

INVESTIGATION REPORT MT CANDY



2/7/19

Fire during STS at Kerch straits OPL

Prepared in accordance to the authorization by Tanzanian Flag Administration (Zanzibar Maritime Authority) for further submission to the IMO



Investigation report MT Candy

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SHIP DETAILS MT «CANDY»

Name: CANDY Ex-names: VENICE, GREEN ENERGY, OCEAN PRIMUS
IMO: 9005479 Type: GAS CARRIER Built: 1992 Builder: RICHARD DUNSTON, UK
Flag: TANZANIA Port of registry: ZANZIBAR Call sign: 5IM923
GRT: 3693 NRT: 1144 Length: 90,90 m Breadth: 15,00 m Depth: 7,80 m
Propulsion: One Diesel Engine MAK 6M 551, KRUPP of 3450 kW

Registered owners: Milano Shipping Ltd

Operating company: Milano Shipping Ltd c/o Evliya Celebi Mah. Mehmet Akif Sok. 6, Tuzla, Istanbul – Turkey

In accordance to the requirements of MTA Act 5 of 2006 Clause 57 the vessel is covered by P&I insurance by “Arsenal Insurance Company” located in Moscow, Russia.

NOTE: THE RELEVANT INSURANCE CERTIFICATE IS ATTACHED TO THIS REPORT.

Remarks: the vessel reported as seaworthy and in appropriate condition, passed PSC inspections on 13/08/2018 and 06/01/2018 under Paris MOU without detentions. Class status have no outstanding recommendations.

SHIP DETAILS MT «MAESTRO»

Name: MAESTRO Ex-names: GREEN LIGHT
IMO: 8810700 Type: GAS CARRIER Built: 1990 Builder: HYUNDAI, KOREA
Flag: TANZANIA Port of registry: ZANZIBAR Call sign: 5IM922
GRT: 4086 NRT: 1226 Length: 91,82 m Breadth: 16,20 m Depth: 10,30 m

Propulsion: One Diesel Engine MAK 6M 551, KRUPP of 3310 kW

Registered owners: Maestro Shipping Ltd

Operating company: Maestro Shipping Ltd c/o Necip Fazil Mah., 19 Mayıs Cad., Kubra Sok. B-7, Eksioglu Evrense 1 Sitesi, Umraniye, Istanbul – Turkey

In accordance to the requirements of MTA Act 5 of 2006 Clause 57 the vessel is covered by P&I insurance by “Arsenal Insurance Company” located in Moscow, Russia.

NOTE: THE RELEVANT INSURANCE CERTIFICATE IS ATTACHED TO THIS REPORT.

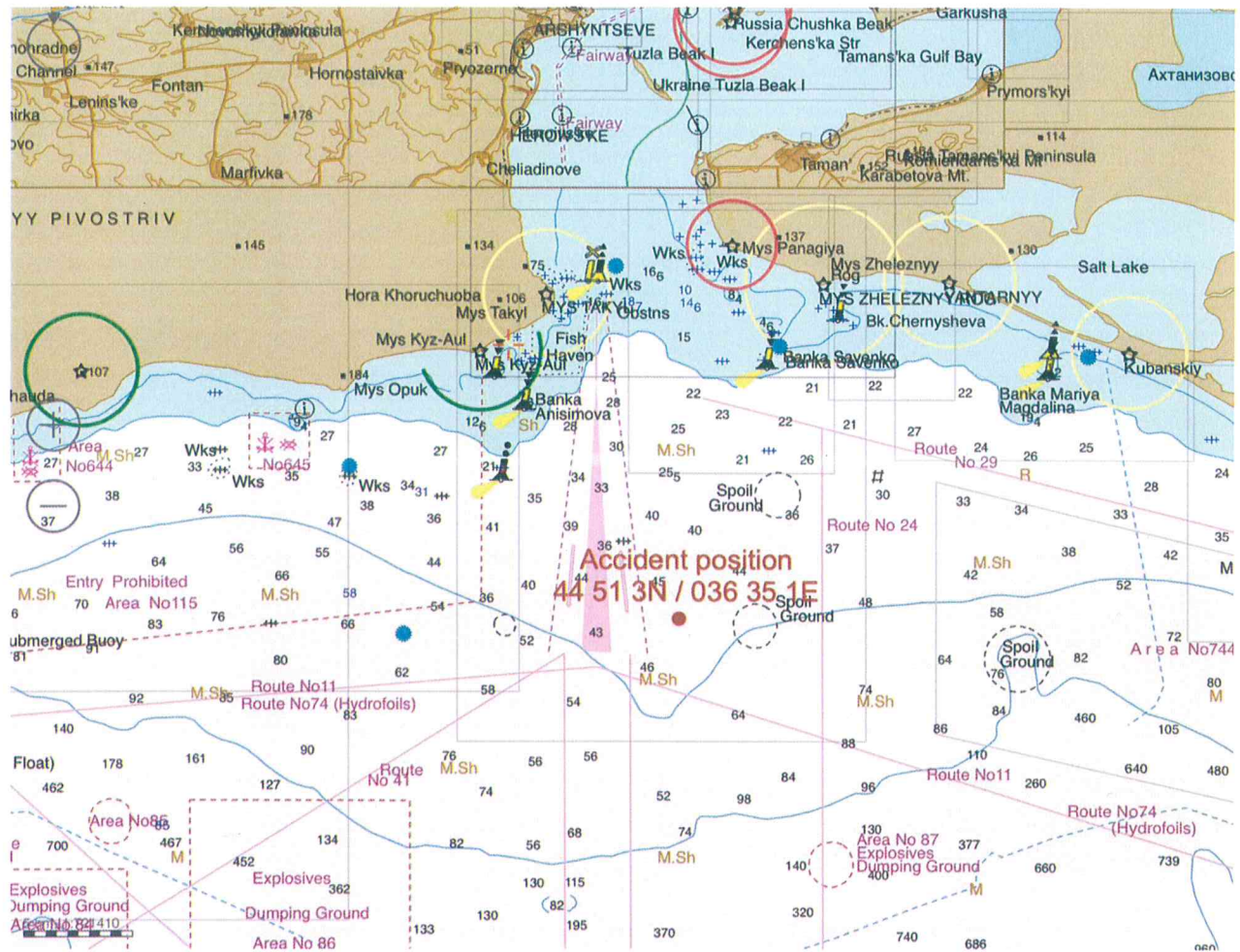
Remarks: the vessel reported as seaworthy and in appropriate condition, passed PSC inspections on 05/10/2018 and 04/03/2018 under Paris MOU without detentions and on 14/06/2018 under Mediterranean PSC without detention.



LOCATION OF ACCIDENT

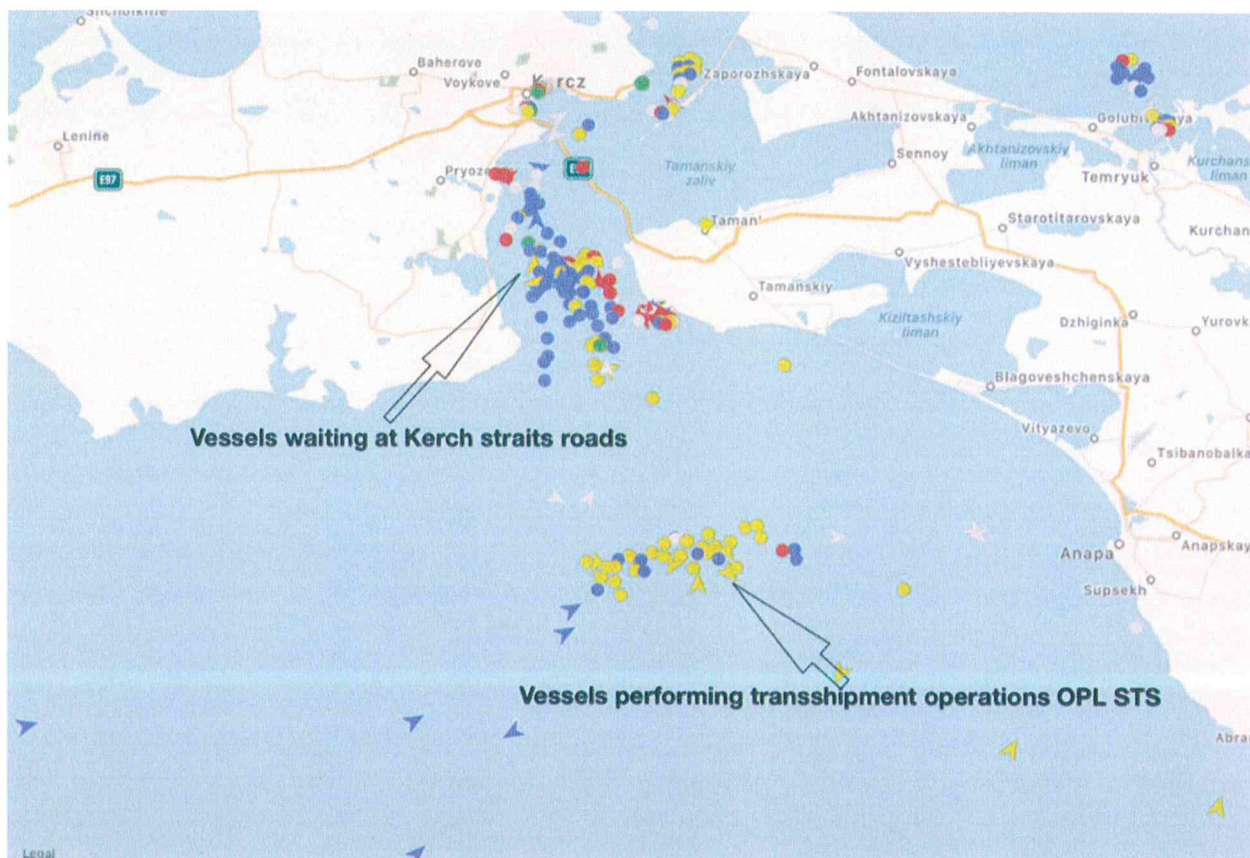
Coordinates of the vessel at the time of accident: 44 51 3N / 036 35 1E.

NOTE: THE POSITION OF THE ACCIDENT IS COLLECTED FROM THE VHF RECORDINGS WITH MRCC DURING NOTIFICATION OF THE ACCIDENT.



The accident area located outside 12 miles zone south from Kerch straits. This area is used for the STS operations and transshipment of both bulk and liquid cargoes from various river-sea type vessels coming from shallow draft ports of Azov Sea (namely: Rostov, Azov, Yeisk, Taganrog and Temryuk) and from inner waters of Russian Federation onto the ocean-going bulk carriers and tankers. The transshipment operations for the dry cargo vessels are mainly organized and carried out by the specialized company owing a fleet of floating cranes, tugs, barges and craned bulk carriers. The tankers fleet is usually doing STS operations by themselves. Since the cargo handling is carried out at the OPL beyond the Russian territorial waters there is no government control imposed at the STS operations as well as no customs, health and/or port authorities are involved.

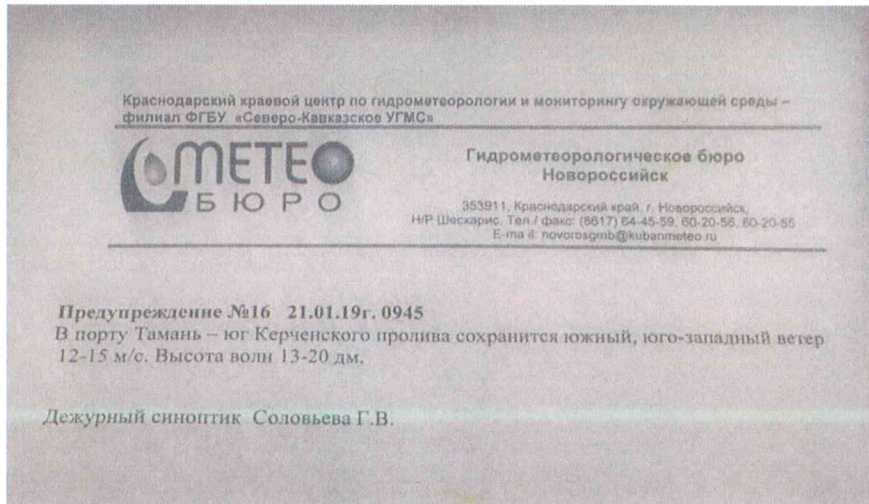




WEATHER CONDITIONS DURING ACCIDENT (ON 21/01/2019)

The weather in the area reported as moderate, partially cloudy, wind S-SW 12-15 m/s and waves 1,3 - 2,0 meters. Air temperature about 9°C, water temperature about 3°C.

The weather report of port Taman and southern Kerch dated 21/01/2019:



The NAVTEX message stated below:

=====
2019-01-21 18:08:37 (LV) AREA: A
Receiver Nr.: 1 (LV)

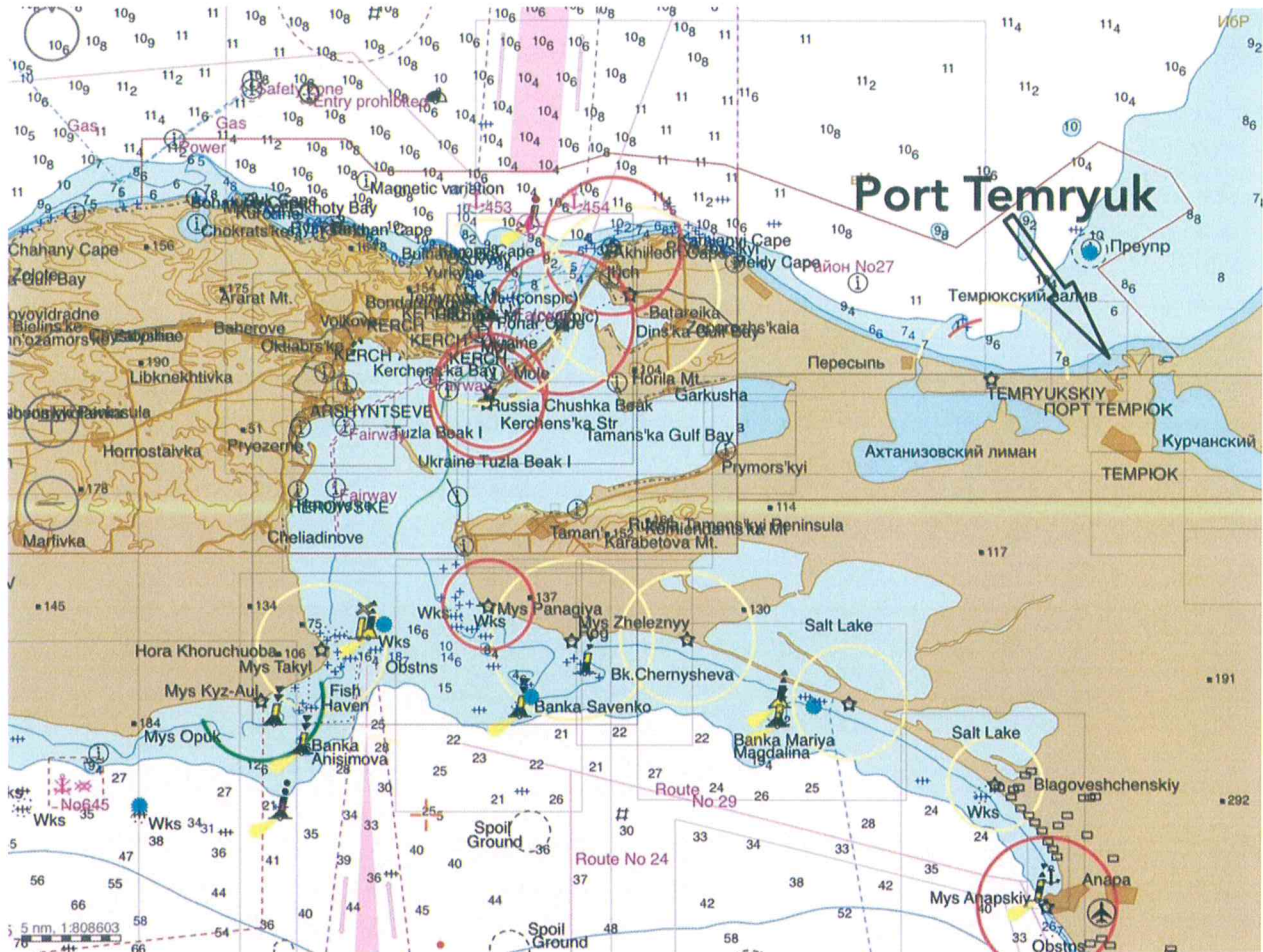
ZCZC AB_E_
QRQRT UTC JAN 19
ANAPA TO_NOVOROSSIYSK TO EUAPSE
WARNING 57
WILL BE KEPT IN_TUAPSE WAVE HEIGHT 1.3-1.5 AT MORNING 21/01 SOUTHEASTERGS S
UTERLY 13-18 M/S_AVE HEIGHT _1.5-2.5 CS EXPECTED
NNNN

=====



SEQUENCE OF EVENTS

Loading at port Temryuk, Russia

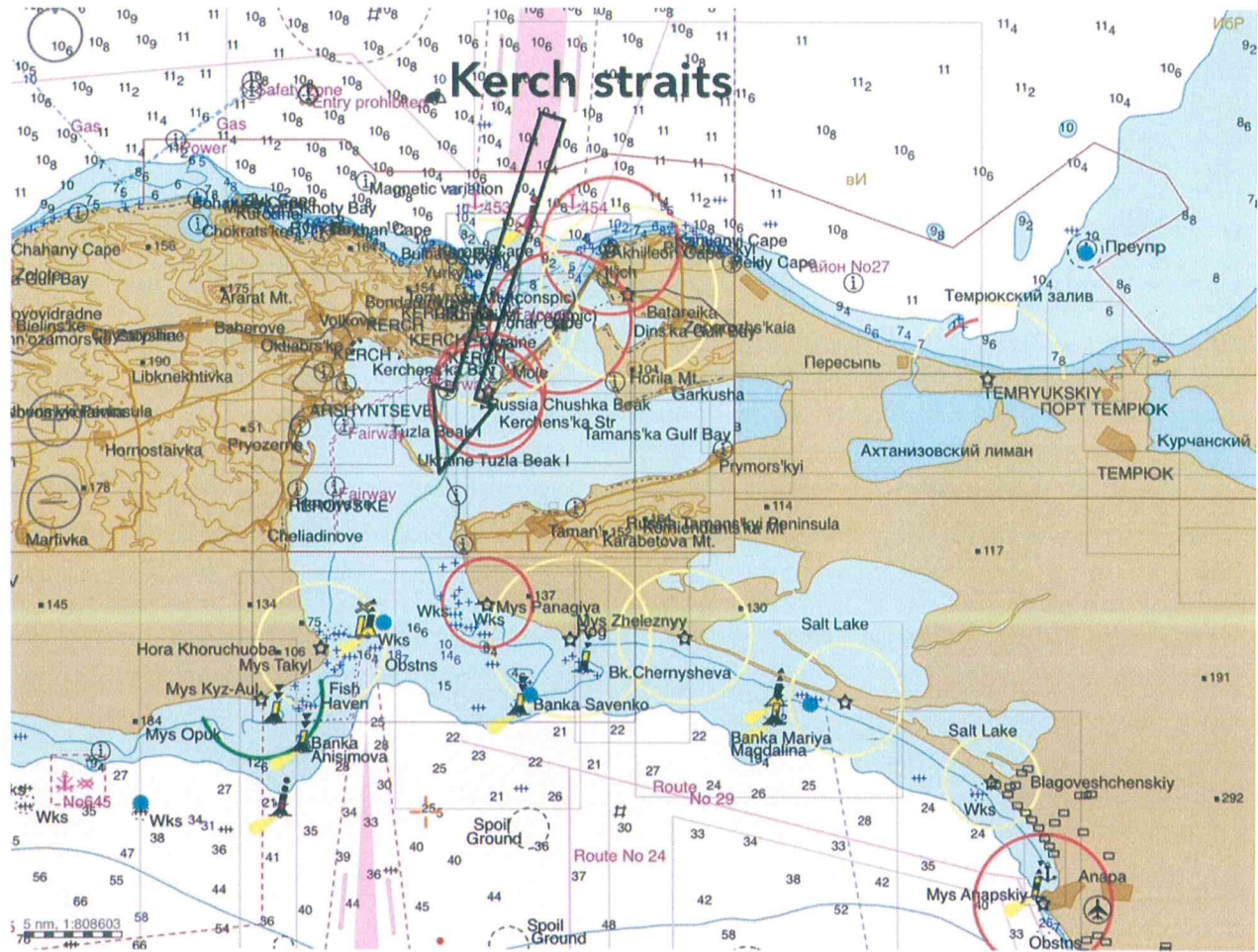


The vessel has been loaded at port Temryuk, Russia on 20/01/2019 and sailed from port on 20/01/2019 evening. It has been reported by the Master that the vessel has been passed 2 (two) pre-loading surveys successfully without remarks. We are collecting required information and will include in final investigation report.

Cargo loaded: LPG MIX 2'468,824 MTS (IN AC)



Passing the Kerch straits



Communication and coordination with Kerch VTS and Kavkaz VTS via VHF 12, 14 and 16.

Time zone applied here and further +3 (Moscow)

20/01/2019 at 22:40 - Arrived to North entrance of Kerch straits and drop anchor at area 453 waiting for pilotage

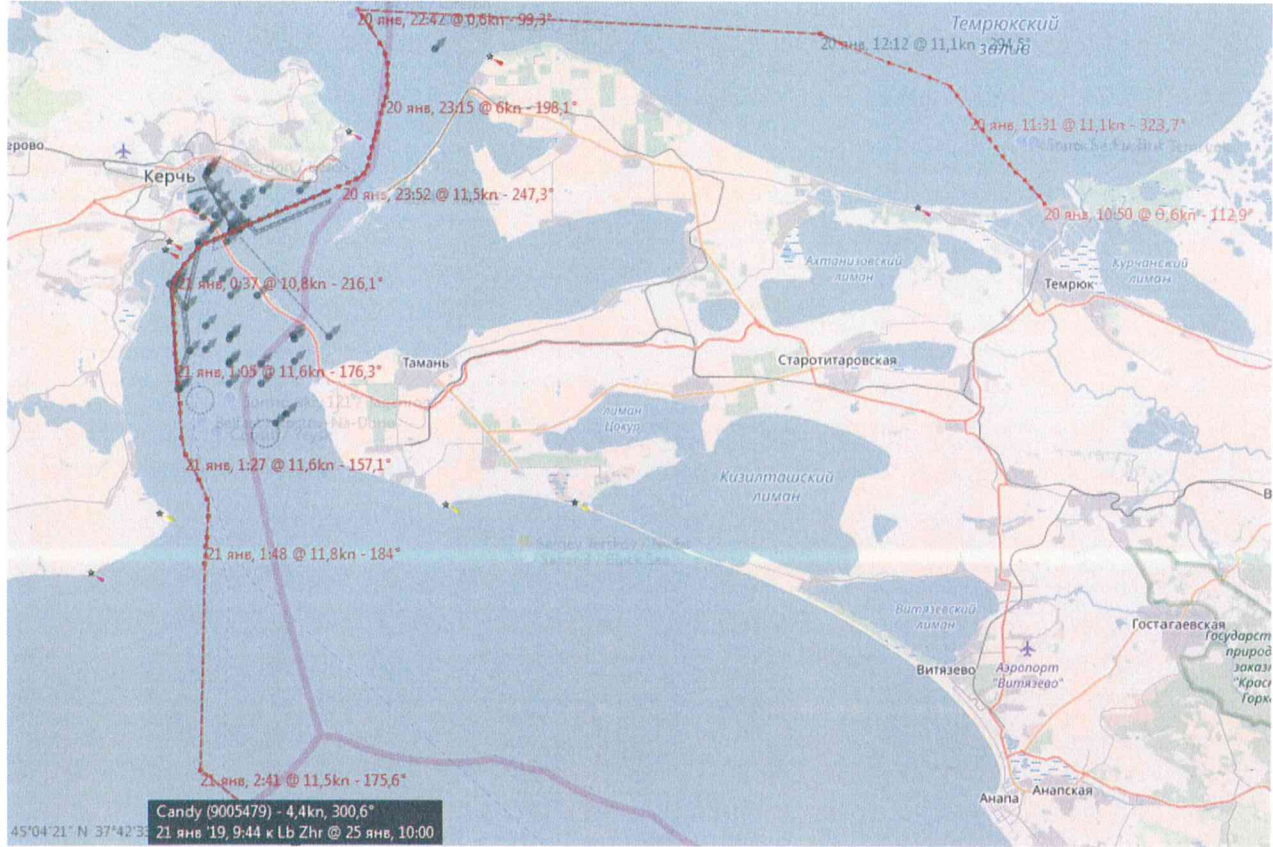
20/01/2019 at 23:00 – Received permission from VTS, have up the anchor, started ME and sailed from anchorage

20/01/2019 at 23:15 – Entered to the Kerch straits. Southbound passage.

21/01/2019 at 01:45 – Cleared from Kerch straits and upon completion of passage has reported to the Kerch VTS that in accordance to the new instructions from owners/managers MT CANDY proceeding for the STS operation at OPL behind 12 miles zone. Same time the contact has been established with the MT MAESTRO and it has been decided to postpone the STS operation for the daylight type. MT CANDY anchored in vicinity of MT MAESTRO waiting for the morning time.



AIS tracking of the vessel starting from port Temruk and to the anchorage area is shown below:



There was no any problems reported before, during and after Kerch straits passage, all operations and maneuverings were in order.



Transshipment operation

NOTE: TIME IS GIVEN ABOUT, BASIS ON THE STATEMENTS OF THE MASTERS AND EVIDENCE INFORMATION.

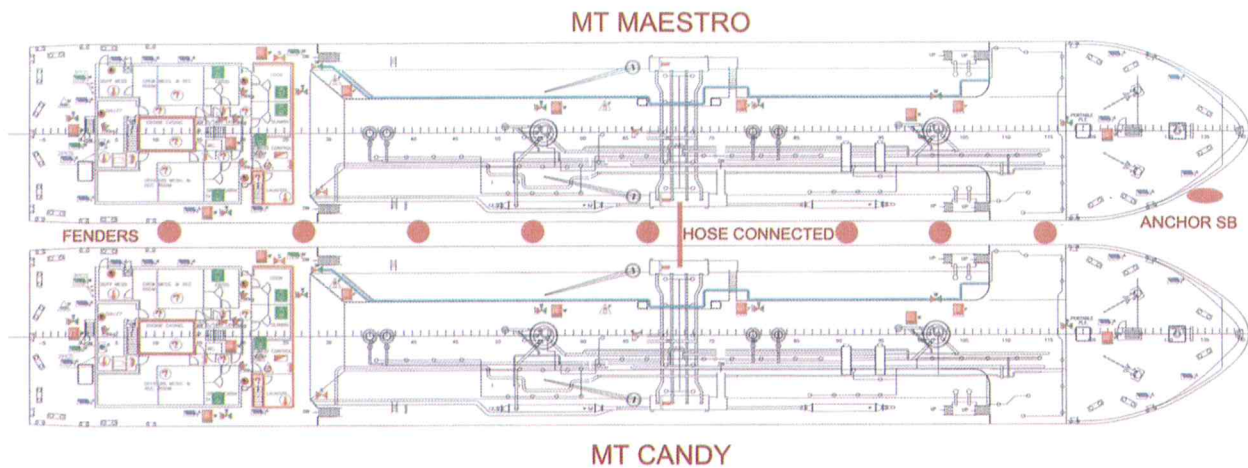
21/01/2019 at 08:00 – MT CANDY contacted to MT MAESTRO and discussed mooring plan and STS arrangements. Both masters agree that the weather condition is appropriate for the expected operation.

21/01/2019 at 09:00 – MT CANDY anchor up and started maneuvering while MT MAESTRO maintained her position with the StB anchor with ME and bow thruster in stand-by condition.

21/01/2019 at 09:30 – MT CANDY fasten to MV MAESTRO STB, total 8 fenders of small size used by both vessels, no remarks noted during mooring. Both ships commenced testing of fire-fighting and safety equipment prior the operation. Both vessels crew using channel 15 enable all the actions on both ships to be properly coordinated and understood. Once the checking has been completed the chief officer of MT CANDY reported that both ships are ready. The transfer hose provided from MT MAESTRO preliminary checked.

NOTE: THE FENDERS' AND CARGO HOSES TYPE APPROVAL CERTIFICATE IS ATTACHED TO THIS REPORT.

Mooring schema of MT CANDY to MT MAESTRO on the accident day.



21/01/2019 AT 12:30 - Commenced cargo transfer operation from MT CANDY using its pumps into MT MAESTRO. Both ships' Chief Officers are on duty on deck. Master of MT MAESTRO came to MT CANDY in order to discuss with the Master the details of completion STS cargo transfer and further unmooring/maneuverings. Same time delivered cargo documents to MT MAESTRO. The STS cargo operation expected to take about 10 hours.

21/01/2019 at 16:30 – Chief Officer of MT CANDY reported about 800 tons of cargo has been transferred, Master of MT CANDY decided to take rest in his cabin while Master of MT MAESTRO decided to return on board his ship and came out to the open platform at boat deck where spoke to his 2nd Officer located on aft deck of MT MAESTRO. It was also noticed that the Chief Officer of MT MAESTRO is going to the manifolds for checking of condition same time.



21/01/2019 at 17:00 – Master of MT CANDY in his cabin, Master of MT MAESTRO is at boat deck aft. Both ships' Masters heard very loud noise of cargo release from main deck side followed with white vapor exhaust few meters above the manifolds, some crew members screamed on deck, within couple seconds extremely light flash caused at manifolds area of both ships and started fire. There was no explosion sound and air-blast noticed. Chief officer of MT CANDY reported to the master Fire on deck. Master run to main deck CCR and activated emergency shut down system, while Chief Officer run to the bridge where pushed alarm and distress buttons and informed MRCC over VHF. When Master came to bridge he found Chief Officer laying on the floor hiding from the heat ingress via bridge's windows.

NOTE: THE RECORD OF CHIEF OFFICER COMMUNICATION TO MRCC ATTACHED TO THIS REPORT. FILE "VIDEO 1 - DISTRESS AND CHIEF OFFICER NOTIFICATION TO MRCC"

The video-records obtained from the vessels in vicinity show that initially the fire was mainly on board of MT MAESTRO and following with one more explosion the fire affected to MT CANDY.

NOTE: THE VIDEO OF SECOND EXPLOSION ATTACHED TO THIS REPORT. FILE "VIDEO 2 - FIRST NOTIFICATION AND SECOND EXPLOSION"





Further to the fire ignition the crew members started jumping into the water being in panic and afraid of possible total explosion of both vessels. The wind direction made the fire and smoke moving towards accommodation and passages of both PS and SB which were under very high temperature, smell of cargo vapors and covered in smoke. Some crew members collected at aft maneuvering station of both tankers while some crew members were already in the water with and without immersion suits. There was no possibility to reach up neither to the muster station nor to the life boats/rafts release stations. Ship's cook was noticed to throw lifebuoy to the sea and was going to jump into water, both Masters shouted to the cook and other crew members in vicinity not to abandon the ships this way but to use immersion suits, however cook jumped into water and was rescued by another ship in the area. Same time Master of MT CANDY was searching a way to release freefall lifeboat.

NOTE: THE VHF RECORD OF SHIPS' INFORMING TO MRCC FOR RESCUE OPERATION ATTACHED TO THIS REPORT. FILE "SHIPS INFORMING MRCC ABOUT READINESS TO START RESCUE ACTIONS"

The water temperature of 2-3° C. Under these circumstances the loss of consciousness appears within 30-60 minutes being in the water and the death within 2-3 hours.

21/01/2019 at 17:40 – According to the Master information all the crew members, which he saw, have abandon from MT CANDY. Due to circumstances described above:

- There was no possibility to make head counting in order to determine missing or remaining crew on board.
- There was no possibility to collect crew on Muster Station which was under effect of fire and smoke
- There was no possibility to launch lifeboat and liferafts located at the areas affected by fire and smoke
- Due to heating of accommodation front bulkhead some crew members couldn't reach to their cabins to collect immersion suits.

The rescue operation conducted by Novorossiysk MRCC. One rescue tug named "Spasatel Demidov" was involved initially.

NOTE: THE VIDEO-RECORDS FROM THE RESCUE TUGBOAT DURING INITIAL SEARCH ATTACHED TO THIS REPORT. FILE "VIDEO 4 - FROM THE RESCUE TUGBOAT"

Among of the vessels located near to MT CANDY and MT MAESTRO the following ships took part in the rescue operation by picking crew members from the water:



- DMITRIY POKROVSKIY (IMO 9683726)
- KONSTRUCTOR ZHIVOTOVSKIY (IMO 9640580)
- SPASATEL DEMIDOV (IMO 9681443)
- SVYATOI KNYAZ VLADIMIR (IMO 9838864)
- SMOLNIY (IMO 8860834)

The accurate information about rescue operation and ship's involved will be provided in the final investigation report.

NOTE: THE VHF RECORD OF SHIPS' REPORTING TO MRCC ATTACHED TO THIS REPORT. FILE "MRCC RECEIVES INFORMATION FROM VESSELS COLLECTING CREW MEMBERS"

Resulting the rescue operation the following were done in regards to the crew members of MT CANDY:

No	Name, Surname	Rank	Nationality	Status
1	AKAT ERALP	MASTER	TURKEY	RESCUED
2	SEN EMRE	CHIEF OFFICER	TURKEY	RESCUED
3	KARANKI YUCE	2ND OFFICER	TURKEY	DEAD
4	DIRIK TAYFUN	CHIEF ENGINEER	TURKEY	LOST
5	CETINOK ERDOGAN	1ST ENGINEER	TURKEY	DEAD
6	SOLAK SEMIH	2ND ENGINEER	TURKEY	DEAD
7	SINGH VIKRAM	OILER	INDIAN	DEAD
8	TANDEL PINALKUMAR BRAHATBHAI	WIPER	INDIAN	DEAD
9	SAKPAL RUSHIKESH RAJU	ABLE SEAMAN	INDIAN	LOST
10	BABAN JADHAN AKSHAY	ABLE SEAMAN	INDIAN	LOST
11	TENDEL KAMLESHBHAI GOPALBHAI	ORDINARY SEAMAN	INDIAN	RESCUED
12	DOD VISHAL	ORDINARY SEAMAN	INDIAN	DEAD
13	NAGARAJAN SARAVANAN	ORDINARY SEAMAN	INDIAN	DEAD
14	KARAOGLU ALI	COOK	TURKEY	RESCUED
15	COSAR TAMER YANKI	DECK CADET	TURKEY	RESCUED
16	PANIGRAHI RAJA	DECK CADET	INDIAN	DEAD
17	KARABULUT SINAN	ENGINE CADET	TURKEY	DEAD

Resulting the rescue operation the following were done in regards to the crew members of MT MAESTRO:

No	Name, Surname	Rank	Nationality	Status
1	GULEC OZAN	MASTER	TURKEY	RESCUED
2	GURDAG AHMET	CHIEF OFFICER	TURKEY	LOST
3	KOKLU EREN	2ND OFFICER	TURKEY	RESCUED
4	OZYURT KAMIL ARKAN	CHIEF ENGINEER	TURKEY	LOST
5	ELIK SINAN	2ND ENGINEER	TURKEY	LOST
6	ANANDASEKAR AVINASH	OILER	INDIAN	LOST
7	SAHAYARAJ SEBASTIN BRITTO BREEZLIN	WIPER	INDIAN	LOST
8	TANDEL KARANKUMAR HARIBHAI	WIPER	INDIAN	DEAD
9	ASHIK ASHOK NAIR	WIPER	INDIAN	RESCUED
10	BOYA YAPAN ALPER	COOK	TURKEY	RESCUED
11	JOGI PURUSHOTTAM HARISH	ABLE SEAMAN	INDIAN	RESCUED
12	MEHER SIDDHARTH	ABLE SEAMAN	INDIAN	LOST



13	SINGH NEERAJ	ORDINARY SEAMAN	INDIAN	LOST
14	SINGH SACHIN	ORDINARY SEAMAN	INDIAN	RESCUED
15	TOLGA GORGVLU	DECK CADET	TURKEY	RESCUED

Due to large number of missing people (10 persons in total) we presume some crew members might remain on boards being injured or died during initial stage of the accident. As of the date of preliminary report there was no search done on board of abandoned ships.

CONSEQUENCES

After completion of rescue operations both tankers CANDY and MAESTRO remains in their anchor position under fire, two rescue tug-boats were assigned by MRCC to stay in vicinity of the tankers and keep fire under control as well as to monitor pollution situation if any occur.





As per recent information the fire is completed due to all cargo from both vessels is burned. Ship's reported at drifting status moored to each other with slight heeling of MT MAESTRO to PS and visually considered as total loss.



ENCLOSURES

- 1) MT CANDY certificate of registry
- 2) MT CANDY certificate of safe manning
- 3) MT CANDY ship radio station license
- 4) MT CANDY international tonnage certificate
- 5) MT CANDY general arrangement plan
- 6) MT CANDY fire control plan
- 7) MT CANDY cargo documents
- 8) MT CANDY crew list
- 9) MT CANDY P&I insurance certificate
- 10) MT MAESTRO crew list
- 11) MV MAESTRO P&I insurance certificate
- 12) Fenders' and cargo hoses type approval certificate
- 13) Official weather report
- 14) VHF records – First notification about accident from other ships
- 15) VHF records – Ships informing MRCC about readiness to start rescue actions
- 16) VHF records – MRCC receives information from vessels collecting crew members
- 17) Video records – First notification and second explosion
- 18) Video records – Distress and Chief Officer notification to MRCC
- 19) Video records – Ships informing MRCC and offer assistance
- 20) Video records – From the rescue boat during search around accident area
- 21) Authorization of investigator



FINAL REPORT

Further the investigator has approached to the following authorities in Russian Federation in order to obtain permission to board the vessel(s) and to collect additional information:

- 1) Investigative committee
- 2) Harbor Master port Kavkaz
- 3) Harbor Master port Kerch

All above mentioned authorities declared that due to the incident has been occurred outside of territorial waters of Russian Federation and there are no Russian citizens involved or injured or dead they (authorities) did not initiated or conducted any kind of investigations of the case.

Furthermore, the owners of MT Candy reported the vessel is sold to scrap and there is no possibility to get on board to collect the details in place.

As it has been mentioned in the preliminary report the statements were taken from the masters of both MT Candy and MT Maestro. In regard to the root cause for the incident and basis on all the available information most probably the fire resulted from the cargo leakage in the area of manifolds during STS operation. In the light of statements, the cargo leakage occurred due to wrong valve operation on cargo receiving vessel MT Maestro which caused excessive pressure on cargo lines and hose. The responsible chief officer of MT Maestro probably mixed consequence of cargo valves' switching.

There was no possibility to determine whenever the ignition took place on the one certain vessel or in between of them.

Further to the ignition and fire it has been noted that the Master of MT CANDY activated emergency shut down at CCR, however this didn't prevent further fire spread. There is no any confirmation from survivals about activation of emergency shut down at MT MAESTRO but considering that the cargo from both vessels has been fully burned the piping system valves were not able to stop cargo exhaust from holds and to stop cargo burn.

This report is prepared by me basis on the relevant qualification and experience in cooperation with Zanzibar Maritime Authorities and according to relevant regulations of IMO.

Oleksiy Tarazanov



Approved by Zanzibar Maritime Authorities

