HM Government of Gibraltar

Office of the Marine Accident Investigation Compliance Officer

Report on the investigation of fatal accident during mooring operations on board the motor tanker

"NISYROS"

at the Port of Gibraltar

on

20 May 2025

This report is subject to the Gibraltar Merchant Shipping (Accident Reporting & Investigation) Regulations 2012.

Office of the Marine Accident Investigation Compliance Officer
Ministry for Health. Care and Business
HM Government of Gibraltar
Suite 971,Europort
Gibraltar
GX11 1AA

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The Gibraltar Merchant Shipping
(Accident Reporting and Investigation)
Regulations 2012

NOTE

Investigations under the Gibraltar Merchant Shipping (Accident Reporting and Investigation) Regulation 2012 ('the Regulations') shall not be concerned with apportioning blame nor with determining civil or criminal liabilities.

The purpose of safety investigation into marine accidents is to reduce the risk of future casualties' and incidents and reduce their serious consequences including loss of life, loss of ships and pollution of the marine environment.

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GLOSSARY OF ABREVIATIONS AND ACRONYMS

OS – Ordinary Seaman

2/O – Second Officer

C/O – Chief officer

A/B – Able Seman

FWD – Forward

FWE – Finished with engines

AFT – Aft, rear part of the vessel

IMO - International Maritime Organization

COSWP – Code of Safe Working Practices for Merchant Seafarers (2025 Edition)

ISM Code – International Safety Management Code

SMS – Safety Management System

OCIMF – Oil Companies International Marine Forum

STCW – International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended

ISM Code - International Management Code for the Safe Operation of Ships and for Pollution Prevention,

MLC – Maritime Labour Convention

ILO Code – International Labour Organization Codes of practice

Gt – Gross Tonnage

GPA – Gibraltar Port Authority

GMA – Gibraltar Maritime Administration

BGTW – British Gibraltar Territorial Waters

LMD – Local Maritime Direction

LT – Local time

MAICO – Marine Accident Investigation Compliance Officer

VTS - Vessel Traffic Services

AIS – Automatic Identification System

IWO – In way of

TIMES - all times used in this report are CET Central European Standard Time (GMT+1) unless otherwise stated

SYNOPSIS

On the afternoon of the 20 May 2025, the pumpman of the Gibraltar Registered tanker Nisyros was fatally injured whilst operating the port forward mooring winch during heaving in excess rope becoming entrapped in the mooring rope around the winch and sadly died of multiple injuries.

At the time of the accident the pumpman was alone on the fo'c'sle as the AB (Deck) had moved to a position further down on the main deck port side in preparation to receive a heaving line which would then be attached to the forward spring.

As no one witnessed the accident it is difficult to reach a firm conclusion as to what exactly happened. However, the Mooring System Management Manual stipulates that there should always be a minimum of two experienced persons at each mooring station throughout the operation, apart from the Officer in charge of the mooring station. The role of the officer is to supervise and keep an overview of the mooring operation. On this occasion there was not an officer undertaking this role. In effect the only person on the fo'c'sle was the pumpman who was operating the Port forward mooring winch by himself, at the same time as possibly ensuring that the mooring rope was correctly feeding and winding onto the winch's drum.

The investigation concluded that:

- The composition of the forward mooring party was not in compliance with the requirements of the mooring manual.
- Page 8 of the owner's preliminary assessment of the incident states that, no officer was assigned to the mooring station forward in order to maintain compliance with hours of work and rest.
- The pumpman was operating the winch at the same time as ensuring that the mooring rope was possibly correctly feeding and winding on to the mooring winch's drum.
- Due to repetitive nature of the work undertaken, the crew may have become complacent
- It is possible that the mooring winch actuator lever had been incorrectly secured in the running position by using the safety clip or external device.
- At this time, he may have become entangled in the slack rope, in all likelihood by standing too close to the winch's drum subsequently resulting in being dragged in feet first under the rotating drum.

MT Nisyros's management company, MM Marine Inc, has undertaken their own internal investigation and have taken actions by reviewing the relevant SMS and Mooring System Management Plan and procedures. Safety flashes and safety alerts were issued to all fleet vessels. Fleet personnel were instructed to complete additional training on mooring risk assessments and management and safe mooring practices.
Safe mooring practices will be audited fleet wide to ensure compliance.
Furthermore, current manning levels taking into account available cabin space capacity on each vessel was reviewed with the outcome of increasing the crew compliment by one officer and additional OS on Qingdao -type vessels and by one OS on Fujian-type vessels.
This report makes safety recommendations aimed at increasing crew awareness of the guidance on mooring operations, as set out in Section 26.3 of COSWP and in *OCIMF Effective Mooring*, and also emphasising the importance of adherence to the vessel's operating procedures

SECTION 1 – FACTUAL INFORMATION

1.1.1 Ship particulars

Particulars about the vessel concerned, including details of its-

SHIPS PARTICULARS

Vessel's name	MT Nisyros	MV Kingfisher D
Flag	Gibraltar	Marshall Islands
Classification society	Lloyds Register	Nippon Kaiji Kyokai
IMO Number	9382138	9238117
Type	Oil Tanker	Bulk Carrier
Registered owner	Benmore Services S. A	Ve Shipping Inc
Manager(s)	MM Marine Inc	Baru Delta Marine Inc
Construction	Steel	Steel
Year of build	2010	2002
Length overall	102.70m	170.00m
Registered length	95.20m	162.00m
Gross tonnage	4599 tonnes	17431 tonnes
Minimum safe manning	12	N/A

1.1.2 Voyage particulars

VOYAGE PARTICULARS

Port of departure	Gibraltar
Vessel attended	Kingfisher D,
Vessel Location	Gibraltar Western Anchorage
Type of voyage	Internal Waters
Cargo Information	Laden (Partly)
Crew	15

1.1.3 Marine causality or incident information

MARINE CASUALTY INFORMATION

Date and time	20 May 2025, 15:06 LT
Type of marine casualty or incident	Very Serious Marine Casualty
Location of incident	Gibraltar Western Anchorage
Place on board	Fwd Mooring Station
Injuries/fatalities	1 Fatality
Damage/environmental impact	None
Ship Operation	Mooring Operation
Voyage Segment	Mooring Alongside MV King Fisher D
External and Internal Environment	Wind: Negligible, Visibility: good Tidal stream: slack water
Persons Onboard	15

Fig 1 – View of MT Nisyros alongside berth No2 East Gibraltar

Fig. 2 – Image of MV King Fisher D

1.2 Narrative

At approximately 12:30 hours LT, MV Kingfisher D anchored within BGTW western anchorage. At approximately 14:30 hours, MT Nisyros proceeded towards the MV Kingfisher D in order to carry out a bunkering operation.
A mooring plan was prepared and completed at 14:54 LT, signed by mooring squad members endorsed by C/O and Master. (Fig-1.3)

Two seafarers were assigned to both FWD and AFT mooring stations.

At approximately 15:00, MT Nisyros had already come alongside the MV Kingfisher D, one headline and one stern line had already been deployed by this time.

Shortly after the initial lines were secured, preparations began for the deployment of the spring lines. The forward spring line was to be paid out from the upper forward side of the port winch drum. It was first led forward, then redirected aft via the appropriate pedestal roller and the aft-leading fairlead, before running down to the port side main deck, as illustrated in Figures 4 and 5.

MM. MARINE	MOORING PLAN	D-42 Issue No.2 Dec 14

MOORING PLAN MUST BE DISCUSSED WITH ALL PERSONELL PARTICIPATING IN THE MOORING OPERATION INCLUDING THE PILOT, AS APPLICABLE

VESSEL NISYROS ARRIVAL DATE/TIME 24 MAR 25 / 1454 LT

PORT GIURGIU ROMANIA BERTH/JETTY WINDPOWER D

INSTRUCTIONS:

- Draw on the appropriate side of ship a schematic (not in scale) indicating dock main particulars approx. position of e.g. bits, dolphins, winches, arms, etc.
- Draw vectors to indicate lines used (fwd, aft, breast, spring) from ship to dock.
- Indicate assisting tug(s) position.
- Final berthing arrangements to be attached and filed with Passage Plan.
- All Deck Officers and ratings participating in the mooring operation, along with the Pilot (if applicable) have become aware of the plan and contribute as necessary for its preparation.
- Following its initial preparation, the plan should be amended as deemed necessary.

MASTER's NOTES *(Enter any information to be used as a reminder for a future visit in the same berth)*
MOORING SQUAD MEMBER NAME/SIGNATURE PMV Salvador Christopher A/B Dnk. Enrique
MOORING SQUAD MEMBER NAME/SIGNATURE PMV Fantonialo Pedro Jr A/B Longka Jojo
MOORING SQUAD MEMBER NAME/SIGNATURE
C/O NAME/SIGNATURE Dionisio Vanzuela Jr
PILOT (if present) NAME/SIGNATURE
MASTER NAME/SIGNATURE CAPT. Emmanouil Minas DATE DD/MM/YY 26/Mar/25

Guidance : To be filled on pilot's embarkation or prior mooring operation. **Vessel File:** M-23 Eff. Date: July 2019 / Rev. 03 Page 1 of 1

Fig 3 – Mooring Plan

Fig. 4 – FWD spring mooring line arrangement. Red lines depict direction line took from drum leading forward, around pedestal roller and then leading aft

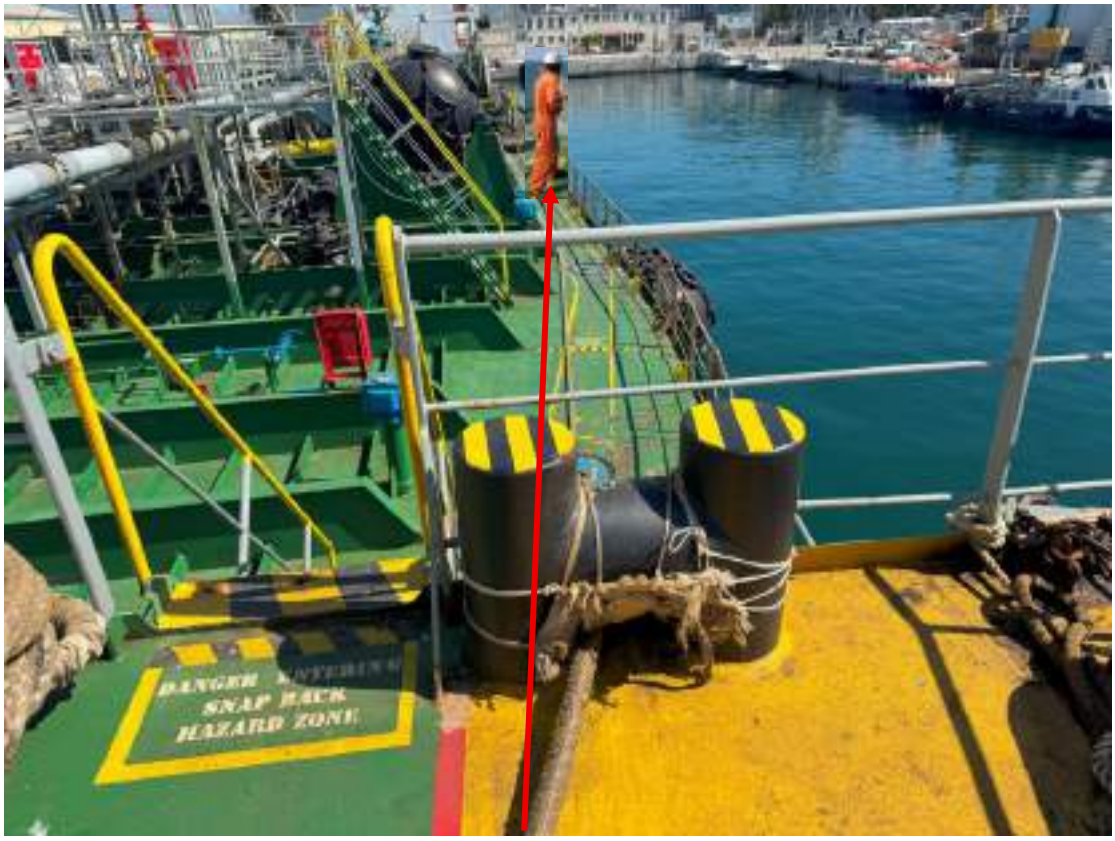


Fig. 5 – FWD spring mooring line through aft leading fairlead down to main deck and approximate position of seaman on main deck

During preparations for deploying the forward spring line, the able seaman assigned to the forward mooring station proceeded to the main deck to secure the heaving line to the mooring line for transfer to the receiving vessel. As a result, the two forward mooring deck squad members were positioned in different locations, with the other remaining at the port mooring winch controls.

Whilst the above-mentioned preparations were taking place, at approximately 15:06 LT the C/O (Kingfisher D) witnessed an incident taking place on the fo'c'sle of MT Nisyros involving a crew member. At this time, the AB on deck, who was positioned outboard in anticipation of receiving the heaving line, heard shouting and was also alerted by the Bosun on board the *Kingfisher D* of the incident taking place. He immediately proceeded to the site to investigate.

Upon arrival at the forecastle, he discovered that the Pumpman - crew member on site was trapped beneath the winch drum and immediately informed the bridge via VHF and stopped the winch's hydraulic motor. The Chief Officer and another crew member arrived at the scene shortly thereafter.

Fig 6 – Image demonstrating location of crew member

1.2.1 Post Incident Response

At 15:07, the incident was reported to the Gibraltar Port Authorities, and an urgent request was made for medical and rescue assistance. At this same time the mooring was aborted.

At 15:12, MT Nisyros cast off from alongside MV Kingfisher D and proceeded to Berth No 3 East, at the Gibraltar Port in order to facilitate local emergency response services to board vessel.

At approximately 15:54, first line ashore was given and at around 16:06 Hours, vessel was all Fast and secured at Berth No #3 East. Immediately on arrival at berth number 3 east, local emergency response services were on scene to board the vessel.

At approximately 16:12, (FWE) Finished with Engines – Gangway down and Police, Port Authorities, local Emergency response services and P&I surveyor boarded. Inspections and investigations commenced, upon boarding.

At 19:00, crew member in question was declared dead. His body was removed by the Gibraltar Fire and Rescue Service at approximately 19:15 Hours and transferred to St. Bernards Hospital.

The Gibraltar Maritime Administration attended the vessel on the 20th and 21st of May 2025 to gather information on the circumstances surrounding the incident and any contributory factors. A preliminary report was subsequently produced and circulated to the owners and other interested parties.

1.3 Environmental Conditions

The incident took place within the Gibraltar Western anchorage; the weather was fine and clear. Sea state was good, with very light winds.

1.4 MT Nisyros

1.4.1 General

Nisyros is a Gibraltar registered vessel with 4599 gross tons, oil tanker owned by Benmore Services S.A and operated by MM Marine Inc. The vessel is serving as a bunker supply tanker within the port of Gibraltar.

The Ship manager, MM Marine Inc based in Athens Greece, is responsible for ensuring the compliance with the International Safety Management (ISM) Code.

1.4.2 FWD mooring deck arrangement

The forward mooring deck equipment was arranged symmetrically, with the port and starboard sides each comprising a single windlass, installed for anchor handling (hoisting and dropping) as well as mooring and warping functions, together with a combination of mooring bitts, pedestal fairleads, and Panama chocks. The port-side winch was positioned such that its operator would face outboard, approximately 45 degrees to port from the forward centreline. (Fig 7).

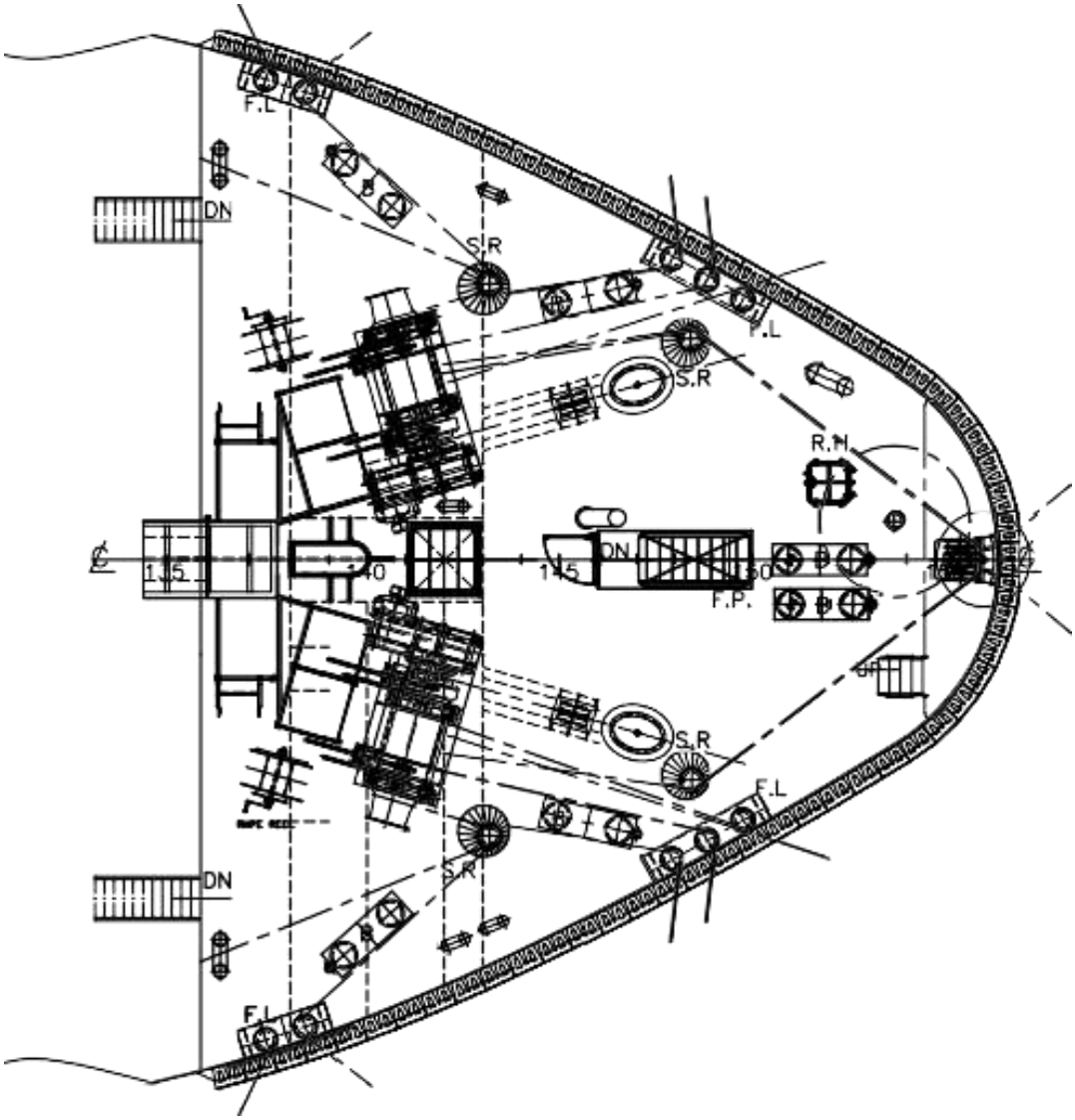


Fig 7 – View of Focsle deck.

Fig 8 – View of Winch leading fwd

Fig 9 – View of winch and deck arrangement leading aft

1.4.3 Mooring winch operations

The operational lever is designed so that when positioned in the centre, the winch remains stationary. To engage the winch, the operator must move the lever forward or backward, as required. Safety features include a locking bracket that secures the lever in the central position (Figure 10), and a spring-loading mechanism that automatically returns the lever to the centre when released, stopping the winch's rotation.
In addition, the winch is fitted with two operational speeds, which are controlled by a valve (Figures 11 and 12).

Fig – 10 – Locking catch

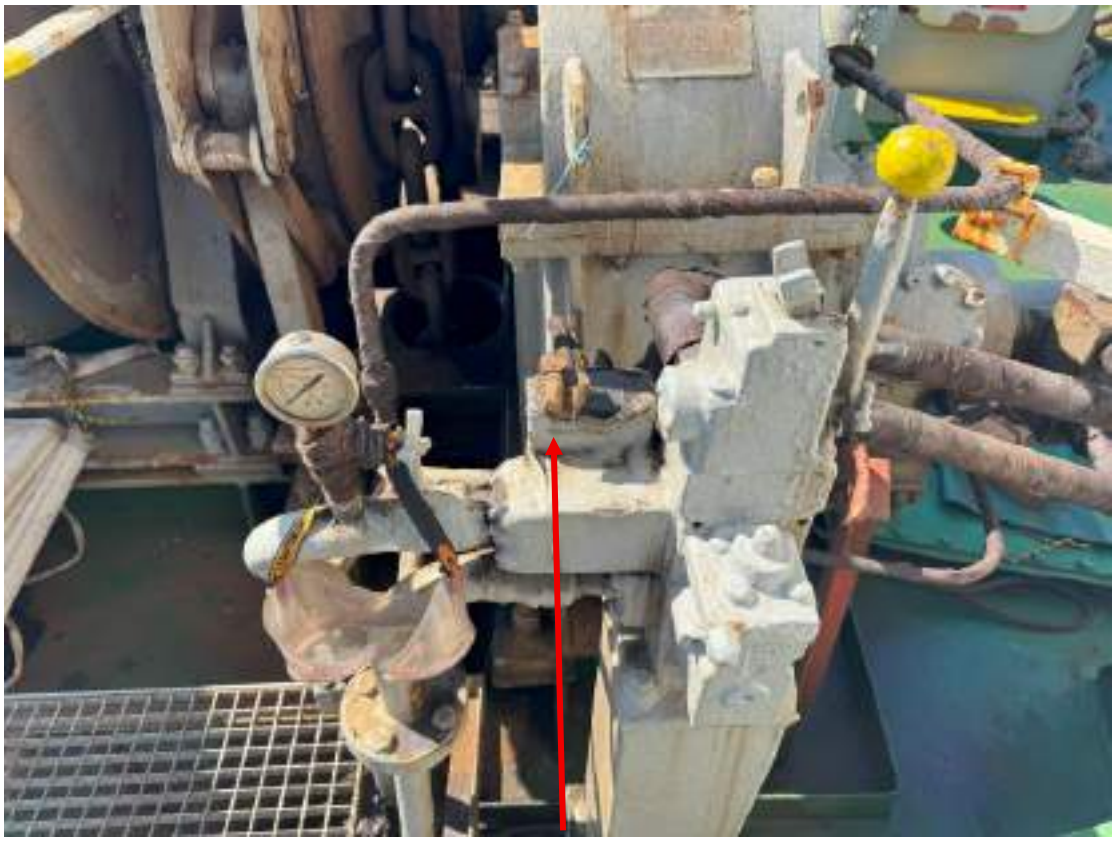


Fig 11 – View of valve in slow speed position

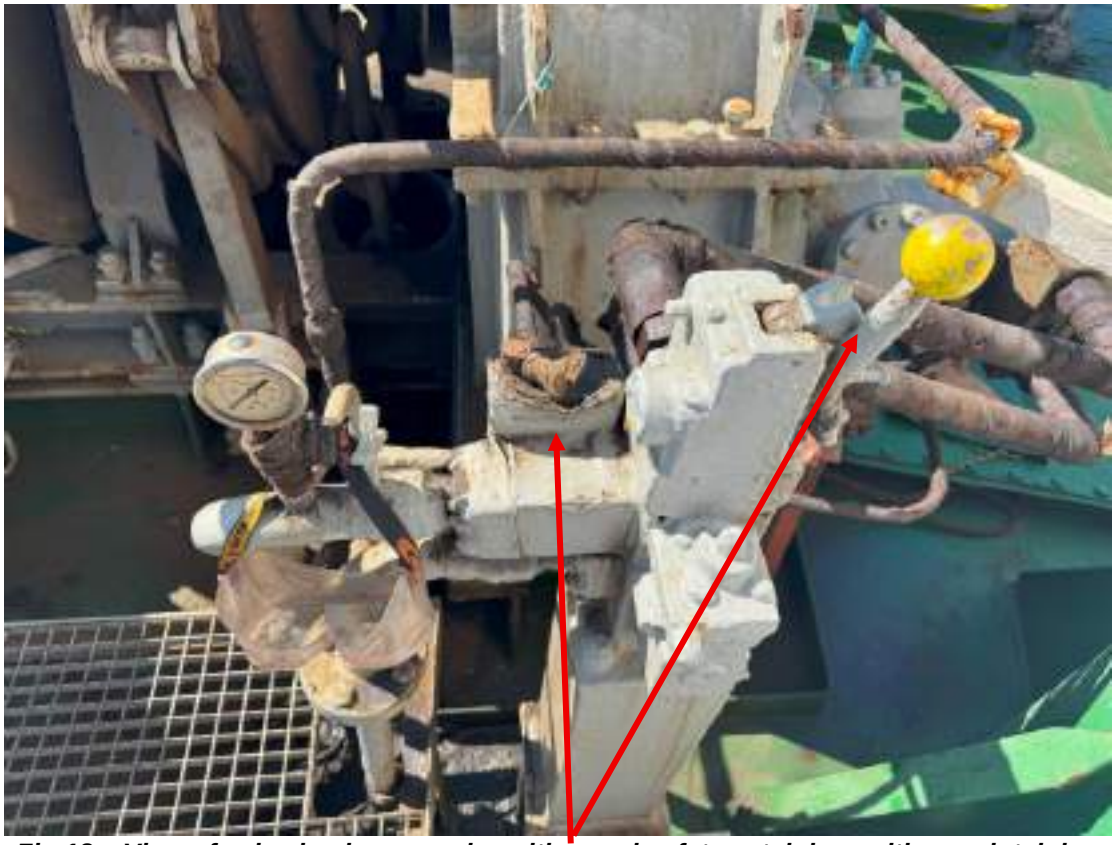


Fig 12 – View of valve in slow speed position and safety catch in position maintaining winch active.

A technical inspection of the winch was carried out to verify its operational and mechanical condition, as well as its safety functionality. It was confirmed that the winch operated correctly under standard conditions; specifically, drum movement ceased immediately upon release of the control lever, in accordance with its design. The winch is designed so that it cannot remain operational without continuous manual engagement of the lever.

However, it was observed that—contrary to proper procedures—the winch can be kept active by securing the lever with its safety catch. This action allows the drum to continue rotating without continuous manual activation of the lever (Figure 12).

1.4.4 Safety Management

The safety management system (SMS) for MT Nisyros had been issued by MM Marine Inc.
The SMS contained the following items related to mooring operations:

- Anchoring, Mooring, and Emergency Towing Procedure, as outlined in the SMS – Deck Manual
- Pre-mooring plan
- Pre-mooring checklist
- Mooring risk assessments
- Four-monthly mooring equipment maintenance and inspection records
- In support of the SMS, the vessel also maintains a ship-specific Mooring System Management Plan (MSMP), prepared in accordance with OCIMF MEG 4, Section 1.9, and SIRE VIQ7.

Company SMS procedures and ship specific MSMP did contain a section which specifically requires that there should always be a minimum of two experienced persons at each mooring station throughout the operation, apart from the officer in charge of the mooring station.

1.4.5 Manning

At the time of the incident the vessel was manned by 15 seafarers of which 13 were Filipino nationals, The Master is a Greek national and the Electrical Officer was Russian. All the Filipino crew are employed through a crewing agency in Manila, the Philippines.
The table of shipboard working arrangements indicate that whilst at sea:

- That the watchkeeping officers and ratings operate 6 hours on, 6 hours off watchkeeping routine.
- The Master, Chief Officer, Chief Engineer, Electrician, Cook and Fitter are on “day work”

- The two pumpmen are not watchkeepers but operate on 6 hours on 6 hours off routine.

- The hours of work and rest records for the pumpmen, whilst not showing any major discrepancies they do indicate that for short periods they do work outside their allotted working hours.

- It is known that both pumpmen formed part of the fore and aft mooring squads, and the hours of work and rest records indicate that this is the norm.

Therefore, it is considered that at the time of the incident the vessel did not fully comply with the requirements of the mooring plan to have an Officer at each mooring station for supervision, for the purpose of complying with the hours of work and rest as required by Regulation 2.7 of the Maritime Labour Convention 2006.

The pumpman was 45 years old. He joined the vessel on 24 September 2024. Prior to this, on 15 August 2024, he completed pre-joining familiarisation training on the Safety Management System manuals with MM Marine Inc. at the crewing agency offices in the Philippines. He was in possession of valid maritime training certification in compliance with the STCW Convention, Part A, Chapter II, Sections A-II/4 and A-II/5, covering the functions of navigation, cargo handling and stowage, ship operation and care of persons on board, as well as maintenance and repair.

At the time of the accident, the pumpman was wearing personal protective equipment (PPE), which included a coverall, safety boots, gloves, and a safety helmet.

From crew accounts on the 21 May 2025, it was deduced that pumpman was found to be deceased by the time shore emergency assistance arrived.

The Master was 61 years old, is a Greek national who holds all necessary qualifications and certifications. The Master holds a Master Unlimited STCW Certificate of Competency issued in Greece and endorsed by Gibraltar. He has been with the company since 2011 and assumed his first command as Master in July 2014. Since then, he has commanded Nisyros on two other occasions, as well as a significant number of other vessels, either sister ships to Nisyros or very similar in type. His most recent assignment aboard Nisyros began in April 2025. The Master has extensive experience operating in the Gibraltar and Tangier Mediterranean region and maintained an incident-free service record.

1.4.6 The International Safety Management Code (The ISM Code)

The objectives of the ISM Code are to ensure safety at sea, prevention of human injury or loss of life, and avoidance of damage to the environment, in particular to the marine environment and to property.
The ISM Code is divided into the following sections:

- Functional requirements for a safety management system.
- Safety and environmental protection policy.
- Company responsibilities and authority.
- Designated person(s).
- Master's responsibility and authority.
- Resources and personnel.
- Shipboard operations.
- Emergency preparedness.
- Emergency procedures.
- Reports and analysis of non-conformities, accidents and hazardous occurrences.
- Maintenance of ship and equipment.
- Documentation. Company verification, review and evaluation.

1.5 GUIDANCE ON MOORING OPERATIONS

1.5.1 Code of Safe Working Practices for Merchant Seafarers (COSWP)

Gibraltar Maritime Administration's Shipping Guidance Notice 042(a) as amended makes provision for the COSWP to be provided on Gibraltar registered ships.

Despite the above-mentioned provision, nothing prevents Gibraltar ships from providing either the COSWP or the ILO Code, or both.

26.3.1 of the COSWP in force at the time of the accident provided that: During mooring and unmooring operations, a sufficient number of seafarers should always be available both forward and aft of the vessel to ensure a safe operation…A responsible person should be in charge of each of the mooring parties.

1.5.2 Effective mooring

Vessel also maintains a ship-specific Mooring System Management Plan (MSMP), prepared in accordance with OCIMF MEG 4, Section 1.9, and SIRE VIQ7. The OCIMF publication Effective Mooring was not referenced within the (MSMP).

Section four of the publication provides specific guidance on mooring winches specifically section 4.7 – Winch safety reminders, the following of which are incident related:

- Do not use rope or anything else to hold the winch operating lever in position
- Do not leave winches running unattended
- Do not try handle a line on the drum end unless there is a second person to remove or feed the slack line to you. There should also be another person to stop the winch immediately, in case of a problem
- Keep your distance from gear wheels and other moving parts.

1.6 Previous Mooring Accidents & Mooring Related Deficiencies

At approximately 2355hrs on the 02 July 2020, Gibraltar VTS received a VHF call from captioned vessel advising that a crew member (Pumpman) had collapsed on deck during mooring operations alongside a client vessel (M/V NAVIOS HYPERION – at Gibraltar western anchorage) and requesting emergency medical assistance. Following attendance by paramedics onboard to try to stabilise crew member, at approximately 0100hrs crew member was disembarked onto a service boat for transportation ashore, arriving at berth at approximately 0115hrs. Crew member was transferred to hospital, where we understand from the vessel operators PIC that he was subsequently pronounced deceased.

Since 2020 the ability of the Gibraltar Health Authority to deploy paramedics to vessels at anchor has ceased.

On the 02 February 2021, during mooring operation second spring line snapped due to tension and injured AB's right foot bottom area. Crew member taken to hospital.

A Flag State inspection was undertaken on 03 June 2014,during this attendance, a related deficiency in way of the windlass operating handle found secured to the windlass operational lever was raised.

The company has an open culture for continuous improvement and learning from near misses and incidents. This was the first fatality caused due to an accident the company has experienced in nearly 30 years of carrying out bunkering operations.

1.7 THE GIBRALTAR PORT AUTHORITY

1.7.1 Background

The government-administered Gibraltar Port Authority was founded in 1806 and its successor, the independent Gibraltar Port Authority (GPA), was established in 2005 by the Gibraltar Port Authority Act.

The principal functions of the Port Authority are:

- Monitoring and control of all vessel movements for British Gibraltar Territorial Waters (BGTW) in support of port operations and navigational safety;
- Provision and monitoring of port security including the provision of security controls within restricted and controlled zones;
- The licensing of Port operations;
- Search and Rescue in BGTW;
- Pollution prevention and response;
- Monitoring and control of bunkering and ship-to-ship operations within BGTW.

1.7.2 Gibraltar as a bunkering Port

Gibraltar is the largest bunkering port in the Mediterranean and its bunkering companies continue to go from strength-to-strength, bunkering continues to be the main activity within the Port of Gibraltar.

Safety and environmental concerns are given top priority by the government of Gibraltar, which applies strict regulations in the form of the Bunkering Code of Practice. The Port Authority's Bunkering Superintendents continuously monitor all operations in the Port.

1.8 THE GIBRALTAR MARITIME ADMINISTRATION

1.8.1 Background

The Gibraltar Maritime Administration (GMA) is responsible for managing vessel registration and oversees maritime safety, environmental protection, and the facilitation of international trade. Established in 1997, it operates under the authority of the UK Maritime & Coastguard Agency and is recognised as a Category 1 Red Ensign register, allowing for the registration of vessels of all types and tonnages.

1.8.2 Gibraltar Maritime Administration functions:

The Gibraltar Maritime Administration is responsible for the registration and survey of ships and yachts registered under the Gibraltar Ship Register. Its functions include:

- Assisting in the registration process for vessels and yachts, ensuring they meet the required standards of quality and suitability.
- Conducting statutory surveys and certification of ships, ensuring compliance with international safety management, ship and port security, and maritime labour conventions.
- Managing Port State Control inspections and conducting accident investigations as instructed.
- Carrying out inspections to locally operated craft and dealing with inquiries and emergencies from overseas and local authorities.
- Issuing local Certificates of Competency and assisting with the training of new surveyors.
- Travelling worldwide to carry out duties.

SECTION 2 – ANALYSIS

2.1 Aim

The purpose of the analysis is to determine the contributory causes and circumstances of the accident as a basis for making recommendations to prevent similar accidents occurring in the future.

2.2 Overview

MT Nisyros's pumpman was fatally injured while operating the port forward mooring winch, possibly during the heaving in of excess rope, becoming trapped in the mooring rope around the winch, resulting in multiple fatal injuries.

The circumstances that led to the Pumpman being in a hazardous area near the mooring winch, combined with factors that contributed to the winch remaining operational due to the operating lever being incorrectly secured in the running position, were significant contributors to the incident.

2.3 Fatigue or alcohol

There is no evidence to suggest that the Pumpman was suffering from the effects of fatigue or alcohol, and these are therefore not considered to have been contributing factors to the accident. Furthermore, the Royal Gibraltar Police conducted drug and alcohol testing on the Master; the results were negative and are not deemed to have been a contributing factor.

2.4 The accident

The forward mooring station is located on the forecastle, where the two anchor and mooring winches are located.

Only two seafarers were assigned to the forward mooring party, namely the Pumpman and one Able Seaman. No officer was assigned to be in charge of the mooring station.

Shortly after the initial lines were secured, preparations began for the deployment of the spring lines. The forward spring line was to be paid out from the upper forward side of the port winch drum. It was first led forward, then redirected aft via the appropriate pedestal roller and the aft-leading fairlead, before running down to the port side main deck. It was therefore necessary for sufficient spring line to be paid out to reach main deck port side.

During these preparations, the able seamen assigned to the forward mooring station proceeded to the main deck to fasten the heaving line to the mooring line for transfer to the receiving vessel. As a result, the two forward mooring deck squad members were positioned in different locations, the other being on port mooring winch controls.

A technical inspection of the winch was carried out to verify its operational and mechanical condition, as well as its safety functionality. It was confirmed that the winch operated correctly under standard conditions; specifically, drum movement ceased immediately upon release of the control lever, in accordance with its design. The winch is designed so that it cannot remain operational without continuous manual engagement of the lever.

Inspection revealed that the spatial distance between the winch operational lever and the drum was 1.90 m. Taking this into consideration, if the winch had been operated in accordance with its design function, it would have been difficult for a person located by the drum, or at the position where the deceased was found, to be within simultaneous reach of the operational lever (Figures 13 and 14).

Fig- 13 View of the distance between the winch operating lever and location of where Pumpman was found.

Fig-14 Image to demonstrate distance to be approximately 1.90m

However, it was observed that contrary to proper procedures, the winch can be kept active by securing the lever with its safety catch. This action allows the drum to continue rotating without continuous manual activation of the lever. Figure 15.

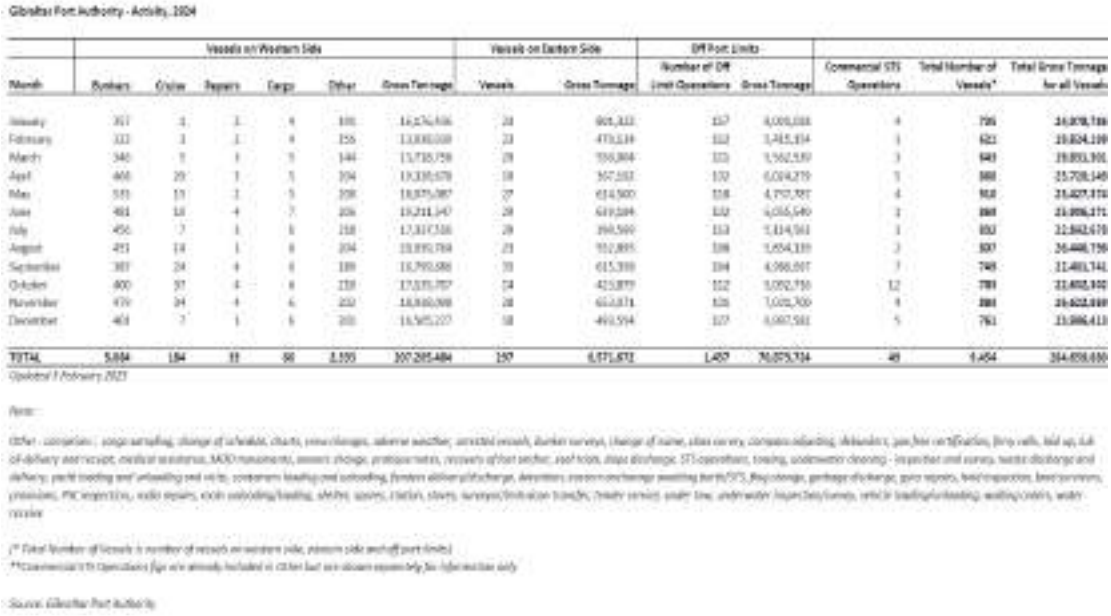
Fig15- View of lever held in position by safety catch

The deceased was discovered positioned at the aft end of the winch and beneath the winch drum. As no one witnessed the accident, it is difficult to reach a firm conclusion as to what exactly happened. The possibility of the winch remaining engaged as described in figure 15 or obstructed by another external object or device, would allow the operator to move away from the operational position.

Given that the deceased was discovered beneath the winch drum, the probable cause of the incident is considered to be the deceased becoming entangled in the rope's excess slack whilst being heaved in, this resulted in him being dragged into and under the drum. This assessment was corroborated by the Royal Gibraltar Police Scenes of Crime Officer, who observed the deceased's severed left foot entangled in the mooring line on the drum, with the torso wedged beneath it.

2.5 Normalisation of risk

Gibraltar is the largest bunkering port in the Mediterranean and its bunkering companies continue to go from strength-to-strength bunkering continues to be the main activity within the Port of Gibraltar.



Gibraltar Port Authority - Activity, 2024

	Vessels on Western Side						Vessels on Eastern Side		Off Port Limits				
Month	Bunkers	Cruise	Repairs	Cargo	Other	Gross Tonnage	Vessels	Gross Tonnage	Number of OPL Limit Operations	Gross Tonnage	Commercial STS Operations	Total Number of Vessels*	Total Gross Tonnage for all Vessels
January	357	1	1	4	101	14,274,936	28	901,333	157	4,009,088	4	795	19,978,788
February	333	3	1	4	156	13,880,009	23	470,539	102	3,445,354	1	621	19,824,199
March	340	1	1	5	144	15,730,758	29	550,804	121	3,562,530	3	643	19,893,901
April	460	20	1	5	104	19,330,678	18	367,102	132	6,024,270	1	688	25,708,148
May	535	13	1	5	108	18,975,387	27	614,500	158	4,757,397	4	918	24,407,370
June	481	18	4	7	106	19,211,347	28	619,184	132	4,055,540	1	869	23,898,171
July	456	7	1	6	158	17,317,516	28	390,560	153	5,114,561	1	852	22,862,670
August	451	14	1	6	104	19,895,784	23	552,895	186	5,654,339	2	807	26,448,756
September	387	24	4	6	189	16,790,586	33	615,399	194	4,986,997	7	749	23,483,741
October	400	37	4	6	159	17,335,757	24	423,877	112	5,092,750	12	781	23,852,940
November	470	24	4	6	202	18,840,998	28	612,671	126	7,026,700	4	884	26,602,669
December	464	7	1	6	203	16,505,227	18	490,594	127	6,067,581	5	761	23,986,413
TOTAL	5,084	184	31	66	2,155	207,295,484	297	6,771,672	1,457	70,075,734	49	9,454	314,658,630

Updated 3 February 2025

Note:

Other - companion, cargo sampling, change of schedule, charts, crew changes, adverse weather, arrested vessels, bunker surveys, change of name, class survey, container unloading, deliveries, gas free certificates, ferry calls, laid up, Lot of delivery and receipt, medical assistance, MOD movements, owners change, pratique notes, recovery of lost anchor, roof trials, ships discharge, STS operations, towing, underwater cleaning - inspection and survey, waste discharge and delivery, yacht loading and unloading and visits, containers loading and unloading, fenders deliver/discharge, deviations, exercise exchange awaiting berth/STS, flag change, garbage discharge, gyro repairs, hand inspection, hand surveyors, provisions, PSC inspections, radio repairs, stock unloading/loading, stretcher, spares, stanchions, stores, surveyors/technician transfer, theatre services, water line, underwater inspections/surveys, vehicle loading/unloading, welding/cutters, water circulate

(* Total Number of Vessels is number of vessels on western side, eastern side and off port limits)

**Commercial STS Operations figs are already included in OS but are shown separately for information only

Source: Gibraltar Port Authority

Fig – 16 – Overview of Gibraltar Port Activity Year 2024

A total of 5,084 bunker supplies took place in 2024.

As per below table MM Marine Inc. Gibraltar based fleet carried out a total of (3350) three thousand three hundred and fifty bunkering operations in the period 20 May 2024 – 20 May 2025.

	Total Supplied (MT) (Sum)	**No of Bunkering Ops (Sum)**
Grand Summary	**2.587.351**	**3.350**

These repetitive operations can become routine or normalised, potentially leading to complacency, as crews frequently perform mooring and unmooring operations. This normalisation of risk may have contributed to the unsafe practice of securing the winch in operational mode, allowing the operator to move away from the control position as suggested by the flag state inspection report, the company's internal investigation, and the findings described in Section 2.5 of this report.

2.6 Risk Assessments

The company prepared a risk assessment covering mooring, unmooring, and singling up. While the hazard of mooring equipment failure was identified, the assessment focused on ropes, messengers, stoppers, heaving lines, and mooring lines being inspected. However, it did not address the associated risks of working with mooring winches, as highlighted in COSWP and OCIMF *Effective Mooring* guidance.

2.7 Emergency Response

The immediate raising of the alarm to notify the bridge team of the accident led the Master to contact the Port Authority and request urgent medical assistance. The Master was advised by the local office that the fastest way for emergency services to reach the vessel was to proceed directly to port and berth alongside No. 3 East. Upon arrival, emergency services and authorities were already in attendance.

SECTION 3 – CONCLUSIONS

3.1 Safety issues directly contributing to the accident and have resulted in recommendations

No officer was assigned to the mooring station forward in order for the officer to maintain compliance with hours of work and rest.

The composition of the forward mooring party was not in compliance with the requirements of the mooring manual. There was therefore lack of supervision at the mooring station.

No specific risk assessment was available addressing the risks and hazards associated with working with mooring winches, as outlined in the OCIMF *Effective Mooring* guidelines.

It was established that the Master did not notify the Company that the mooring party was reduced to two seafarers instead of the three required under the Mooring System Management Plan. While this adjustment was made to maintain compliance with hours of work and rest regulations, the deviation was not brought to the Company’s attention through any of the established channels, such as Safety Committee meetings, Master’s Reviews of the SMS, or the reporting of non-conformities.

3.2 Other safety issues directly contributing to the accident

Inspection revealed that the spatial distance between the windlass operational lever and the drum was 1.90 m. Taking this into consideration, if the winch had been operated in accordance with its design function, it would have been difficult for a person located by the drum, or at the position where the deceased was found, to be within simultaneous reach of the operational lever. It is therefore possible, that the mooring winch actuator lever had been incorrectly secured in the running position by using the safety clip or other external device.

Considering the deficiency described on the Flag State Inspection report, company internal accident investigation, and the possibility of the winch remaining engaged as described in section 2.5 of this report, it may indicate that an unsafe practice of securing the windlass in an operational mode thus allowing the operator to move away from the operational position may have on occasions taken place on the ship.

The mooring winch was in all likelihood operational at the same time as the Pumpman was possibly ensuring that the mooring rope excess slack was correctly feeding and winding on to the mooring winch's drum.

At this time, he may have become entangled in the slack rope, in all likelihood by standing too close to the winch's drum subsequently resulting in being dragged in feet first under the rotating drum.

Due to repetitive nature of the work undertaken, the crew may have become complacent.

3.3 Other safety issues not directly contributing to the accident.

The Gibraltar Ambulance Service no longer maintains the dedicated marine assets, specialist equipment, or specific training protocols required for the safe sea-based transfer of paramedics to vessels at anchor or elsewhere within British Gibraltar Territorial Waters (BGTW).

For 17 years prior to 2020, there was in place a system available to any vessel in distress within BGTW to receive prompt medical attendance and professional casualty retrieval from the Gibraltar Ambulance Service

Since 2020, operational capacity has been restricted to responding to medical emergencies on vessels that are securely berthed within the port.

SECTION 4 – ACTIONS TAKEN

In response to this accident, MM Marine has undertaken the following preventive measures:

- Relevant SMS and Mooring & Lines Management Plan procedures were reviewed and found to be in order.
- A Safety Flash (01/2025, attached for reference) was circulated to the fleet on the first day. An additional Safety Meeting was conducted on board all fleet vessels, during which its contents were discussed with all officers and crew, highlighting the serious consequences arising from the incident.
- A Safety Alert (01/2025, attached for reference) was circulated to the fleet on 23rd May, and the preventive measures listed therein were analysed and discussed with all officers and crew.
- Reinforcement of training through onboard drills and supervision audits.
- All fleet deck personnel have been instructed to complete OLP Training No. 0370 – Mooring Risk Assessment and Management in July 2025.
- All fleet crew have been instructed to complete OLP Training No. 0181 – Ship-to-Ship Transfer Operations in July 2025.
- As involved parties in the incident, the Master and Chief Officer of Nisyros will undergo re-training in safe mooring practices prior to their next assignment.
- Enhanced compliance checks during mooring operations are to be performed through the end of Q3 2025.
- Unannounced mooring audits will be implemented fleet wide.
- The implementation of additional safeguards against unsafe winch operation is currently under research and consideration.
- Although fleet manning complements already exceed the Minimum Safe Manning requirements set by flag states—including duplication of certain positions (e.g., two Pumpmen)— they have undertaken a review of current manning levels in conjunction with available cabin and space capacity on each vessel. This was done to further ensure the consistent presence of a supervisor at each mooring station. As a result, and based on each vessel's operational utilisation intensity, they have decided to implement the following adjustments:
  Qingdao-type vessels: One additional 2nd Officer and one additional OS will be assigned.
  Fujian-type vessels: One additional OS will be assigned.
- The relevant incident investigation reports will be updated with any new findings and recirculated to the fleet to enhance awareness and help prevent recurrence.

- This incident will be discussed across the fleet during upcoming HSSCMs, with a focus on bridge teams and deck personnel.
- The incident, along with the investigation results and lessons learned, will be included in the agenda of the next quarterly Management Review Meeting.
- The incident has been added to the Company's Familiarization Agenda, to be discussed during pre-joining familiarisation and presented in the next in-house training session or open forum.

The Office of the Marine Accident Investigation Compliance Officer released a Safety Bulletin (No:01) in June 2025 highlighting the dangers and risks associated with mooring operations.

SECTION 5 - RECOMMENDATIONS

[Safety recommendations shall in no case create a presumption of blame or responsibility].

The Marine Accident Investigation Compliance Officer acknowledges that the company has conducted a thorough and timely internal investigation into the accident. Their efforts to identify contributing factors and implement preventative measures demonstrates a proactive commitment to safety. The actions taken, including revisions to manning, risk assessments, training, and procedural oversight, are intended to mitigate future risks and enhance the safety of mooring operations across the fleet.

MM Marine Inc is recommended to:

- Include in the company SMS a specific risk assessment addressing the risks and hazards associated with working with mooring winches, as outlined in the OCIMF *Effective Mooring* guidelines and COSWP, explicitly considering the operational and safety risks posed by winches.
- Revise manning levels to ensure that a minimum of two experienced personnel is available at each mooring station throughout operations, in addition to the Officer in Charge, to ensure compliance at all times with the Mooring System Management Plan.
- Ensure that safe mooring operations are systematically included in the agenda for all ship inspections and internal audits.
- Ensure that a toolbox meeting is conducted prior to each mooring operation to review all associated risks, hazards, and the mooring plan.
- Circulate fleet-wide safety bulletins to inform crews of the fatal accident, highlight lessons learned, outline preventative measures, and raise awareness of the importance of adhering to safe operating procedures.
- Consider modifying the winch control to prevent the safety catch being used to hold the operating lever in heaving and lowering positions and to put in place suitable guarding in way of the winch drum to prevent someone from becoming trapped in the rotating drum.
- Continue to monitor and adjust their vessels manning levels based on operational requirements, to ensure compliance at all times with Regulation 2.7 of the Maritime Labour Convention. 2006.
- Issue a circular to all vessels, reinforcing and encouraging the requirement to communicate any such deviations, through the established reporting mechanisms outlined in the ISM Code. This measure will enhance crew awareness and ensure that the Company remains fully informed to evaluate associated risks and implement appropriate corrective actions.

The Gibraltar Port Authority is recommended to:

- When carrying out unannounced visits to bunker vessels in port, also ensure that correct mooring procedures are being followed and mooring operations are conducted safely, in line with SMS requirements, COSWP, and OCIMF Effective Mooring guidelines and industry best practices. Such inspections help deter unsafe shortcuts and reduce the risk of complacency and normalisation of unsafe practices.

The Gibraltar Ambulance Service, in conjunction with the Gibraltar Health Authority, together with the Gibraltar Port Authority and in consultation with other interested parties is recommended to:

- Review the port's emergency response capabilities for emergency services to attend vessels at anchor with the aim of developing a sustainable and safe solution to restore an effective emergency medical response capability for all vessels within BGTW.

This will ensure that the port maintains effective emergency response capabilities to respond to incidents involving vessels at anchor. The ability to provide timely medical and rescue assistance is essential in mitigating the consequences of emergencies, safeguarding life, and ensuring the protection of the marine environment.

The Gibraltar Maritime Administration is recommended to:

- Routinely audit mooring operations when carrying out annual safety surveys and whilst conducting audits under the International Safety Management Code.