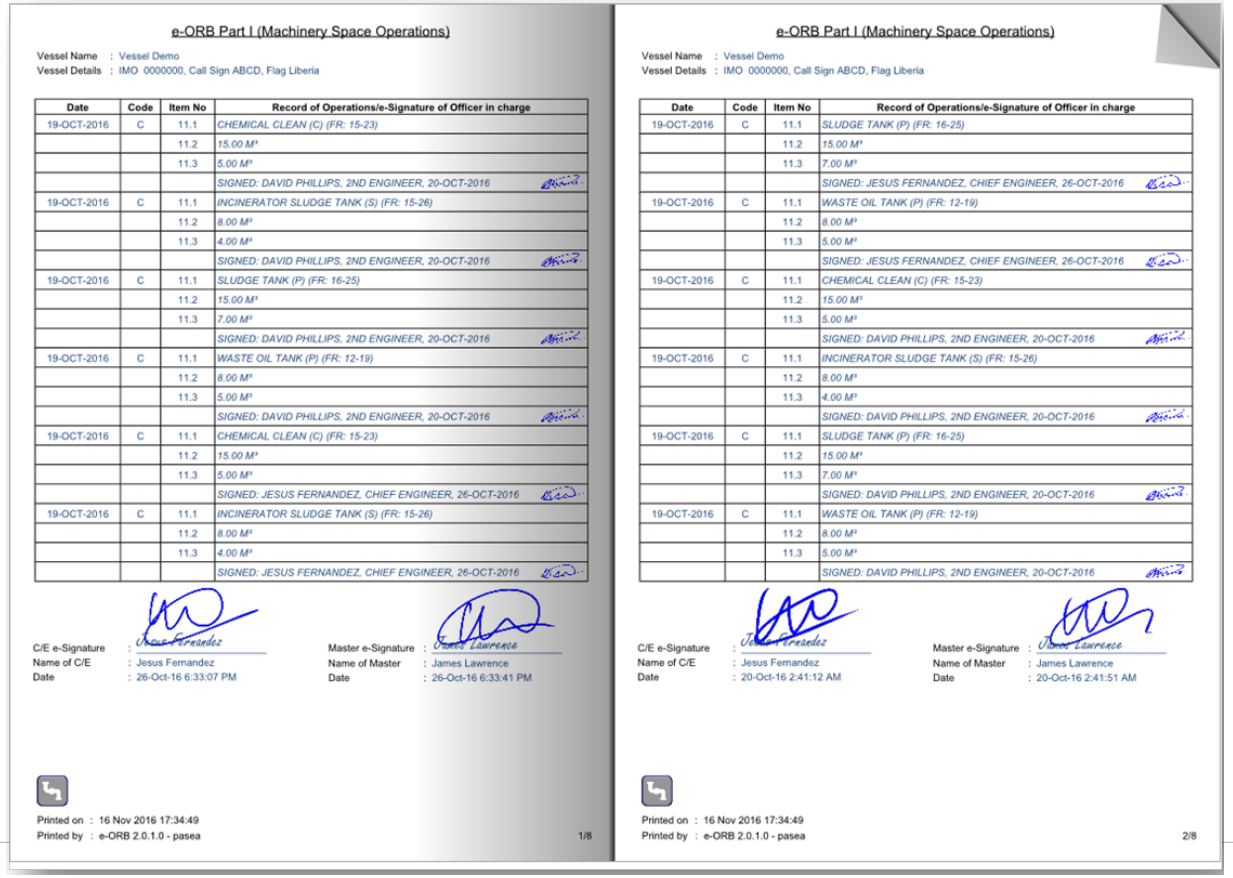
Less Columns | Show Description | 2 of 2

#	Date UTC	Code Letter	Item Number	Sub-Number	Operation
23	14-JAN-2016	H	26	2	START: 14-JAN-2016 01:00 HRS, STOP: 14-JAN-2016 03:00 HRS
24	14-JAN-2016	H	26	3	8 MT OF 380 HFO 3.00 %S BUNKERED IN TANKS: 8 MT ADDED TO NO 1 H.F.O.T.(P) (C) NOW CONTAINING 9 MT
25	15-JAN-2016	I			QWDQWD
26	~~19-JAN-2016~~	~~D~~	~~13~~		~~4 GALS. BILGE WATER FROM BILGE TANK (C) CAPACITY 24.30 GALS., 16.00 GALS. RETAINED~~
27	~~19-JAN-2016~~	~~D~~	~~14~~		~~START: 19-JAN-2016 13:00 HRS, STOP: 19-JAN-2016 18:00 HRS~~
28	~~19-JAN-2016~~	~~D~~	~~15~~	~~3~~	~~TO SLUDGE TANK (C) (FR:19 92), 3.00 GALS. RETAINED~~
29	~~19-JAN-2016~~	~~D~~	~~13~~		~~2 M³ BILGE WATER FROM BILGE TANK (C) CAPACITY 24.30 M³, 14.00 M³ RETAINED~~
30	~~19-JAN-2016~~	~~D~~	~~14~~		~~START: 19-JAN-2016 21:00 HRS, STOP: 19-JAN-2016 23:00 HRS~~
31	~~19-JAN-2016~~	~~D~~	~~15~~	~~3~~	~~TO SLUDGE TANK (C) (FR:19 92), 6.00 M³ RETAINED~~
32	19-JAN-2016	D	13		3 M³ BILGE WATER FROM BILGE TANK (C) CAPACITY 24.30 M³, 17.00 M³ RETAINED
33	19-JAN-2016	D	14		START: 19-JAN-2016 12:00 HRS, STOP: 19-JAN-2016 18:00 HRS
34	19-JAN-2016	D	15	3	TO SLUDGE TANK (C) (FR:19 92), 3.00 M³ RETAINED

LIBERIAN REGISTRY

ε-Book Tab





e-ORB Part I (Machinery Space Operations)

Vessel Name : Vessel Demo
Vessel Details : IMO 0000000, Call Sign ABCD, Flag Liberia

Date	Code	Item No	Record of Operations/e-Signature of Officer in charge
19-OCT-2016	C	11.1	CHEMICAL CLEAN (C) (FR: 15-23)
		11.2	15.00 M³
		11.3	5.00 M³
			SIGNED: DAVID PHILLIPS, 2ND ENGINEER, 20-OCT-2016
19-OCT-2016	C	11.1	INCINERATOR SLUDGE TANK (S) (FR: 15-26)
		11.2	8.00 M³
		11.3	4.00 M³
			SIGNED: DAVID PHILLIPS, 2ND ENGINEER, 20-OCT-2016
19-OCT-2016	C	11.1	SLUDGE TANK (P) (FR: 16-25)
		11.2	15.00 M³
		11.3	7.00 M³
			SIGNED: DAVID PHILLIPS, 2ND ENGINEER, 20-OCT-2016
19-OCT-2016	C	11.1	WASTE OIL TANK (P) (FR: 12-19)
		11.2	8.00 M³
		11.3	5.00 M³
			SIGNED: DAVID PHILLIPS, 2ND ENGINEER, 20-OCT-2016
19-OCT-2016	C	11.1	CHEMICAL CLEAN (C) (FR: 15-23)
		11.2	15.00 M³
		11.3	5.00 M³
			SIGNED: JESUS FERNANDEZ, CHIEF ENGINEER, 26-OCT-2016
19-OCT-2016	C	11.1	INCINERATOR SLUDGE TANK (S) (FR: 15-26)
		11.2	8.00 M³
		11.3	4.00 M³
			SIGNED: JESUS FERNANDEZ, CHIEF ENGINEER, 26-OCT-2016

C/E e-Signature : Jesus Fernandez
Name of C/E : Jesus Fernandez
Date : 26-Oct-16 6:33:07 PM

Master e-Signature : James Lawrence
Name of Master : James Lawrence
Date : 26-Oct-16 6:33:41 PM

Printed on : 16 Nov 2016 17:34:49
Printed by : e-ORB 2.0.1.0 - pasea

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e-ORB Part I (Machinery Space Operations)

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19-OCT-2016	C	11.1	WASTE OIL TANK (P) (FR: 12-19)
		11.2	8.00 M³
		11.3	5.00 M³
			SIGNED: DAVID PHILLIPS, 2ND ENGINEER, 20-OCT-2016

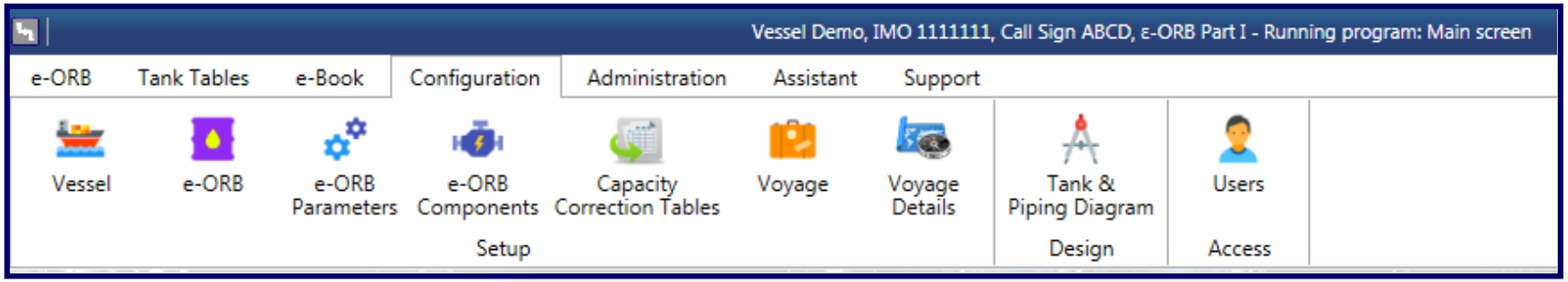
C/E e-Signature : Jesus Fernandez
Name of C/E : Jesus Fernandez
Date : 20-Oct-16 2:41:12 AM

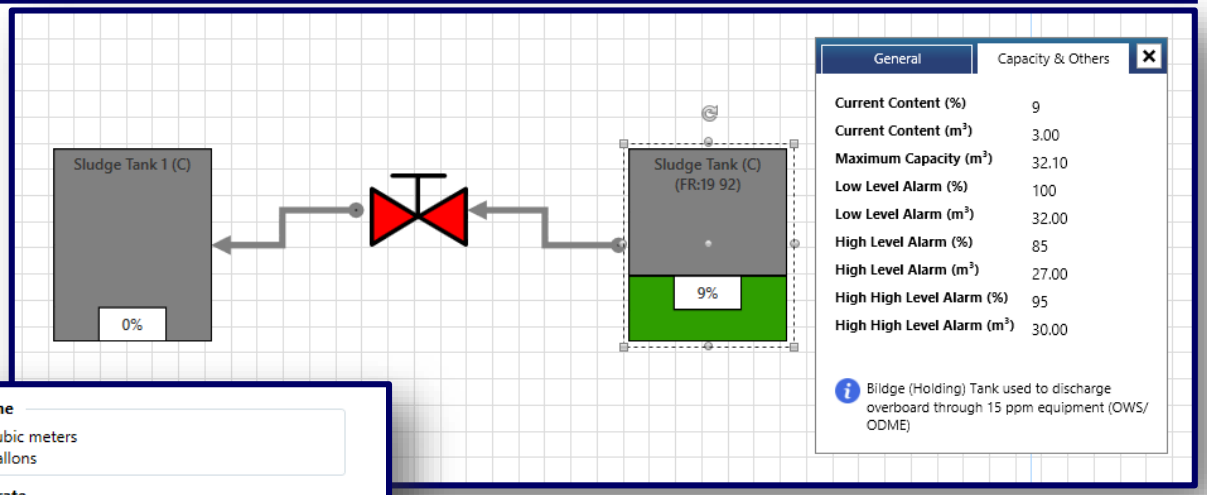
Master e-Signature : James Lawrence
Name of Master : James Lawrence
Date : 20-Oct-16 2:41:51 AM

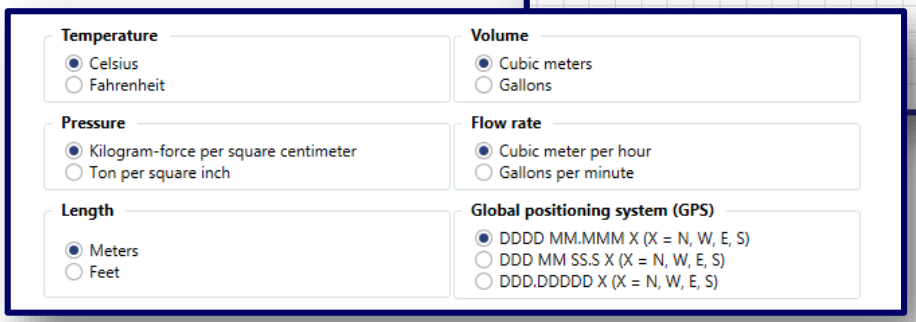
Printed on : 16 Nov 2016 17:34:49
Printed by : e-ORB 2.0.1.0 - pasea

2/8

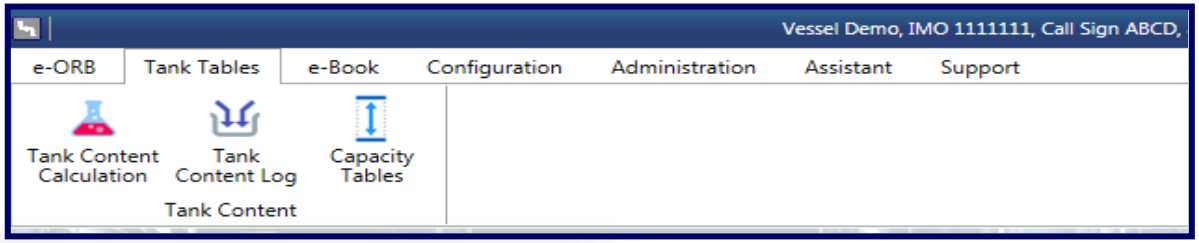
Configuration Tab

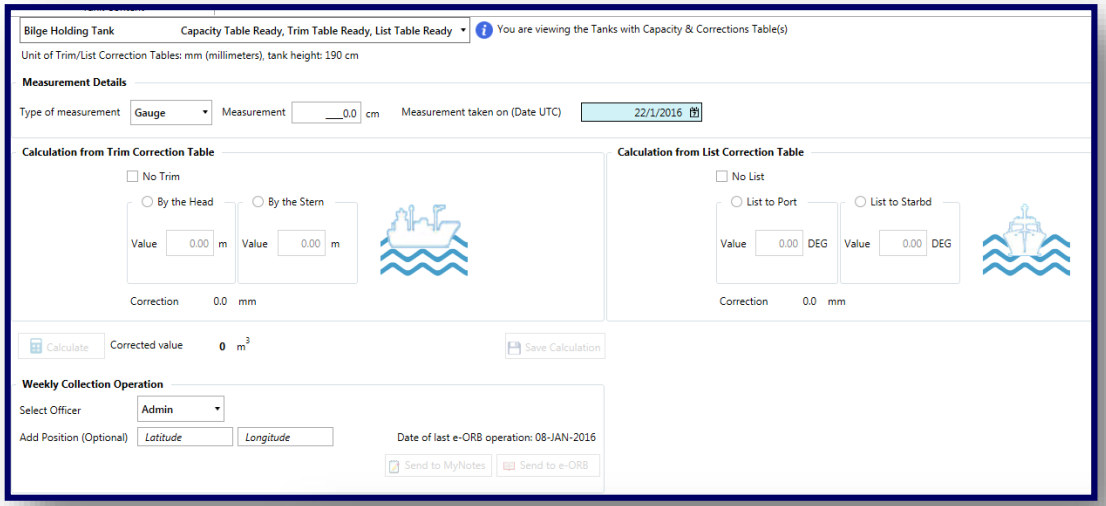


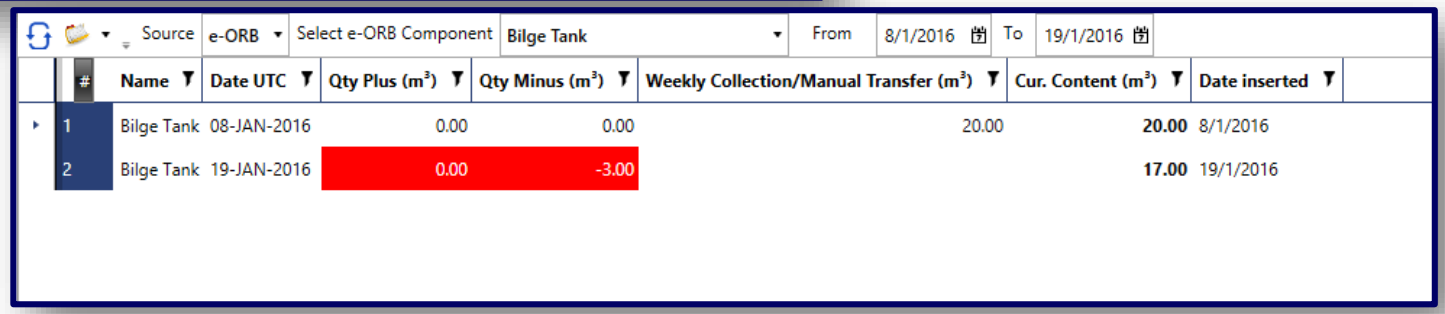




Tank Tables Tab



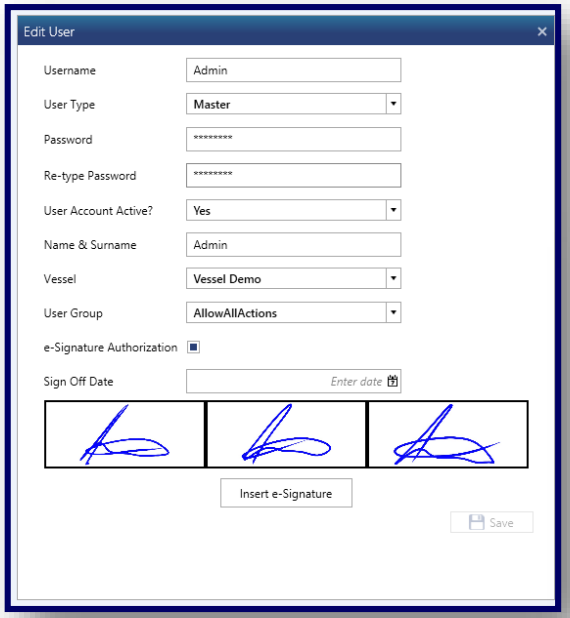




#	Name	Date UTC	Qty Plus (m³)	Qty Minus (m³)	Weekly Collection/Manual Transfer (m³)	Cur. Content (m³)	Date inserted
1	Bilge Tank	08-JAN-2016	0.00	0.00	20.00	**20.00**	8/1/2016
2	Bilge Tank	19-JAN-2016	0.00	-3.00		**17.00**	19/1/2016

ε-Signature

The e-Signature pad provides extra security



Minimum Requirements for the Software Installation

- Minimum Ram 2 GB. For remote stations on board minimum ram 1 GB
- Recommended screen: 15”
- Resolution: 1280 x 720
- Windows platform: Minimum Windows XP Service Pack 3
- Storage Size: 256 MB
- CPU 800 MHz

Industry Associations & Governmental Organizations

The Liberian Registry and P@S has met with:

- Intertanko/Intercargo (June 2016)
- USCG (September 2016, Jan. 2017, May 2017)
- IMO (October 2016)
- EMSA (October 2016)
- OCIMF (October 2016)
- German flag State &PSC (November 2016)
- Malta flag State (January 2017)
- Luxembourg flag State (January 2017)
- Paris MOU (February 2017)
- Japan flag State (March 2017)
- AMSA (March 2017)

Assistance & Support

We provide assistance at 3 different levels:

- Updates to the software (IT and regulatory)
- Customization guidance
- Technical assistance on MARPOL regulations

Software Pricing Plans

OUTRIGHT PURCHASE	
PART I	PART I & II
$1,600	$1,750

- ✓ Basic ε-ORB software
- ✓ Piping diagram module: assists in designing the ship's piping diagram and recording operational entries by using those diagrams
- ✓ Sounding tables module: assists in the rapid calculation of contents inside a tank
- ✓ 12 months of software and regulatory support

* *Buy the software upfront and pay only $250/year for annual maintenance and support in future years*

PAY AS YOU SHIP PLAN	
PART I	PART I & II
$589/ship/year	$619/ship/year

* *Instead of buying the software outright, pay a yearly fee for the software (includes all the features of outright purchase version and future years' annual maintenance and support)*

Additional Options

Customization

Customization Fee
$999/lead ship

** Contact us for a full quote based on fleet size and characteristics*

Cloud Portal

Cloud Portal Fee
$144/ship/year

** The cloud portal ensures secure back-up and access to your vessels' ε-ORBs from ashore, and gives you the ability to run reports, search and benchmark data across your fleet*

Accessories

INDIVIDUAL COMPONENTS	PRICE ($)
SIGNATURE PAD	250
SIGNATURE PAD BIOMETRIC DATA VERIFICATION	110
DISASTER RECOVERY BACK-UP DEVICE	350

** Signature pad items are subject to the supplier's pricing list*

Thank you for your time!

Additional Information and trial version available:
www.liscr.com/eorb

Email
eorb@liscr.com

1st

Electronic Oil Record Book
Approved by a
Major Flag State

Finally, an approved **Electronic Oil Record Book** that meets the needs of today's regulatory environment.

The ε-ORB ensures accuracy and affords peace of mind.

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