



INSPECTION & INVESTIGATION DIVISION

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**INDEPENDENT INVESTIGATION REPORT
INTO THE VERY SERIOUS MARINE
CASUALTY**

OF

MV “FAIRPLAY-33”

AT Mekjarvik, Randaberg, Norway

ON 02.04.2020

Flag: Antigua and Barbuda W.I.

IMO No.: 9476006 / Official No.: 3088 / Call sign: V2QG6



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OBJECTIVE

Maritime Safety Committee MSC.255(84)

CODE OF THE INTERNATIONAL STANDARDS AND RECOMMENDED PRACTICES FOR A SAFETY INVESTIGATION INTO A MARINE CASUALTY OR MARINE INCIDENT

This code recognizes that under IMO conventions each flag State has a duty to conduct an investigation into any casualty occurring to any of its ships when it judges that such an investigation may assist in determining what changes in the present regulations may be desirable or if such casualty has produced a major deleterious effect upon the environment (SOLAS, chapter I, part C, regulation 21).

The Government of Antigua and Barbuda W.I. is signatory to the major international shipping conventions. The Antigua and Barbuda Department of Marine Services and Merchant shipping (ADOMS) constitutes the flag State Administration together with the Inspection and Investigation Division (ADOMS IID), which is the marine safety investigation Authority, with the Chief Casualty Investigator (CCI).

DISCLAIMER

This report is not written with liability in mind and should not be used in court for the purpose of litigation. It endeavours to identify and analyse the relevant safety issues pertaining to the specific accident, and to make recommendations aimed for preventing reoccurrence of similar accidents in the future.

At all times the ADOMS IID Chief Casualty Investigator strives to balance the use of material that could imply adverse comments with the need to properly explain what happened, and why, in a fair and unbiased manner.

PART A – THE OCCURRENCE

1. Executive summary

On the 2nd of April 2020 MV FAIRPLAY-33, an ocean going tug with a length over all (LOA) of 48,88 m and breadth of 13,80 m was moored alongside the barge PAULA with a LOA of 100 m at the Merkjavik Kai to the north west of Stavanger close to Randaberg.

Due to the increasing swell and winds in the area, the master of MV FAIRPLAY-33, after consultation with the Chief Officer (CO) at about 20:00 local time (LT), made the decision to prepare to cast off from the barge.

During this preparation the later deceased Able Seaman (AB1) fell overboard between the tug and the alongside barge. The rescue by fellow crew members on scene proved difficult with the 2nd Officer (2O) also falling overboard.

The 2O was retrieved quickly by crew arriving on scene and was able to return to duty the next day. The AB1 was pronounced dead after having been airlifted to hospital.

2. The aftermath

Due to the accident and consequent required actions the FAIRPLAY-33 remained alongside the barge in the unfavourable conditions without further damages. Police and other officials conducted their investigation as far as possible under the then given very unsure CORONA virus induced situation. It was for the same reason not possible to conduct an on scene investigation by ADOMS Investigators, nor by the Norwegian authorities responsible, through strict implemented travel restrictions.

2.1 Fatalities and injuries

The 2O was treated for hypothermia and later returned to the vessel to take up his duties again. The AB who had fallen overboard first, could not be saved and was pronounced dead upon arrival at the local hospital.

2.2 Impact on the surrounding environment

No impact to the surrounding environment was found.

2.3 Extent of the damage

There were no damages reported.



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PART B – GENERAL

1. Regulatory requirements

Other than the SOLAS Part C, Regulation 21 regulatory requirement and the Casualty Investigation Code Part II Chapter 6 Rule 6.1 to investigate into every very serious marine casualty (IMO resolution MSC.255(84) the Antigua and Barbuda W.I. Merchant Shipping Act 2006 (as amended), Part X Chapter 252 demands an investigation where any of the following casualties occur: (b) a loss of life or serious injury to any person, caused by fire on board, or by any accident to a ship or ship's boat, or by any accident occurring on board a ship or ship's boat; or any damage caused by a ship. Furthermore, the Antigua and Barbuda flag State Administration is guided by Chapter 17 of the Casualty Investigation Code where the objective is defined to investigate into an even not very serious marine casualty (e.g. near-miss incidents) if it is considered likely that the investigation will provide information that can be used to prevent marine casualties and incidents in the future as lesson to learn.

2. Assessment of the occurrence

With the aim to identify lessons to learn the accident was assessed in the light of what evidence could be collected and the consequent restructuring of the run of events leading to the very serious marine accident. The accident was assessed mainly with information provided by the ship managers FAIRPLAY Towage. By the given difficulties concerning travel and thus deployment of on scene investigators, no investigation on board was conducted. It was by the information available assessed that the access from the tug to the barge was unsafe and no efforts were undertaken to reduce the risk of personnel falling into the water between the tug and barge.

3. Instructions

Basis for the investigation into this very serious marine casualty are stipulated in the Antigua & Barbuda Merchant Shipping Act 2006 (as amended).

Captain Nils Beyersdorff located with ADOMS Inspection and Investigation Division (ADOMS IID) in Elsfleth, Germany, vested with the powers as per the Antigua and Barbuda Shipping Act 2006 (as amended) Part II 6.2 is the Chief Casualty Investigator (CCI) of the flag State marine safety investigation Authority. In this commission he initiated a full and separate investigation into this very serious marine casualty. Relevant notifications as per Chapters 5 and 20 of the Casualty Code have been distributed accordingly.

PART C – FACTUAL INFORMATION

1. The M.V. “FAIRPLAY-33”



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1.1 Ship particulars

Name of Vessel	FAIRPLAY-33
Company (ISM Code 1.2)	Fairplay Schleppdampfschiffs-Reederei Richard Borchard GmbH
Flag State	Antigua & Barbuda
Port of Registry	St. John's
IMO Number	9476006
Type of Vessel	Motor Tug
Classification Society	DNV 100 A5 Tug Anchor Handling and Salvage Tug DG MC AUT FF(1)
Year built	2009
Ship Yard	Daewoo Mangalia Heavy Industries
Loa (Length over all)	48.88 m
Boa (Breadth over all)	13.8 m
Deadweight	1000
Summer Draft	6.2 m
Gross Tonnage	1374
Net Tonnage	412
Main Engine	2 x MAN STX 6L32/40
Engine Power /Speed	8.160 HP (6.000 KW) / 13,8 kn
Crew as per MSM Document	8
Crew Actual	11
Document of Compliance (Date of Issue)	04.07.2018
Safety Management Cert. (Date of Issue)	04.07.2018
Trading Area	International
Last PSC Inspection	26.09.2019
Any deficiencies noted?	no
Any detentions noted?	no



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1.2 Crew particulars

MV FAIRPLAY-33 was in compliance with the issued A&B Safe Manning Document and above the required number of crew. The crew was made up of Captain, Chief Officer, 2nd Officer, 3rd Officer and 3 Able Seaman on deck. The technical department was made up of a Chief Engineer, 2nd Engineer, 3rd Engineer and Oiler as engine rating. The crew complementary included a certified cook.

All crew originated from Europe and included German, Dutch and Polish nationals. The official working language is English.

All crew held the required certificates of competency for their specific roles and from the available information, up to the deceased AB, had good experience in the operational fields MV FAIRPLAY-33 operated in.

From the documented hours of rest it was concluded that all crew had worked and rested within the set limitations, which could be backed up by the good level of manning given, with sufficient relievers for required watch keeping and day to day operation.

The deceased AB had worked his routine Deck Watch on the day of the tragic accident, having just finished his rest period when called upon to prepare the shifting.

1.3 The voyage pattern

MV FAIRPLAY-33 was selected by Heerema Marine Contractors Netherlands to perform the transport of a PAU Mercury Removal Module that was to be installed on a Shearwater Field platform for Shell UK Limited. The module was, secured on the barge PAULA, to be towed to the Amoy Fjord near to the city of Stavanger, Norway. Here the PAU module was to be transferred to the MV SLEIPNIR, a semi-submersible crane vessel active in the North Sea, which again was to transfer the module to the platform where it was to be installed.

As the time window narrowed down to three days for the voyage due to deteriorating weather conditions, it was decided to commence transit directly after the cargo was secured on the barge and necessary handover surveys were executed. It was also decided that the transfer of the module to the MV SLEIPNIR would be done in the Amoy Fjord and not at sea next to the platform at the installation site as this would be safer for the transfer operation due to calmer seas with the expected weather in the area. This decision and the fact that the MV SLEIPNIR would not be directly available upon arrival made all parties agree upon mooring the barge and towing vessel at Mekjarvik, Norway in the Amoy Fjord.



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1.4 The cargo

MV FAIRPLAY-33 was tasked to tow a 100 m long barge with a cargo of one PAU module to Norway. The PAU unit was well secured on the deck of the barge PAULA.

MV FAIRPLAY-33 connected to the barge via a towing wire attached to the bridle of the barge.

2. The environmental condition

Upon arrival in Mekjarvik on the 01.04.2021 the wind was from a westerly direction at about 4 Bft. On the morning of the 02.04.2021 at 08:00 LT the wind had turned to a more south westerly direction and increase to an average of 5 to 6 Bft. Considering the position alongside of the barge Paula and MV FAIRPLAY-33, this caused the tug take a position away from the barges side by 3-4 m. This was too far to be able to board the barge from the tug which made a checking of mooring lines from shore necessary which was then requested.

At 10:00 LT the wind turned to the North to NNW with an increase to 7 to 8 Bft, creating a situation in which the tug was being pushed against the barge. The situation apparently worsened over the day and the movement of both barge and tug increased, also worsening the contact intensity between the two.

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PART D – NARRATIVE

On the 2nd of April 2020 MV FAIRPLAY-33, an ocean going tug, built for deep sea and long distances, with a length over all (LOA) of 48,88 m and breadth of 13,80 m, was moored alongside the barge PAULA with a LOA of 100 m which was again fast alongside the Merkjavik Kai to the north west of Stavanger close to Randaberg.

Due to the increasing swell and winds in the area, the master of FAIRPLAY-33 considered disconnecting the tug from the barge to lower the risk of damages to the vessel and barge. With 2-3 m of swell and north westerly winds of 6-7 Bft the decision was made at about 20:00 local time (LT) to evaluate the possibility to prepare to cast off from the barge.



Berthing situation

The captain and chief officer (CO) discussed the intended operation in a tool box meeting on the bridge of FAIRPLAY-33. The necessity to disconnect the wire between the tug and barge to be able to cast off, lead to the CO first having to check if the barges bridle generator could be started. He prepared himself with the 2nd officer (2O) and one of the able seamen (AB 1) in the change locker.

At about 20:20 LT the CO stepped over from the tug to the alongside barge to check the generator to run the bridle. The CO was not able to start the generator suspecting that the starter battery was low and informed the captain via VHF handheld radio. This prompted the 2nd Engineer (2E) to get an ammeter for the CO to be able to check the battery.

Due to the increasing darkness, the CO also requested a torch via VHF. The master instructed the 2O, who was positioned on the port side tween deck of the tug, at the position of easiest access to the barge, to give the CO a torch. The AB was instructed by the 2O to go to the bridge and get a torch.

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Shortly afterward the AB returned with a torch and the 2O informed the captain that the AB would hand over the torch to the CO. Turning around back into the direction of the barge the 2O did not see the AB anymore and went to look overboard where he spotted the AB in the water between the heavily moving barge and tug. Immediately the 2O informed over VHF by shouting Man Over Board which the CO also heard, prompting him to also rush back towards the barge's side. The 2O immediately after informing attempted to rescue the AB from the water but did not succeed at first, due to the heavy movement of both barge and tug in the swell. The CO jumped back on board the tug intending to assist the 2O who had already stepped over the tugs side, standing on the wall rail trying to grasp the AB.

An instant later the 2O also fell into the water between the tug and barge prompting the just arrived CO to shout out Man Over Board.

With assistance of all crew the 2O was retrieved first, holding on to one of the large fenders and a short moment later the AB was retrieved too having ceased holding himself above water a moment before.

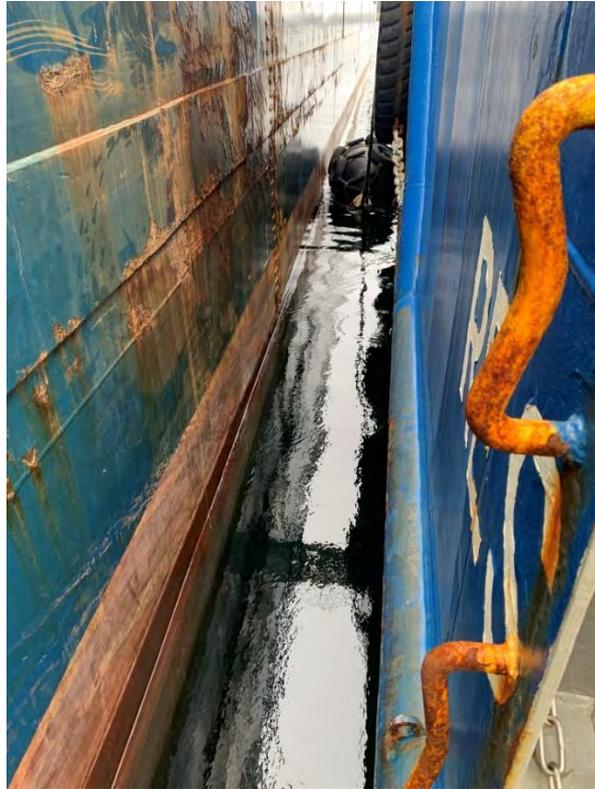


Position the 2O was retrieved from the water

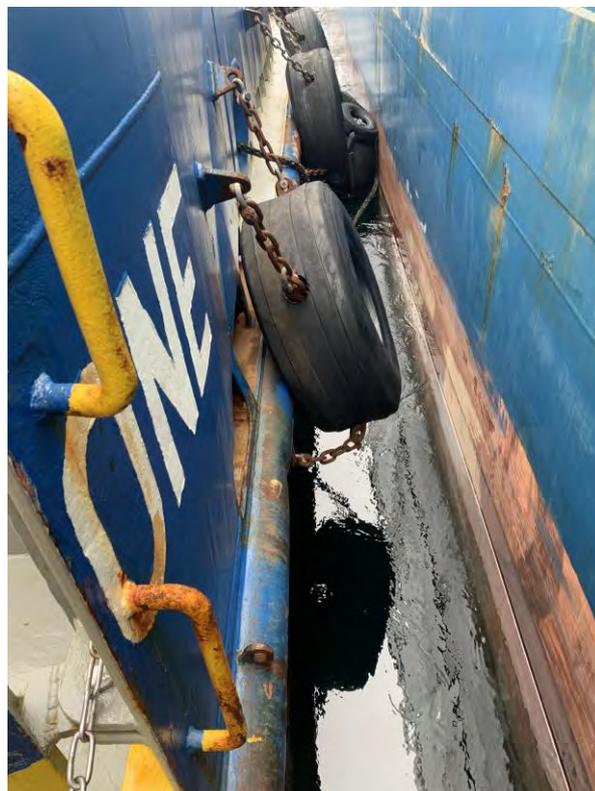
The unconscious AB was laid on deck and the CO immediately after checking for signs of life commenced CPR until the shore side medical team alarmed by the captain arrived on scene and took over from the crew and prepared the medical evacuation by helicopter. The AB was airlifted to hospital where he was pronounced dead upon arrival.

The 2O was also brought to hospital and treated for hypothermia. He could return to the vessel and continue his duty the next day.

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Space between tug and barge looking forward



Position looking aft

PART E – ANALYSIS AND COMMENTS

1. The aim

The purpose of this investigation is to determine the circumstances of the accident and safety factors leading to the death of the seafarer. Further it is the intention to be able to make recommendations in order to prevent similar accidents in the future.

2. Causal factor

Upon decision by the master to release the tug from the moored barge a toolbox meeting was held. As per later information and statements made it became clear that the preparation meeting focused on the task at hand and what was to be done. No focus was laid on how the tasks were to be executed safely and what safety measures were to be implemented to reduce the accident risks.

AB1 together with the CO and 2O were tasked to prepare the alongside barge to be disconnected from FAIRPLAY-33. The tug and barge were attached by lines but no means of boarding were brought out. This prompted the CO to jump from the tug onto the barge without any safety measures applied, indicating that this was regarded as a routine action on FAIRPLAY-33.



Accident location

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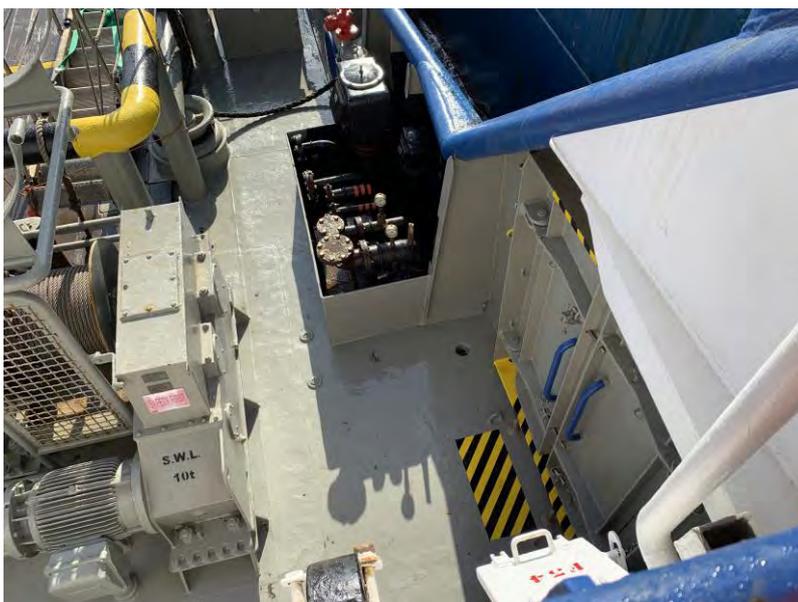
The 2O and AB1 remained on the tug's side at the position the CO had stepped over. The communication with the vessel's master on the bridge was conducted via handheld VHF by the 2O with the AB1 instructed as per order to fetch the equipment the CO required.

As per later statements taken, the AB1 was never instructed to board the barge as the intention was to handover from the side of the tug to the CO on the barge's side. The 2O was communicating via VHF with the master, turning away from the wind and ship's side with the sloshing water. Upon turning back, the AB1 was out of sight and in the water between tug and barge.

It could not be assessed in detail what the intention of the AB1 was, prompting him to step onto the ship's side. It is possible that he intended to take position to be able to hand over the requested equipment to the CO, who was at that point still at the bridge generator of the barge, or even step over to the barge to join the CO and hand over the torch.

The position on the edge of the vessel, without a harness to secure himself and not having informed the 2O before, created a high risk of falling into the water, which in consequence happened.

Further the AB1 was wearing a life jacket described as working life jacket. These are not part of the safety equipment of the vessel. The life jacket worn was not equipped with a crotch strap to prevent the jacket from moving out of position upwards towards the head, thus not giving the intended support, especially once the AB1 lost consciousness.



Rescue Zone on port side

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PART F – FINDINGS

1. Safety issues

- Stepping over or jumping from tug to barge or vice versa is apparently seen as a routine task. No means to safely cross were established to reduce risk of falling in the water between tug and barge.
- Conducted toolbox meeting before commencing intended task of releasing the barge from the tug did not focus in any way on safety risks and their mitigation but only on the operation as such.
- Used work vest (floatation device) did not have a crotch strap that could have prevented the inflated vest from moving position upwards away from the intended position to keep the person at the right angle and the head above water.
- No individual securing by harness/line to the vessel was established before stepping on the ship's side to hand over the equipment as intended to the CO on the barge.

2. Lesson to learn

- Apparent routine tasks require prior preparation also with a focus on safety and risk mitigation. In this case the conducted toolbox meeting should have included a risk assessment and consequent safety measures.
- Life jackets and/or floatation devices should be equipped with a crotch strap to increase the tight fit and prevent a change of position in the water that could lead to a loss of effectiveness.
- In order to allow safe transfer from ship to barge or also ashore, a gangway or other means of transfer should be established. Not providing safe means of transfer and excepting the risks of just having to step over, especially with the in this case movement of barge and tug involved, should not be accepted as a routine task.

3. Recommendations

The company is recommended to establish clear procedures in relation to transfer of persons or equipment between vessels and/or shore. These procedures should include at sea and in port situations.

Vessels should be equipped with means of safe transfer, including fitting gangways and/or other transfer means in order to prevent unnecessary risks to personnel when executing appointed tasks.



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It is recommended to establish a situation when alongside a barge in port, which allows the disconnection of vessel and barge by own means of the vessel without the need to board the barge and/or use barge equipment like the bridle winch generator. This would allow the vessel to disconnect quickly without risk to personnel in an emergency or near emergency situation.

Elsfleth, 02 May 2022

Nils Beyersdorff
Chief Casualty Investigator



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PART G – ATTACHMENTS

Addresses and contacts

Marine Safety Investigation Authority
Antigua and Barbuda W.I. Flag State Administration

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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

2E	Second Engineer
2O	Second Officer
AB	Able Seaman
Bft	Beaufort
CCI	Chief Casualty Investigator
CO	Chief Officer
CPR	Cardiopulmonary resuscitation
IMO	International Maritime Organization
ISM	International Safety Management
LOA	Length over all
LT	Local time
MSM	Minimum Safe Manning
NNW	North-northwest
SOLAS	International Convention for Safety of Life at Sea
VHF	Very high frequency