



INSPECTION & INVESTIGATION DIVISION

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

OF

MV “FRANCOP”

AT Dublin, Ireland

ON 14th of November 2018

Flag: Antigua and Barbuda W.I.

IMO No.: 9277412 / Call sign: V2DJ5



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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

MV FRANCOP, a typical container feeder vessel, was moored alongside at MTL Terminal, South Bank, Dublin Port, Ireland, busy with standard cargo operations.

The crew was monitoring the loading on deck with a shore contracted stevedore operating the crane on the pier. At one point during the container loading operations it was noticed that a twistlock was missing at one bottom corner between a stack of four containers high and the deck fitting. This was reported to the Chief Officer who was on duty at the time. The Chief Officer, after some discussion, instructed the AB (able seaman) on duty to place a twistlock in the initially intended position to secure the container with the vessel's fixture.

The AB arranged with the stevedore foreman that the stack of 4 containers was lifted by the shore crane to place the twistlock. During the lifting the suspended stack of containers swung towards the AB pushing him against the next neighbouring stack to the aft. The AB was consequently severely injured and the containers were immediately lifted clear. At this point the lowest container of the suspended stack of four broke loose and fell on the already injured AB. The AB consequently succumbed to his injuries directly on deck and the local emergency services were not able to assist in any way.

2. The aftermath

After the accident the fatally injured crew member was brought ashore and the accident scene was for the moment left for the further investigation to proceed.

2.1 Fatalities and injuries

The fatally injured crew member of MV FRANCOP was the only person directly affected by the tragic accident. No further involved were injured and the accident scene was later secured and the cargo re-stowed.



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2.2 Impact on the surrounding environment

There was no reported direct impact to the environment.

2.3 Extent of the damage

The actual damage to the vessel or its equipment can be described as minor and superficial.



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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 to having involved the shore and ship side personnel who acted without following their specific safe working procedures provided by the relevant safety systems.



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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.

An on scene investigator, vested with the rights of a Power of Attorney, commenced investigations at the earliest practical opportunity on the 14th of November 2018.

While being in process of acquiring evidence, efforts were successfully applied to liaise with all interested parties involved on scene.

PART C – FACTUAL INFORMATION

1. The M.V. “FRANCOP”



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1.1 Ship particulars

Name of Vessel	MV FRANCOPI
Company (ISM Code 1.2)	Reederei Bartels, Am Bahnhof 7, D-21376 Gödenstorf
Flag State	Antigua & Barbuda
Port of Registry	St. John`s
IMO Number	9277412
Type of Vessel	Container Feeder Vessel
Classification Society	DNVGL
Year built	2003
Ship Yard	J.J. Sietas Germany
Loa (Length over all)	137.5 m
Boa (Breadth over all)	21.3 m
Deadweight	8620
Summer Draft	7.466m
Gross Tonnage	7519
Net Tonnage	3570
Main Engine	Caterpillar Motoren GmbH & Co KG
Engine Power /Speed	7950 kW/19 kts max
Crew as per MSM Cert.	11
Crew Actual	13
Document of Compliance (Date of Issue)	24.03.2017
Safety Management Cert. (Date of Issue)	
Trading Area	North and Irish Sea



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1.2 Crew particulars

MV FRANCOOP was manned by a multinational crew of 13 members comprising of Filipino, Ukrainian, Romanian and Polish nationals.

The vessel's master from Poland, joined the vessel about 6 weeks prior to the accident. The Master held an Antigua & Barbuda seaman's book, containing all required endorsement to his national certificates which he also carried on board and could be presented during the investigation on scene.

All other crew were also fully certified as per their designated duties on board, verified through the available documentation presented to the on scene investigator and later reconfirmed through the ADOMS STCW department.

The deceased was a fully qualified deck rating with navigational watch keeping qualification (STCW II/5 as stated on the Minimum Safe Manning Document requirements). He was the only Rating deck ranked as an AB (able seaman) on the crew list from the day of the accident. This confirming his stated experience and training in relation to the designated duties.

1.3 The voyage pattern

MV FRANCOOP was employed on a feeder service line between multiple ports in the Irish and North Sea area. Port stays can be described as short, limited to the time of cargo operations and usual vessel supplying. The last port of call prior to arriving in Dublin was Rotterdam, Netherlands.

1.4 The cargo

MV FRANCOOP was laden with a multitude of different sized containers with diverse contents stowed as per prior received stowage plan. The nature of cargo contents was ascertained not to have influenced the accident but the containers and their stowage as such played a deciding role.

2. The environmental condition

The conditions can be described as calm with overcast skies but no rain or mentionable wind. Possible weather influences on the accident could not be identified as the vessel was stated to have laid safely alongside. The accident took place at 09:15 UTC during daylight after the vessel had performed cargo operations over night.

PART D – NARRATIVE

1. MV FRAN COP, fatal accident during container stack lift

Arriving from sea after passing the English Channel at the Irish port of Dublin, MV FRAN COP went alongside at the MTL Terminal on the 13th of November 2018 and commenced cargo operations on the same evening.

The crew was divided into 2 shifts to monitor and assist with the cargo operations including the lashing of the containers prior to departure. Prior to being loaded on board the crew was tasked with fitting the twistlocks to each container on the pier side for them to be locked and secured once in position on deck.

The operations were conducted as planned during the night until the next morning and the vessel's Chief Officer and the later fatally injured Rating Deck (AB) took over the cargo watch shift in the morning. The AB came on deck at about 08:00 UTC and noticed a missing twistlock on the inboard aft side of the bottom container on deck on starboard side. The stack was already completely stowed 4 containers high, partly with standard semi-automatic twistlocks securing them to each other.

The AB immediately reported the missing bottom corner twistlock to the vessel's Chief Officer on duty who was working in the ship's office. The Chief Officer apparently noted the issue at hand and instructed the AB to apply extra lashing bars to the lower part of the container stack to make good for the missing twistlock. The AB was, as per later statement by the Chief Officer, not in concurrence with the solution ordered by the Chief Officer and insisted that a twistlock be installed as was originally intended and common practice in line with the cargo securing manual of MV FRAN COP. The vessel's Chief Officer answered the AB to "fix it" and was apparently not further interested in what the issue was and how further proceeding was decided and then executed.

The AB approached the shore stevedore foreman and they, on short hand, agreed to let the shore crane minimally lift the stack of 4 containers at once for the AB to place a twistlock at the missing position. The AB then instructed his colleague, a Deck OS (ordinary seaman) to unlock the 3 twistlocks on the bottom of the stack container and positioned himself on the platform between the aft starboard stack and the to be lifted stack one row forward. The shore crane was instructed to position the lifting spreader at the top container to be attached accordingly. At this point neither the vessel's Master nor the Chief Officer were directly involved or present on scene.

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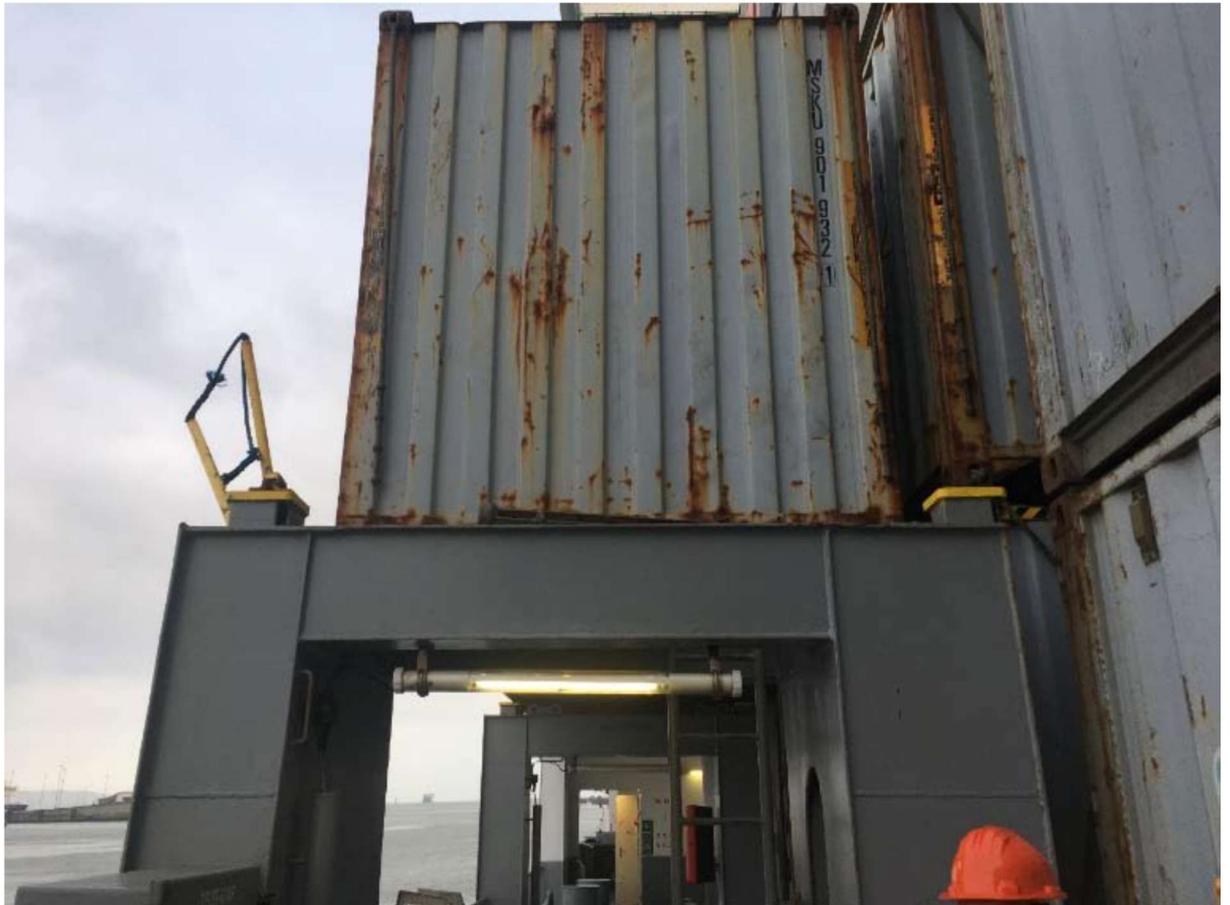
Upon go ahead given by the AB via handheld radio to the crewmember ashore next to the stevedore foreman, who in turn instructed the shore contracted crane operator, the container stack was lifted slightly from its position. The AB tried to apply the twistlock but failed as the space given by the lift was not yet sufficient. This prompted the AB to ask for further lifting by the crane which was duly executed. Through the increased lift and achieved space the container freed itself from the before still restraining other three twistlocks and as a result swung toward the AB, pushing him against the container behind him with a strong moment. The OS standing under the AB's position immediately informed the shore side colleague that lifting is to be stopped and noticed the AB was still held between the suspended container stack and the fixed stack behind, bleeding from the mouth.

Lifting was immediately stopped, but as direct reaction and to free his colleague the OS ordered the crane to lift and release the injured AB. Upon moving the stack and freeing the AB the connections on the top of the bottom container failed, causing it to crash down onto the AB lying on the platform after having already been severely injured.



MV FRANCOP aft starboard side showing suspended stack and detached, crashed down bottom container (Taken on scene directly after accident)

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Position of AB looking aft onto platform and adjacent most astern stowed container on starboard side (taken on scene)

During the on scene investigation it was found that between the containers in tier position 84 and 86 (lowest and the above container of the stack of 4) the forward seaside corner position was only secured by a midlock, which was found to have broken, most probably when the stack of containers was lifted with the intention to free the later deceased AB.

Immediately after realising the tragic events, the shore emergency services were alerted and arrived shortly after. Sadly they were also not able to save the AB and could only release him from under the fallen container after which he was eventually taken ashore by the local coroner.

PART E – ANALYSIS AND COMMENTS

1. The aim

The purpose of the 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

The investigation on scene and later analysis of documents and statements collected, make the non-adherence to provided and implemented safety and safe working procedures the main causal factor.

The later fatally injured crew member, working together with appointed shore stevedores noticed a missing container securing appliance, the semi-automatic twist lock (SATL), on one corner of the lowest container of a stack of four on the traversing platform over the starboard side walkway. As the twistlocks were put in position on the pier by the appointed vessel's crew members, this was in simple terms regarded as a problem caused by the vessel. Showing due diligence and good understanding of safe stowage the later deceased AB immediately informed his superior (Chief Officer), in charge of the vessel's cargo operations and safe stowage, of the missing securing link between the vessel's structure and the container stack. Possibly due to the almost finished cargo operations the Chief Officer was reluctant to remove the not correctly stowed container stack and ordered the AB to secure the container at the base via application of lashing bars. The AB, by his own evaluation of the situation argued that the missing twistlock should be inserted to achieve the actually intended setup, also in accordance with the vessel's cargo securing manual. The Chief Officer was, according to later taken statement, not willing to further discuss or assess the problem and replied to the AB to "fix it".

According to the vessel's safety management system the situation can be described as out of the normal and a risk assessment, at a minimum by assessment at the direct location should have been conducted. This would have called for an exchange with the shore supervising stevedore and the Chief Officer to coordinate a safe and effective solution. Due to the possible time constraints and finishing phase the supervision of planning and execution was left to the AB himself who without any effort or great



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discussion was able to make the shore side cargo handling responsible agree to the cutting corners solution.

Taking into account industry safety practice and related standards (e.g. OSHA, US Occupational Safety and Health Administration) associated with cargo handling operations, in this case containerized cargo, a lifting of a vertical stack of 4 laden containers is not safe and in such case not permitted.

The only in some cases considered safe vertical lift of a stack of freight containers is a lift of two **empty** containers under specifically taken measures to reduce the risks involved.

These measures include but are not limited to:

- Inspection of containers for any visible defects
- Verification that both containers are empty and correctly marked
- The used lifting equipment functions as intended
- Area of lift are clear of personnel

In the case of the accident on board MV FRANCOPI the situation was in stark contrast to any given safety procedures concerning VTL (vertical tandem lifting).

If equipment is used to lift cargo there is a difference made between the “lifting appliance” and “loose gear”. The spreader used to connect the crane to the container is considered as part of the “lifting appliance” whereas the SATL used to connect the spreader to the container are defined as “loose gear”, being subject to different testing and inspection regimes (ILO Convention 152).

This then in consequence means if in any VTL a lower container is lifted by the above, this would make the latter the lifting appliance and demand that the utilized SATL and the container are inspected and tested as required in the “lifting appliance” case. This would in practice not be feasible or even possible to do.

In the case of the MV FRANCOPI it can thus be surely said that the VTL conducted to allow the missing SATL to be inserted was contrary to any industry practice and given material intended use and their safe working loads.

PART F – FINDINGS

1. Safety issues

The non-abidance to standard safety procedures and given industry practices. In order to save time a short cut solution was agreed.

The lack of supervision through responsible senior ship staff on site to ensure safe operations using given safety management tools such as risk assessment and correct task execution with required communication with all involved persons from the ship and shore.

The use of a less strong connecting device (midlock) on one outside corner to secure the bottom container with the above, in contrary to all other connections between the stack of 4 containers where Semi-Automatic Twist Locks were used. The midlock does in practice not securely connect containers but only holds them in position.

2. Lesson to learn

Cutting corners and thereby not staying in line with set safety precautions can lead to very serious accidents causing severe injury or even death.

If situations are out of the ordinary routine operational limits, the responsible individuals or parties should prior to execution assess the situation, by e.g. a risk assessment, to agree on a well prepared and safe solution.

Important to achieve a high level of safety, also during routine operations, is the supervision by responsible senior staff. In this case, including vessel crew as well as shore side contracted workers tasked with the loading of the vessel. This also implies that the responsible individuals communicate sufficiently and in cases of out of the ordinary situation, agree on the to be applied solution as per their areas of responsibilities.



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3. Recommendations

The company of MV FRANCOOP, the shipping company Reederei Bartels, is recommended to have a procedure in place to allow the parties involved in the cargo operations to, before commencing, clearly state the responsibilities of each party and thus agree on the roles to be assumed, possibly also including a tool box meeting. This especially applies to the cargo preparation ashore, prior to the lift on board, and the ways of communication, by voice, radio or hand signalling.

Further, the company is recommended to ensure that responsible officers and also ratings are aware of their duties in regard to the supervision of operations, especially those out of the ordinary routine tasks. This may be strengthened by leadership training and also communicating to staff that decisions, especially concerning safety, that may delay operations, are acceptable and fully supported by the company.

Elsfleth, 09 November, 2021

Nils Beyersdorff
Chief Casualty Investigator



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PART G – ATTACHMENTS

1. Addresses and contacts

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

ADOMS IID

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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

IMO	International Maritime Organization
CCI	Chief Casualty Investigator
AB	Able Seaman
OS	Ordinary Seaman
SOLAS	International Convention for the Safety of Life at Sea
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
UTC	Coordinated Universal Time
SATL	Semi-Automatic Twistlock
OSHA	US Occupational Safety and Health Administration
VTL	Vertical Tandem Lifting