

Outline of Taiwanese marine crew training program

本國籍船員培訓計劃大綱

❖ Purpose 目的: Normand Jarl is a highly specialized Offshore construction and support vessel with DP2 (Dynamic Positioning 2) function and able to provide W2W (Walk to Work) duties. There is an apparent lack of skilled Taiwanese maritime sea staff available to operate such vessels safely and efficiently. The purpose of this training course is to outline the plan to familiarize the Taiwanese seafarers with the vessel and its functions. Their time onboard such a vessel will also train them to operate similar vessels for our fleet and other wise in the future.

本工作船 Normand Jarl 為一艘專門用於離岸工程施工建造期間的支援船舶,具備 DP2 系統且能執行動態補償舷梯 (Walk to Work)任務。顯然地在台灣目前缺乏有經驗的船員來安全且有效率地操作此類型的船舶。這個訓練計劃的目的最主要是讓台灣的船員熟悉船舶及相關功能,以期望未來他們能操作本公司類似的其它船舶。

- ❖ Type of vessel 船舶類型: Offshore Support Vessel 離岸支援船
- ❖ Name of vessel 船舶名稱: Normand Jarl



Vessel specification 船舶規格:

- ❖ Name of Ship Normand Jarl
- ❖ Built 2013, Leven Verft AS Yard, Norway / Hull No. 359
- **❖ IMO Registration** 9661170
- **❖ Call Sign** LACE8
- **❖ DNV Identification Number** 32564
- Flag State Norway
- Port of Registration Skudeneshavn

❖ Classification 1A1 Clean(Design) COMF(V-3) DK(+) DYNPOS(AUTR) E0 HELDK(S) Ice(C) LFL(*) NAUT(OSV(A)) SF

Length Overall: 107.6 m
Breadth Moulded: 22 m
Length BP: 98.4 m

Gross Tonnage: 7403 t
Net Tonnage: 2220 t
Deadweight: 6500 t

Minimum Safe Manning Document

NORWEGIAN MARITIME AUTHORITY SAFE MANNING CERTIFICATE

Issued under the provision of the Administration's regulation of 18 June 2009 No 666 pursuant to regulation V/14.2 of the SOLAS convention 1974 and regulations in the STCW convention 1978 as amended.

Name		Callsign letter:	IMO No.	Homeport			
NORMAND JARI	L'	LACE8	9661170	Skudeneshavn			
Туре		Trading area – withir	Trading area - within the radio certificate assigned sea area				
Multi Purpose C	Offshore Vessel	Unrestricted voy	ages	2-watch System			
Gr. tons	Loa-Br	Prop. power	El. plant	Prop. eng.	Speed		
7403.00	107.600-22.00	00 m 6500 kW	690 V - 12850 kW	Diesel-electric	15		
Minimum Safe N	Manning is base	ed on the following techni	cal installed equipment:				
Auto Pilot x	Int	ernal comm x	Personnel alarm x	UMS Alarms x			
Safe Manning fo	or operation wi	ith periodically unmanne	d engine room. The period is limit	ted to maximum 24 h	nours		
Positions	Nos	Qualifications + (STCW)	Comments				
Master	1	D1 (II/2)					
Chief mate	1	D2 (II/2)					
Deck officer	1	D4 (II/1)	See note 3				
Chief engineer	1	M1 (III/2)					
Second enginee	r 1	M2 (III/2)	See note 3				
Electrician	1	Note 1 (III/7)					
Cook	1	Note 2	See note 3				
Able seafarer de	eck 3	(11/5)	See note 3				

Gr.tons means gross tonnage according to the International Convention of 1969 concerning Tonnage Measurement of Ships.

All crew members shall meet the requirements regarding safety training according to the requirements of the regulations concerning qualification requirements, issue of certificates and certificate rights for personnel on Norwegian ships.

A radio operator holding a Certificate of competency shall be present on every navigational watch. If the ship is provided with equipment for sea area A1, minimum requirements: Restricted Operator's Certificate (ROC). If the ship is provided with equipment for greater sea areas, minimum requirements: a General Operator's Certificate (GOC).

(*) Certificate requirements refer to national codes with STCW references in brackets. Other certificates may be accepted for the required position. For rights or restrictions, see each individual certificate's section of limitations.

The chief engineer shall in both cases as compensation hold electrical qualifications pursuant to STCW A-III/2.

During operations which require continuous monitoring of the DP-system, there shall be one DP-operator on each watch in addition to the duty navigator.

3)One Deck officer, One Second engineer, the Cook, one AB may be omitted when the vessel is not carrying cargo, or is on a non-commercial voyage excluding overseas voyages. If/when the Second engineer is omitted, the Electrician may not be omitted. If/when the cook is omitted, one of the remaining crew shall be responsible for the catering duties.

The covering letter to which this certificate is attached is a part of the Safe Manning Certificate.

¹⁾ May be replaced by extra engineer, or the position may be omitted if the electrical plant is supervised by electrical personnel in accordance with routines for systematic maintenance determined by the shipping company.

²⁾ Qualifications according to requirements in §§ 52 or 53 in Regulations of 22. December 2011 No. 1523.

Place	Date	Signature A Androca
Haugesund	2017.01.27	Jack-Arild Andersen Principal Surveyor

❖ Positions required 需求職位: Total Four (4)

Deck cadet x 2 甲板部門實習生兩名 Engine cadet x 2 輪機部門實習生兩名

❖ Project duration 專案期程: Commencement expected from 1st July 2021 for a period of fifteen (15) months firm + options to extend.

預計 2021 年 7 月 1 日開始, 為期 15 個月, 並視專案情況決定是否延長

Reason for not being able to employ Taiwanese marine crew.

無法僱用本國籍船員之原因

Most of the Taiwanese crew CV reviewed were for conventional ships like Containers or tankers. It has been difficult to find crew with operational experience on sophisticated and complex vessels like Normand Jarl. These vessels will work very close to the wind farm installation jackets – sometimes at 20 meters. The operator must position the vessel in Dynamic positioning mode and monitor currents and wind to ensure the vessel does not drift too close to the installation. Experienced DP operators and engineers with DP maintenance course are usually employed on such vessels.

As per regulation set out by Maritime of Port Bureau, MOTC, Solstad had already asked our agent in Taiwan to advertise for the recruitment of Taiwanese marine crew at the website of both Seafarer Union and Maritime of Port Bureau, MOTC (See attachment 1)

目前我們所收到來自本國籍船員的個人簡歷,經歷大部份都是貨輪或商船。我們在取得有實際操作像 Normand Jarl 這種高精密度的船舶的船員確實有困難。我們的工作船在離岸風場施工時,必須與水下基礎非常靠近,距離有時僅 20 米。工作船的操作手必須利用船上的動態定位系統將船鎖定在一定範圍,並隨時監控洋流與風的作用與干擾,以確保工作船不會擅自漂移或與水下基礎太過靠近。工作船所有被僱用的都是有實務經驗且受過訓練課程的動態定位系統操作手。

檢附於航港局、海員總工會等網站公開徵求船員7日,而無符合條件之應徵者(見附件一、職缺公告)

❖ Minimum qualification for seafarers 船員資格條件

- STCW certificates 持相關適任證書及 STCW2010 訓練證書
- As most of the crew members on board are foreign nationals, fluent English communication skills are required, with TOEIC 700 or GCSE (including listening, reading, writing and speaking) in THE GEPT, or with no difficulty in communication by interview are preferred.

因船上多為外國籍船員,需具備流利英語溝通能力,具備多益 TOEIC 700 分或全民 英檢中高級程度(含聽力讀寫及口說四項)或經面試溝通無礙者優先錄取培訓。

- Relevant health examination approval certificate for offshore wind farm operators:
 Medical (OGUK/ ILO / MLC). 離岸風電作業人員相關健檢核可證書
- Proof of Tertiary education in maritime studies deck or engine 相關海事院校學歷證明。
- relevant escape training for maritime operators: OPITO BOSIET / FOET / GWO BST。 海上作業人員相關逃生訓練核可證書

Crew agreements

- The Taiwanese crew will sign an MLC contract with Solstad Offshore's appointed manning agent for wages, insurance, pensions. Overtime will be provided as accrued. 本國籍船員須與 Solstad 指定的 Manning agent 簽訂以 MLC 為基礎的聘僱契約。
- Solstad Offshore will ensure the Taiwanese crew are provided MLC approved accommodation and meals at no additional charge to the crew.

 Solstad Offshore 將提供符合 MLC 規範的住宿與伙食, 不另外計費。
- Crew will be provided sufficient training opportunities onboard the vessel but the level of knowledge gained also depends upon the individuals interest, awareness and understanding of the ship's functioning.

 船員在船上將有充足的訓練機會,唯知識及能力的累積仍視個人興趣、認知與對船舶的瞭解而定。
- Hands on training will be provided by Ship's officers as and when the timing is suitable. 船上的甲級船員在適當的時間與機會將提供相當務實的訓練。
- The training Taiwanese marine crew list (or the list of interns) shall be submitted to the MPB in the future for MPB permit application of Normand Jarl once the Taiwanese marine crew/ interns are employed.

 本國籍船員或實習生經聘用後,船員名單 (或實習生)將提交給航港局備查,以利 Normand Jarl 在交通部航港局的從事離岸風電工程許可申請。
- The Taiwanese crew are always required to comply to ALL of Solstad HSE policies. Failure to do so could result in premature termination of contract with Solstad. 台灣籍船員必須完全遵照 Solstad 所訂立的環安衛 (HSE)規範。任何背離規範的行為可能會造成聘僱合約的提前終止。

Deck Cadet Training

Solstad Offshore Reference 7-2 Training and Familiarization ➤ Onboard Training, Familiarization and Operation

Omposed Training and Familiarization and Operation and Operation

Omposed Training and Familiarization and Operation and

Vessel	
Name:	Rank:
Joined Vessel Date:	Commenced Checklist Date:

	n Check Points	N/A	Date	Signature
Α	GENERAL			
1	General Introduction and duties			
2	Vessel layout and familiarization walkaround			
3	Muster Alarms / Muster Stations			
В	WATCH KEEPING			
1	Watch routines			
2	Ship specific watch routines – Bridge/Deck			
3	Process watch keeping			
С	COMMUNICATION			
1	Intercom and vessel's internal telephone system(s)			
2	Transportable VHF/UHF			
3	V-SAT			
4	GMDSS station			
5	VHF / Helicopter – communications			
6	Signal equipment (Aldis lamp and ship's whistle)			
7	SART and EPIRB			
8	Subscription & updates of electronic Charts and Notice to Mariners			
9	OCS Onboard module			
10	VDR			
D	NAVIGATION			
1	Radar 1 and 2, including ARPA			
2	Autopilot (switch between manual and auto)			
3	GPS / DGPS			
4	VHF bearing equipment			
5	Gyro- and magnetic compass including repeaters, trouble-shooting and compass deviation tables			
6	Magnetic compass course monitor and alarm			
7	Electronic chart (Vessel specific ECDIS system)			
8	Nautical charts and publications, including filing system			
9	Echo sounder and plotter			
10	Panel for lights in signal mass			
11	Deck lights including emergency lights and lifeboat lights			
12	Lanterns - control panel, changing circuits and location of spare bulbs.			
13	Guidelines for Seamen and Notice to Mariners - system for chart corrections and			
13	logging corrections			
14	Captain's standing orders and Night order book			
15	Navtex			
16	AIS			
17	Speed log			
18	Weather fax			
19	Search lights including remote control			
20	Stability calculator			
21	CCTV			
22	Day signal figures for signal mast			
23	Other equipment on the bridge			
24	Emergency steering plan and alarm signal			
Е	OFFSHORE INSTALLATION SAFETY ZONE			
1	Knowledge of checklist for Entering of Safety Zone			
2	Charters procedure for entering of Safety Zone			

	n Check Points	N/A	Date	Signature
-	ARRIVAL PLAN			
1	Knowledge of arrival and departure checklist VOYAGE PLAN			
G	1 4 11 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
1	Knowledge of Voyage Planning			
Н				
1	Ships ballast water Management plan			
2	Stability familiarization including stability calculator			
3	Local and International rules regarding Ballast Water			
Ţ	DRILL			
1	Knowledge of Drill matrix			
2	Knowledge of Action plans			
J	WATER INTEGRITY			
1	Knowledge of Ships plan, Damage control plan			
2	Watertight doors			
3	Door in accommodation and window blending			
	DOCUMENTATIONS / MANUALS			
1	Documentations and Equipment Manuals located.			
L				
1	Knowledge of the test Equipment being used for Potable Water Testing			
	MOORING OPERATIONS			
1	Knowledge of process Anchoring and mooring			
2	Mooring lines & Heaving lines condition			
3	Operating/Emergency stop for Mooring winches, Windlass and Capstan.			
4	Manning of mooring stations.			
5	Communication to bridge.			
N	MOB-BOAT / WORK BOAT OPERATION			
1	MOB-boat/work boat, mustering, manning, use of engines and operation			
2	Use of Mob-Boat/work boat davit, launching, bowline, quick release hook			
3	Knowledge about the emergency functions on the boat/Davit.			
0	PILOTAGE			
1	Process Pilotage			
2	Rules and Regulation for Pilot			
3	Rigging of Pilot ladder, Lifebuoy with line and light			
4	Communication with Pilot station and Pilot boat.			
Р	SHIP-SHORE ACCESS			
1	Rigging of Gangway, Net, Lifebuoy with line and light.			
2	Watch routines on gangway.			
3	Process ship – shore access.			
Q	HOT WORK			
1	General Hot Work procedure.			
2	Work permit.			
3	Charter procedure for Hot Work inside Safety Zone.			

Checklist completed	(date/sign)
Verified by Instructor an	d Entry is made in the

Deck Logbook (date/sign)

Note: To be filed in the Familiarization folder

Engine cadet training program:

Solstad Offshore Reference 7-2 Training and Familiarization ➤ Onboard Training, Familiarization and Operation DTFA-OTFA-0544 Competence ➤ Familiarization

Approved

Revision 04 26.08.2020 Duty Familiarization New Engine Ratings /

Cadets / Apprentices

Vessel:	
Name:	Rank:
Joined vessel date:	Commenced checklist date:

-	CHECKPOINTS	Date	Signature	Instructor
Ą	MACHINERY			
1	Engine room- identify the different types of machinery and installation			
В	SYSTEMS			
1	Fuel oil systems			
2	Lubricating oil systems.			
3	Cooling water systems (seawater/freshwater)			
4	Ballast- & bilge systems			
5	Freshwater systems (potable water)			
6	Compressed air system - working air.			
7	Sanitary, air-condition and ventilation systems in engine room and in accommodation			
8	Tank-sounding system			
9	System for liquid cargo			
10	System for Nitrogen filling			
11	System for bulk-cargo.			
12	System for tank-cleaning.			
13	Control-air system for machinery (Main- and Auxiliary diesels)			
14	Inspection of separators and filter systems			
15	Machinery and equipment – main data			
16	System for compressed air, use of working air, hoses, couplings etc.			
17	Internal communications systems: telephone, high speakers etc.			
18	Workshop and storeroom – tools, machined and hand held, order and system etc.			
С	Oil and environmental protection (Waste Management Plan, SOPE	P/SMP	EP)	
1	Handling and segregation of garbage (SAP) such as organic matter, waste contaminated by foodstuffs, paper, plastic, glass and metal and special waste such as oily rags etc.			
2	Oil spill prevention equipment, positioning and use.			
3	Notification of oil spill and/or danger of oil spill.			
			01	*
	OPERATION PROCEDURE	Date	Signature	Instructor

1	Transport of fuel oil (bunkering, loading, unloading etc.) – safety regulations				
2	Rigging for and securing of work site at a height and work site below deck.				
3	Loading/unloading liquid or dangerous cargo – safety regulations.				
4	General work in engine room and with electrical installations— importance of order, cleanliness and complying with safety rules and use of personal protective equipment.				
5	Securing work site when working with electrical installations and in areas of high voltage, securing colleagues – emergency procedure and work permit.				
6	Use of machine tools including spark producing tools, rotating and with high pressure (paint sprayer).				
7	Preparation for going to sea and securing spare parts, stores and equipment in engine room.				
8	Notification of fire, small fires, accidents, injuries and other emergency situations				
9	Chief Engineers standing orders				
10	Examine and sign relevant Risk Assessment earlier performes by "the vesse" which is filed/ompile in a Risk Assessment manual				
11	Bans / restrictions on smoking and use of open flame and spark producing tools				
12	Shipboard "Waste Management Plan" including SOPEP / SMPEP and "Oil Record Book"				
13	MOB- mustering, manning launching, sailing and operation				
E	ENVIRONMETAL PROTECTION ONBOARD - Safety and Contingency				
1	Duties and responsibilities of the individual seaman				
2	The vessel's environment protection policy - general knowledge of the regulations and objectives				
3	Importance of and the "vessels" requirements for cleanliness and hygiene - "ship shape"				
F	DOCUMENTATION / MANUALS				
1	Documentations and Equipment Manuals located.				
	:klist completed e/place)				
	fied by Instructor and Entry made ie Deck Logbook (date/sign)				
Note	e: To be filed in the Familiarization folder				

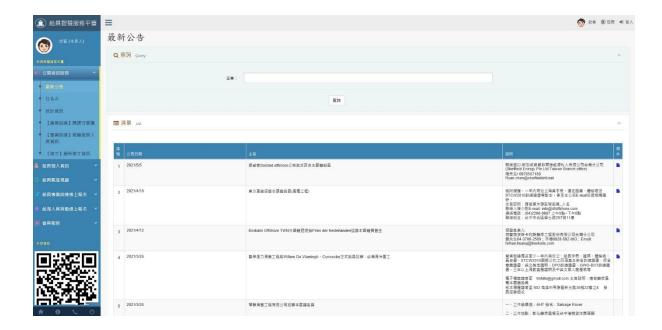
List of crew members expected to be employed and employment schedule 預計僱用之船員名單與僱傭期程計畫

Solstad via our appointed recruitment agent in Taiwan have been making inquiry at domestic renowned marine university such as NTOU & NKUST for qualified candidate or candidates being interested in offshore wind energy industry. As long as the CV/ resume is provided, we will conduct a quick interview with the candidates and hopefully further recruit suitable candidates for the participation of our training program.

Upon the candidates being employed, the final crew/ cadet list will be submitted to the Maritime And Port Bureau, MOTC for the work permit application of our vessel Normand Jarl.

Solstad透過我們在台灣合作的人事招聘公司已經在國內的一些知名的海事大學,例如海洋大學及高雄科技大學開始徵求符合需求或離岸風力發電產業有興趣的畢業生。只有我們有收到任何的履歷,我們會立即做一個簡單的面試,並希望進而聘用適合的人選來加入我們的培訓計劃。正式名單將於船員/實習生雇用後,於提送外籍工作船來台申請工作計畫時一併提送至中華民國交通部航港局備查。

Attachment 1 附件一



5/3/2021 中等海黄建工會



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