

ANNEX 2

IMO MARINE CASUALTY AND INCIDENT REPORT

DATA FOR VERY SERIOUS AND SERIOUS CASUALTIES

CASUALTY DATA

- 1 Date and local time of casualty (24 hr clock) (YYMMDD)** 040119 16:30
- 2 Position of casualty** 60°19.88'N 005°11.3'East
- 3 Location of casualty** Vatlestraumen (Raune Fjord)Norway
- 3.1 At berth
- 3.2 Anchorage
- 3.3 Port
- 3.4 Port approach
- 3.5 Inland waters
- 3.6 Canal
- 3.7 River
- 3.8 Archipelagos
- 3.9 Coastal waters (within 12 miles)
- 3.10 Open Sea
- 4 Pilot on board**
- 5 Type of casualty**
- 5.1 Collision: striking or being struck by another ship (regardless of whether underway, anchored or moored)
- 5.1.1 IMO Number of the other ship involved (not coded)
- 5.1.2 Name of the other ship involved (not coded)
- 5.2 Stranding or grounding, being aground, or hitting/touching shore or sea bottom or underwater objects (wrecks etc.)

- 5.3 Contact striking any fixed or floating object other than those included in Nos. 1 or 2
- 5.4 Fire or Explosion
- 5.5 Hull failure or failure of watertight doors, ports, etc.: not caused by Nos. 1 or 4
- 5.6 Machinery damage: not caused by Nos. 1 to 5, and which necessitated towage or shore assistance
- 5.7 Damage to ship or equipment not caused or caused or covered by Nos. 1 to 9
- 5.8 Capsizing or listing not caused by Nos. 1 to 9
- 5.9 Missing assumed lost
- 5.10 Other all casualties which are not covered by Nos. 1 to 9

6 Type of subsequent events

- 6.1 Collision: striking or being struck by ship (regardless of whether under way, anchored or moored).
- 6.1.1 IMO Number of other ship involved (not coded)
- 6.1.2 Name of other ship involved (not coded)
- 6.2 Stranding or grounding, being aground, or hitting/touching shore or sea bottom or underwater objects (wreck, etc)
- 6.3 Contact striking any fixed or floating object other than those included in Nos. 1 or 2
- 6.4 Fire or explosion
- 6.5 Hull failure or failure of watertight doors, ports, etc.

- 6.6 Machinery damage which necessitated towage or shore assistance
- 6.7 Damages to ship or equipment
- 6.8 Capsizing or listing
- 6.9 Missing, assumed lost
- 6.10 Other, all events which are not covered by Nos. 1 to 9

7 Consequences of the casualty

7.1 Consequences to the ship involved in the casualty:

- 7.1.1 Total loss
- 7.1.2 Ship rendered unfit to proceed *
- 7.1.3 Ship remains fit to proceed **

7.2 Consequences related to human beings:

7.2.1	Number of dead or missing crew	18
7.2.2	Number of dead or missing passengers	N.A.
7.2.3	Number of other dead or missing persons	nil
7.2.4	Number of crew seriously*** injured in the casualty	4
7.2.5	Number of passengers seriously*** injured in the casualty	N.A.
7,2,6	Number of other persons being injured*** in the casualty	nil

*The ship is in a condition, which does not correspond substantially with the applicable conventions, presenting a danger to the ship and the persons on board or an unreasonable threat of harm to the marine environment.

**The ship is in a condition, which corresponds substantially with the applicable conventions, presenting neither danger to the ship and the persons on board nor unreasonable threat of harm to the marine environment.

***incapacitated for 72 hours or more

7.3 Consequences to the environment (pollution):

7.3.1 Oil in bunkers

7.3.1.1 Type of oil	Quantity spilled
<input checked="" type="checkbox"/> Heavy fuel	450 t -----
<input checked="" type="checkbox"/> Diesel	78 -----
<input checked="" type="checkbox"/> Lube oils	21 -----
<input checked="" type="checkbox"/> Others	44 -----

7.3.2 Oil Cargo

7.3.2.1 Type of oil (not coded)	Quantity spilled
<input type="checkbox"/> Crude oil	-----
<input type="checkbox"/> Persistent refined oil products	-----
<input type="checkbox"/> Non persistent refined oil products	-----
<input type="checkbox"/> Other	-----

7.3.3 Chemicals in bulk

Category (Appendix I to Annex II of MARPOL 73/78)

	Quantity spilled
<input type="checkbox"/> A	-----
<input type="checkbox"/> B	-----
<input type="checkbox"/> C	-----
<input type="checkbox"/> D	-----

7.3.4 Dangerous Goods in packed form

Class (IMDG Code)	Names	UN numbers	Quantity lost overboard
1 <input type="checkbox"/>	-----	-----	-----
2 <input type="checkbox"/>	-----	-----	-----
3 <input type="checkbox"/>	-----	-----	-----
4.1 <input type="checkbox"/>	-----	-----	-----
4.2 <input type="checkbox"/>	-----	-----	-----
4.3 <input type="checkbox"/>	-----	-----	-----
5.1 <input type="checkbox"/>	-----	-----	-----
5.2 <input type="checkbox"/>	-----	-----	-----
6.1 <input type="checkbox"/>	-----	-----	-----
6.2 <input type="checkbox"/>	-----	-----	-----
7 <input type="checkbox"/>	-----	-----	-----
8 <input type="checkbox"/>	-----	-----	-----
9 <input type="checkbox"/>	-----	-----	-----

8. Primary causes of the initial events

Coding principle:

- a The human elements is a complex multi-dimensional issue that effects maritime safety and marine environmental protection. It involves the entire spectrum of human activities performed by ship's crews, shore based management, regulatory bodies, classification societies, shipyards, legislators and other relevant parties.
- b Effective remedial action following maritime casualties require a sound understanding of the human element involvement in accident causation. This comes by the thorough investigation and systematic analysis of casualties for contributory factors and the causal chain of events.

8.1 Internal causes (related to the ship where the casualty occurred)

8.1.1 Human violation or errors by the crew

.1 Human violation

.2 Human error

- | | | |
|------------|---|-------------------------------------|
| 8.1.2 | Human violations or error by the pilot | <input checked="" type="checkbox"/> |
| | .1 Human violation | <input type="checkbox"/> |
| | .2 Human error | <input checked="" type="checkbox"/> |
| 8.1.3 | Structural failures of the ship | <input type="checkbox"/> |
| 8.1.4 | Technical failure of machinery/equipment including design error | <input type="checkbox"/> |
| | .1 Failure of propulsion machinery | <input type="checkbox"/> |
| | .2 Failure of essential auxiliary machinery | <input type="checkbox"/> |
| | .3 Failure of steering gear | <input type="checkbox"/> |
| | .4 Failure of closing arrangements or seals | <input type="checkbox"/> |
| | .5 Failure of inadequacy of navigational equipment | <input type="checkbox"/> |
| | .6 Failure of bilge pumping | <input type="checkbox"/> |
| | .7 Failure of electrical installation | <input type="checkbox"/> |
| | .8 Failure of inadequacy of communication equipment | <input type="checkbox"/> |
| | .9 Failure of inadequacy of lifesaving appliances | <input type="checkbox"/> |
| | .10 Ship design errors (i.e. insufficient stability) | <input type="checkbox"/> |
| | .11 Other | <input type="checkbox"/> |
| 8.1.5 | The ship's cargo | <input type="checkbox"/> |
| | .1 Cargo shifting | <input type="checkbox"/> |
| | .2 Fire or explosion of cargo | <input type="checkbox"/> |
| | .3 Improper stowage of cargo | <input checked="" type="checkbox"/> |
| | .4 Spontaneous combustion | <input type="checkbox"/> |
| | .5 Cargo liquefaction | <input type="checkbox"/> |
| | .6 Other | <input type="checkbox"/> |
| 8.2 | External causes (outside the ship) | <input type="checkbox"/> |
| 8.2.1 | Another ship or ships (improper actions, etc.) | <input type="checkbox"/> |
| 8.2.2 | The environment | <input type="checkbox"/> |
| | .1 Heavy sea | <input type="checkbox"/> |
| | .2 Wind | <input type="checkbox"/> |
| | .3 Current or tides | <input type="checkbox"/> |
| | .4 Icing | <input type="checkbox"/> |
| | .5 Ice condition | <input type="checkbox"/> |
| | .6 Restricted Visibility | <input type="checkbox"/> |

- | | | |
|------------|--|-------------------------------------|
| 8.2.3 | Navigational infrastructure | <input type="checkbox"/> |
| | .1 Failures in aid to navigation | <input type="checkbox"/> |
| | .2 Inaccurate charts or nautical publications | <input checked="" type="checkbox"/> |
| | .3 Charts or nautical publications unavailable for the sea | <input type="checkbox"/> |
| | .4 VTS | <input type="checkbox"/> |
| 8.2.4 | Criminal acts | <input type="checkbox"/> |
| 8.2.5 | Other "external" causes (i.e. not associated with the ship itself) | <input type="checkbox"/> |
| | .1 Tug boat operations | <input type="checkbox"/> |
| | .2 Failure or incorrect operation of shore equipment or installation | <input type="checkbox"/> |
| | .3 Other than .1 and .2 | <input type="checkbox"/> |
| 8.3 | Unknown causes | <input type="checkbox"/> |
| 9 | Violations and error types | |
| 9.1 | Violation (deliberate decision to act against rule or plan) | <input type="checkbox"/> |
| 9.1.1 | Routing (cutting corners, taking path of least effort, etc) | <input type="checkbox"/> |
| 9.1.2 | Necessary (due to inadequate tools or equipment, improper procedure or regulation) | <input type="checkbox"/> |
| 9.1.3 | "For kicks" (thrill seeking, to alleviate boredom, macho behaviour) | <input type="checkbox"/> |
| 9.1.4 | Exceptional (taking risk to help people in distress, lack of system knowledge) | <input type="checkbox"/> |
| 9.2 | Slip (unintentional action where failure involves attention) | <input type="checkbox"/> |
| 9.2.1 | Incorrect operation of controls or equipment | <input checked="" type="checkbox"/> |
| 9.2.2 | Left/Right, reversal | <input type="checkbox"/> |
| 9.2.3 | Failure to report due to distraction | <input type="checkbox"/> |
| 9.2.4 | Other | |
| 9.3 | Laps (unintentional action where failure involves memory) | <input type="checkbox"/> |
| 9.3.1 | Forgetting to report information | <input type="checkbox"/> |
| 9.3.2 | Failure to advise Officer on the Watch | <input type="checkbox"/> |
| 9.3.3 | Other | <input type="checkbox"/> |

- 9.4 Mistake (an intentional action where there is an error in the planning process; there is no deliberate decision to act against a rule or procedure).**
- 9.4.1 Error in judgement
- 9.4.2 Inappropriate choice of route
- 9.4.3 Deciding not to pass on information
- 9.4.4 Failure to respond appropriately
- 9.5 Other
- 10 Underlying factors**
- 10.1 Live ware**
- 10.1.1 Physiological
- .1 Fatigue
- .2 Stress
- .3 Alcohol/illegal drug
- .4 Prescription medicine
- 10.1.2 Psychological
- .1 Excessive workload
- .2 Communication
- .3 Standards of personal competence
- .4 Lack of familiarity or training
- .5 Panic and fear
- .6 Boredom
- .7 Mental and emotional disorder
- 10.1.3 Physical
- .1 Hearing problem
- .2 Visual problem
- .3 Injuries and illness
- .4 Less than adequate medical fitness
- 10.1.4 Others
- 10.2 Hardware**
- 10.2.1 Equipment not available
- 10.2.2 Ergonomics

- 10.2.3 Design failures (other than ergonomics)
- 10.2.4 Maintenance and repair
- 10.2.5 Other
- 10.3 Software**
- 10.3.1 Company policy and standing orders
- 10.3.2 Less than adequate operating procedures and instruction
- 10.3.3 Management and supervision
- 10.3.4 Other
- 10.4 Environment**
- 10.4.1 Ship movement /Weather effects
- 10.4.2 Noise
- 10.4.3 Vibration
- 10.4.4 Temperature / humidity
- 10.4.5 Less than adequate manning
- 10.4.6 Other
