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**REPORT OF INVESTIGATION
INTO THE GROUNDING OF
MV "PANTANAL"
AT
CASHLA BAY, ROSSAVEAL
ON
31st MARCH 2011**

**REPORT No. MCIB/199
(No.2 of 2012)**

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1. SYNOPSIS

- 1.1 On 31st March 2011 at approx. 04.35 hrs. the vessel, which was anchored in Cashla Bay, began to drag anchor. At 04.55 hrs. the vessel took the ground on the North Eastern part of the Bay, in position 53° 15.7'N 009° 34.05'W. No lives were lost, however, the vessel was extensively damaged.

2. FACTUAL INFORMATION

2.1 Description of the Vessel

2.1.1 The vessel is a geared general cargo ship, designed for handling specialist heavy lift or project cargoes. The vessel has two cargo holds with Tween Decks and two hatch covers. Accommodation and machinery spaces are located aft. Weather deck protection is provided by steel hatch covers.

2.1.2 Principal Particulars:

Vessel Name:	<i>"Pantanal"</i>
Vessel Type:	General Cargo Ship
Year:	2004, Xingang Shipyard, China
Flag:	Antigua & Barbuda
Port of Registry:	St. John's
MMSI:	304639000
I.M.O. Number:	9316579
Length Overall:	119.80 m
Breadth Moulded:	20.20 m
Summer Draft:	7.59 m
Summer Deadweight:	7,821 m.t.
Gross Tonnage:	7,002
Net Tonnage:	3,375
Propulsion:	Variable Pitch Propeller
Steering:	Hydraulic motors
Service Speed:	16.0 knots
Classification:	Germanischer Lloyd
Entry No.:	110904
Owner/Manager:	Harren & Partner
Charterer:	K.S. Combi Lift, Denmark
Master:	Capt. Reinhardt Peters
Crew on Board:	16 persons

2.1.3 Equipment

The vessel was a modern cargo ship and, as such, it was well equipped with navigational aids and equipment. The bridge lay out comprised of a central control console, with two seats towards the centreline at the front of the wheelhouse. The bridge had open bridge wings with doors to the wheelhouse.

3. EVENTS PRIOR TO THE INCIDENT

- 3.1 The "*Pantanal*" was on Time Charter to K.S. Combi-Lift of Denmark and received voyage instructions on 18th March 2011. The vessel was instructed to proceed to Galway Bay where it would load two ferries for transport to Madagascar. The instructions were to load at Galway Docks or Rossaveal Harbour if there was a safe anchorage. Following communications between the Master and the Charterer it was decided to proceed to Rossaveal, where the vessel would anchor.
- 3.2 The vessel arrived in Galway Bay on 30th March 2011 in ballast condition. The maximum draft was 6.5 metres at the stern.
- 3.3 Prior to boarding the vessel the Pilot met with the Harbour Master at Rossaveal, to discuss the optimum anchorage position. As part of the preparation, they discussed the weather and examined the latest weather forecast. The intention was to load the cargo that day. However, if the loading was delayed until the next day, the Harbour Master advised that the vessel should depart the anchorage, as the bay was exposed to South Easterly winds. In addition, the Harbour Master advised that, in view of the forecast, the vessel should weigh anchor and depart the bay if loading was to be delayed until the next day.
- 3.4 The vessel was boarded by a Galway Docks Pilot and brought into the anchorage in Cashla Bay. The Pilot and Master were not satisfied with the initial position and the vessel weighed anchor to get a better position. This is due to the restricted swinging circle in the anchorage.
- 3.5 The Pilot warned the Master to depart the Bay if the weather conditions deteriorated and rose above Beaufort Force 6. He reported to the Harbour Master that he had passed on his advice with respect to departing the anchorage.
- 3.6 Late in the evening a decision was made to defer loading of the cargo until 31st March 2011. The vessel remained at anchor.
- 3.7 The Master was on the bridge until approx. 01.00 hrs. on 31st March 2011. He left the Second Officer in charge.

4. THE INCIDENT

- 4.1 At 04.35 hrs. on 31st March 2011 the second officer noted that the vessel had started to drag anchor. He alerted the Master. By 04.50 hrs. the vessel was aground and unable to free itself on a falling tide.

EVENTS FOLLOWING THE INCIDENT

5. EVENTS FOLLOWING THE INCIDENT

- 5.1 The Master of the ship contacted the Harbour Master at 05.48 hrs. on 31st March 2011 by mobile telephone to advise him of the incident, and reported that the Harbour Master was the only person the Master of the ship could raise. The Harbour Master alerted the MRCC Valentia by telephone and proceeded to the scene, by boat.
- 5.2 On boarding the vessel, the Harbour Master attempted to discuss the incident with the Master, but he (the Master) had received instructions from his owners not to discuss the incident with anybody. The Harbour Master noted a ship's plan showing the profile of the vessel. There was a table of fuel oils on board showing the capacities of the tanks and a table of soundings showing the actual quantities in each tank. He also noted the entries in the "Rough Log Book" or "Bell Book" (log of activities maintained whilst entering and departing from a port, the important parts of which are transferred to the Deck Log Book when there is a suitable opportunity to do so).
- 5.3 Later in the morning the vessel was boarded by various persons representing the Marine Survey Office, the Irish Coastguard, a surveyor representing the vessel's P & I Club and a Supercargo (superintendent) representing the Time Charterer of the vessel.
- 5.4 Soundings of the tanks indicated that the vessel was not making water in any of the double-bottom tanks. A centreline void space, extending between frames 45 and 135 had filled. The bulkheads at each end were reported as being watertight. Later it was found that some water from this space had entered the engine room via ducting outlets that became dislodged. There was no immediate threat of oil pollution.
- 5.5 Emergency actions to secure the vessel were discussed. Two anchors, other than the ships anchors were laid out, from the starboard bow and quarter, using ship's mooring lines. It was hoped that the vessel might be able to refloat herself on the next high tide by warping on the anchors. The alternative was that the anchors would hold the vessel in position on the next high tide and prevent her from going further inshore.
- 5.6 The owners entered a contract with the owners of the "*Celtic Isle*" for assistance and this vessel was despatched to Cashla Bay. The vessel arrived off Cashla Bay around 04.00 hrs. on 1st April 2011 and proceeded inwards. The tug was made fast to the vessel and commenced pulling as the next high tide approached. The vessel refloated at approx. 05.00 hrs. on 1st April 2011.
- 5.7 The vessel was anchored in Galway off Ballyvaughan and detained by the Marine Survey Office, under the Paris Memorandum of Understanding, more commonly referred to as Port State Control. It was subjected to a detailed inspection by

Germanischer Lloyd, as the Classification Society and recognised organisation representing the flag State. A team of divers and support vessels were brought in to assess the damage and to affect repairs. The tug remained on station secured to the vessel's stern.

- 5.8 The vessel was subsequently brought further up Galway Bay and re-anchored outside the fairway buoy marking the approaches to Galway Docks to facilitate repairs.
- 5.9 Certificates of Competency
- 5.9.1 The Master held a valid Class 1 Certificate of Competency issued by Antigua and Barbuda, dated 25th March 2005.
- 5.9.2 The Mate held a Class 2 Certificate of Competency issued by the Ukraine on 17th November 2010 and a Certificate issued by Antigua and Barbuda issued on 19th November 2008.
- 5.9.3 The Second Officer had a Certificate of Competency as a Navigating Officer, issued by the Ukraine on 11th June 2007 and by Antigua and Barbuda on 15th March 2010.
- 5.9.4 The Third Officer had a Certificate of Competency issued by the Ukraine on 19th August 2008 and a Certificate issued by Antigua and Barbuda on 8th August 2008.
- 5.10 The British Admiralty chart was examined. The chart in use was BA 2096 with an inset for Cashla Bay. The chart was "new" in appearance and the last correction entered was No. 6499 of 2009. The last position marked on the chart was for 04.00 hrs. It was noted that the distance from the shore was 3 cables or 0.3 nautical miles. The charted depth of water was 10.5 metres.
- 5.11 The Sailing Directions published by the British Admiralty, NP 40, called the Irish Coast Pilot, was examined. The Second Officer pointed out the date on it which indicated that it had been received on board on 30th March 2011.
- 5.12 Various Statements
- 5.12.1 The Master had prepared a typed statement which he was relying on. It outlines the sequence of events in the hour before the incident occurred. Attached to the statement were copies of communication between the Owner's superintendent and the Master, dated 22nd March 2011. The correspondence indicates that the vessel was too large to enter Galway Docks and suggests anchoring off Rossaveal. The problem was also discussed with a representative of Combi Lift. The Master had left orders in the Night Order Book that he was to be called if the wind

rose above 20 knots, especially if the wind direction was from the South East. He was called to the bridge by the Second Officer at 04.35 hrs. when the vessel began to drag anchor.

- 5.12.2 The Chief Officer had been working in the hold preparing the vessel to receive the cargo. The supercargo had left the vessel around 17.00 hrs. The Chief Officer finished working at approx. 03.00 hrs. on 31st March 2011 in preparation for the planned loading operations at 09.00 hrs. He was called by the Second Officer at approx. 04.30 hrs. to say the ship was dragging anchor.
- 5.12.3 The Second Officer had prepared a handwritten report on the sequence of events. He commenced watch at 00.00 hrs. on 31st March 2011. At 02.00 and 04.00 hrs. he recorded the vessel as maintaining position. He logged the first sign that the vessel was dragging anchor at 04.35 hrs. He raised the alarm and contacted the Engineers to start the main engine. The Master arrived on the bridge at 04.37 hrs. and the main engine was running at 04.40 hrs. At this time the engine was placed on full ahead, the rudder was hard to port and the boatswain was on the forecastle attempting to raise the anchor. The Master took over command but the vessel was subject to strong South South Westerly winds which blew her ashore at 04.55 hrs.
- 5.12.4 The Second Officer had an Able Seaman on watch with him. He was making rounds when the incident occurred.
- 5.12.5 The Boatswain stated he was called and ran forward in an attempt to raise the anchor.
- 5.12.6 The Chief Engineer reports that he was called and went to start the main engine.
- 5.12.7 The Third Officer stated that when he handed over the watch he passed on the Master's instruction with respect to what should be done in the event the vessel dragged anchor. He was called at 04.40 hrs by the Second Officer. He went to the bridge to find the Master in command and the engine running.
- 5.12.8 The Harbour Master at Rossaveal prepared a report on the incident and provided the investigator with a copy. The report includes a photocopy of the chart of the inset showing Cashla Bay. The depth of water is shown as 10.5 metres, or 5.7 fathoms.

6. CONCLUSIONS

- 6.1 The vessel rode to 3 shackles in the water, the equivalent of 45 fathoms of chain or 82 metres of chain. The standard practice for fair weather is to deploy at least 3 times the depth of water, so one considers the scope of anchor chain deployed was adequate originally.
- 6.2 Weather data supplied by the Harbour Master, with wind speeds measured at the ferry terminal in Rossaveal, indicate that at the time of the incident the wind speed in the harbour was 40 knots. Using an exercise undertaken by consulting engineers in the past, he calculated the wind speed at the anchorage was in the region of 60 knots. The wind direction was SSW.
- 6.3 The documents include a graphic reading and digital records for the weather station. A summary of the records is set out below:
- 00.00 hrs. The graph shows the wind speed rises above 20 knots.
There is no digital record for this time.
- 02.00 hrs. The graph shows wind speeds at approx. 20 to 25 knots.
The digital date shows a wind speed and direction of 221° T x 23.0 knots.
- 03.00 hrs. The graph shows a maximum gust of 35 knots.
The digital records shows 259° T x 18.3 knots.
- 04.00 hrs. The graph shows a wind speed of 40 knots.
The digital records show 236° T x 30.9 knots.
- 04.30 hrs. The graph shows gusts of approx. 47 knots.
The digital records shows 223° T x 35.3 knots.
- 6.4 The M1 databuoy has been removed from service and the data records are no longer available. Met Éireann have provided the weather forecast in force at the time where the west coast winds were predicted as being southwest force 4 or 5, increasing to south to southeast force 7 for a time and then veering southwest force 6 to gale 8.
- 6.5 The description of the weather that actually occurred indicates that a frontal squall was experienced. The Harbour Master suggested that the weather might have been very localised.
- 6.6 The planning of the operation on the part of the Time Charterer was poor. The Master was given a choice of Galway Docks or Rossaveal to load the cargo. When he checked the information available to him on board, it was found that the

vessel could not enter Galway Docks, on two counts, beam and draft. Therefore, his options were narrowed down to one very quickly. The Master was asked to place his vessel in a narrow bay where he only had 3 cables between the ship and the shore.

- 6.7 The Harbour Master is adamant that he expressed his concerns with respect to the vessel remaining at anchor overnight in light of the weather forecast. He relied on the Pilot to pass on his reservations to the Master. Ideally, if the advice of the Harbour Master had been taken on board, the vessel would have left the anchorage at 17.00 hrs. on 30th March 2011 when operations were suspended until the following day. For an unexplained reason the Master opted to remain at the anchorage.
- 6.8 In a tight anchorage, which is new to the Master, one would expect that the engines should have been on instant standby rather than on notice. The Master wanted to be called if the wind speed rose above 20 knots. When he left the bridge at 01.00 hrs. the wind speed had already reached this speed.
- 6.9 Once the vessel began to drag anchor there was very little time or options available. By the time the crew were roused and the engines started the vessel was well on its way to the shore.
- 6.10 There was an apparent breach in protocols in that the vessel did not appear to use its VHF transceivers, or other GMDSS apparatus to alert the Authorities. At a minimum a PAN PAN message should have been transmitted immediately. Instead reports indicate the Master was relying on a mobile telephone to communicate.

7. RECOMMENDATIONS

On investigating the casualty the Board recommends the following actions:

- 7.1 All Masters, Pilots and Harbour Masters should take the dimensions of a vessel into account before entering an anchorage such as Cashla Bay. There should be a clear passage plan with all dangers and limitations clearly identified. The plan should be prepared well in advance and if necessary, there should be communication between the Pilot, the Harbour Master and the Master in advance of the arrival.
- 7.2 The MCIB recommends that the Minister issue a Marine Notice reiterating the requirements of the IMO STCW Code on ships at anchor.
- 7.3 The MCIB recommends that the Minister issue a Marine Notice reminding mariners of their obligation to report a marine casualty to the appropriate authorities.

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Appendix 8.1 Photographs of "Pantanal".



Photograph of "Pantanal" aground courtesy of Irish Coast Guard.



(a) Wheelhouse from port to starboard.

Appendix 8.1 Photographs of *"Pantanal"*.

(b) Wheelhouse from starboard to port.

Appendix 8.2 Particulars of vessel.

MV "PANAGIA" - MV "PANTANAL" - MV "PANGANI"

MV PANAGIA: CALL SIGN: V2905 - IMO NO: 9305295
MV PANTANAL: CALL SIGN: V2P98 - IMO NO: 9311579
MV PANGANI: CALL SIGN: ZDHG4 - IMO NO: 9318943

TIC OWNERS: K/S COMBI LIFT - 4220 KORSOER - DENMARK
PORT OF REGISTRY: ST. JOHN'S
FLAG: ANTIGUA

MAIN PARTICULARS :

CLASS:
OL + 100 ASEG EQUIPPED FOR CARRIAGE OF CONTAINERS AND DANGEROUS CARGO IMO 1.1. MC/AUT STRENGTHENED FOR HEAVY CARGO.

BUILDERS:
XINGANG SHIPYARD, TIANJIN YARD NO 328/337-2 - 2004

REGISTER TONNAGE:
TYPE INTERNATIONAL
GROSS 7002
NET 3375

DIMENSIONS:

LENGTH OVER ALL	119,80 M
LENGTH BETWEEN PP	113,50 M
BREADTH MOULDED	20,20 M
DRAFT FULLY LOADED SUMMER	7,59 M

DEAD WEIGHT CAPACITIES:

DEAD WEIGHT A.T.	7821 MTS
DEAD WEIGHT C.C.	ABT. 7200 MTS

CONTAINER CAPACITIES:

TOTAL CAPACITY 20' x 8' x 8'6"	589
HEREOF: IN CARGO HOLD	238
ON DECK	351
CAPACITY WITH AVERAGE 14 TS REEFER CONTAINERS	377
REEFER CONTAINERS	38

STACKLOAD:

TANKTOP	100 TS EACH 20' 120 TS EACH 40'
DECK	60 TS EACH 20' 80 TS EACH 40'



CARGO HOLD:
FITTED FOR DANGEROUS CARGO SOLAS -II-2. REG 54 HOLDS
FITTED WITH SMOKE DETECTORS, CO2 SYSTEM, SPRINKLER

HATCHES:

HATCH NO. 1	12,63 X 15,15 + 6,22 X 9,84 M
HATCH NO. 2	52,00 X 16,10 X 10,80 M

BOXSHAPED

CUBIC CAPACITIES IN HOLDS:
WITH TWEEN-DECK HATCH COVERS 11009 CBM

CRANES:
2 ELECTRO HYDRAULIC CRANES PORT SIDE 250 TS / 12 M & 100 TS / 26 M COMBINABLE UP TO 500 TS

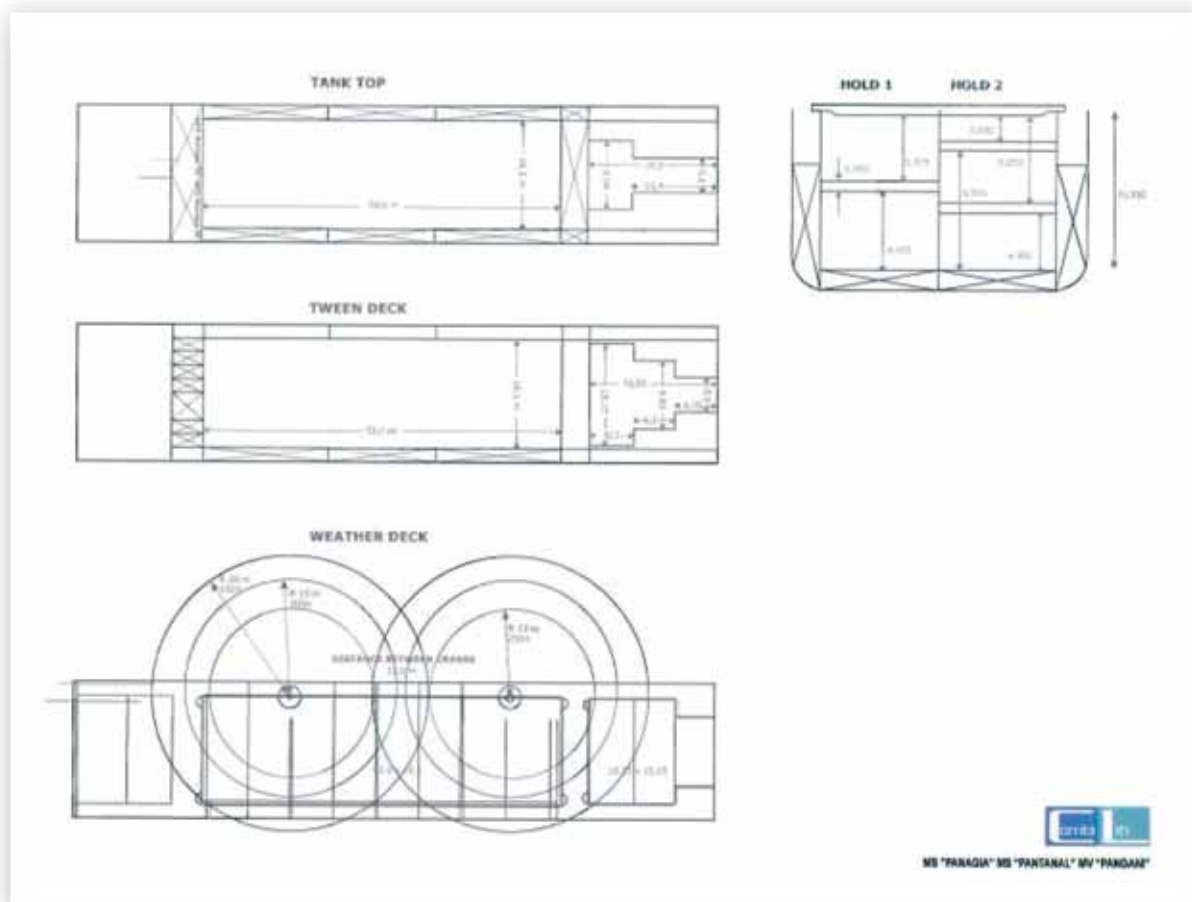
DECK STRENGTH:
TANKTOP - STEEL 16,0 TS PER M2
TWEENDECK - HOLD NO. 1 2,5 TS PER M2
TWEENDECK - HOLD NO. 2 3,0 TS PER M2
HATCH COVER 2,5 TS PER M

TANK CAPACITIES:

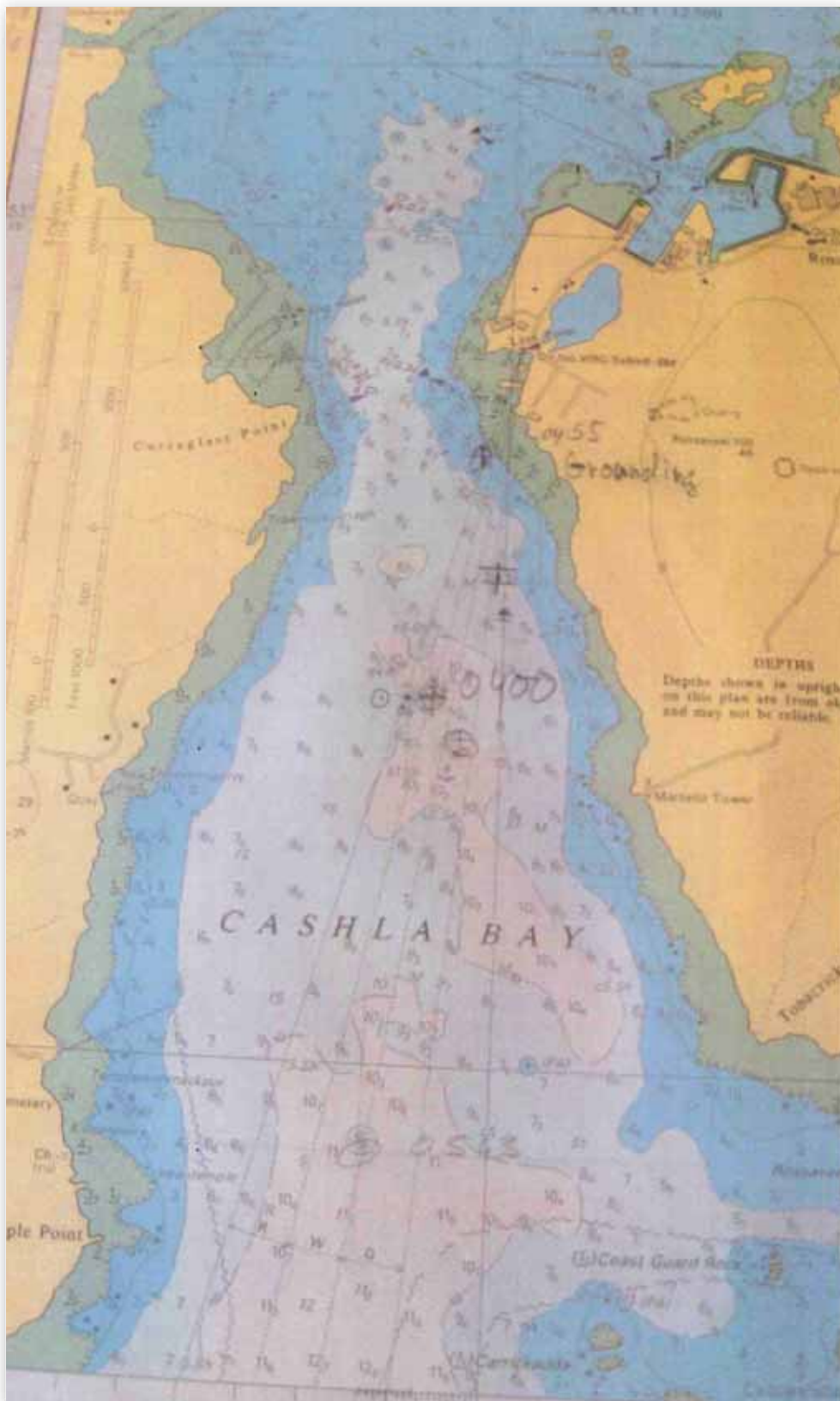
FUELOIL	ABT. 751,8 TS
MGO	ABT. 89,3 TS
FRESH WATER	ABT. 140 TS
BALLAST WATER	ABT. 4048,8 TS

ALL PARTICULARS BELIEVED TO BE CORRECT, BUT NOT GUARANTEED

Appendix 8.2 Particulars of vessel.




Appendix 8.3 Photograph of chart on board vessel.



Appendix 8.5 Weather reports from Met Éireann and related data.

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MET ÉIREANN
The Irish Meteorological Service

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8/4/2011

Our Ref: WS3018/2C_14084
Your Ref: MCIB/199

Estimate of weather conditions in the Cashla Bay, County Galway, sea area, on the 31st March 2011 between 0 hours and 12 hours.

General Situation
 A complex Low pressure area in mid-Atlantic gave a mainly south-westerly airflow over north-west Europe. A local Low pressure area embedded in the flow moved north-eastwards past the north-west coast of Ireland.

Details

0 to 6 hours


Winds: south to south-west Force 6 to 7, increased in the second half of the period to south-west to west Gale Force 8 to Strong Gale Force 9.

Weather; cloudy with outbreaks of rain at first, cleared to showers and clear spells later.

Visibility: Moderate to Poor

Waves of 3 metres to 5.4 metres significant wave height were observed at weather buoys off the west coast of Ireland during this period. The highest waves occurred later in the period. Similar waves would have occurred on the Atlantic side of the Aran Islands. The waves would have been considerably reduced within Cashla Bay itself.

.....continued *WS3018/2C_14084*



Appendix 8.5 Weather reports from Met Éireann and related data.

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The Irish Meteorological Service Online


Wednesday, 30 March 2011 · Dublin SW Moderate Search

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[Sea Area Forecast](#)

WEATHER WARNING
Forecasts

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Additional Information


 Marine Weather Service
[Enlarge Sea Area Map](#)

Gale Warning

South to southwest winds will reach gale force for a time tonight on all Irish coasts and on the Irish Sea.
 Issued at 11:30 on 30-Mar-2011

Sea Area Forecast until 0600 Thursday 31 March 2011
Issued at 0600 Wednesday 30 March 2011

Gale warning: In operation

Small craft warning: In operation

Meteorological situation at 0300: A fresh south to southwest airflow covers Ireland as an occluding frontal trough clears eastwards this morning and a low centre passes close to the northwest. A strong westerly follows for a time but moderates. A strong southwest flow develops early tonight as a frontal system tracks eastwards over Ireland.

Forecast for coasts from Roches Point to Loop Head to Erris Head
Wind: Quickly becoming southwest to west force 5 to 7 this morning. Decreasing force 4 or 5 for a time, but increasing south to southeast force 6 or 7 this evening, veering southwest force 7 or gale 8 early tonight later decreasing force 5 or 6.

Forecast for coasts from Erris Head to Howth Head to Roches Point and the Irish Sea
Wind: South force 5 or 6 veering southwest to west by early afternoon, decreasing force 4 or 5 for a time. Increasing south to southeast force 6 or 7 this evening veering southwest to west force 6 to gale 8 tonight

Weather for all Sea areas: Some fog banks, mainly in the east at first and in other areas tonight. Rain clearing eastwards for a time today but further rain spreading from west this evening.

Visibility for all sea areas: Mostly moderate or poor.

Outlook for a further 24 hours until 0600 Friday 01 April 2011: Southwest to west winds decreasing fresh to strong for a time tomorrow morning but increasing strong to gale force southwest again, later backing southerly. Bands of rain crossing the area.

Next update before 0700 Wednesday, 30 March 2011

Latest Weather

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<http://www.met.ie/forecasts/sea-area.asp> 30/03/2011

Appendix 8.5 Weather reports from Met Éireann and related data.

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&w&bPage

Sensor Name: M3 Latitude:51.21660000 , Longitude:-10.55000000
Please click on the Table Headers to view a Graph of the Observations.

Time	Atm. Press. (mb)	Char. Press. (mb)	Press. Tend. (mb)	Wind Dir. (°)	Wind Speed (kn)	Max Gust(kn)	Air Temp.(° C)	Dew Point Temp.(° C)	SeaTemp. (°C)	Wave Per.(s)	Stg. Wave Hgt.(m)	Max Wave Per. (s)	Max Wave Hgt. (m)	Relative Hum. (%)	Mean Wave Dir. (°)	Const. (S/m)	Salinity
01/04/2011 00:00:00	1006.800		8	1.200	190	23.000	33.000	12.100	12.100	10.900	7.000	4.500		100.000			
31/03/2011 23:00:00	1007.400		8	0.600	190	25.000	33.000	12.000	12.000	11.000	7.000	4.500		100.000			
31/03/2011 22:00:00	1007.800		8	0.100	190	24.000	31.000	12.100	12.100	10.900	8.000	4.000		100.000			
31/03/2011 21:00:00	1008.000		6	0.300	190	22.000	31.000	12.000	12.000	11.000	8.000	4.500		100.000			
31/03/2011 20:00:00	1008.000		6	0.400	200	22.000	27.000	12.000	12.000	10.900	9.000	4.100		100.000			
31/03/2011 19:00:00	1008.000		7	0.700	200	20.000	27.000	12.000	12.000	10.900	8.000	4.300		100.000			
31/03/2011 18:00:00	1008.200		6	1.000	180	18.000	25.000	11.600	11.600	10.900	8.000	4.100		100.000			
31/03/2011 17:00:00	1008.400		7	0.600	190	20.000	27.000	12.000	11.000	10.900	8.000	4.000		94.000			
31/03/2011 16:00:00	1008.600		7	0.700	210	14.000	21.000	11.900	11.000	10.900	8.000	4.300		94.000			
31/03/2011 15:00:00	1009.200		5	0.000	220			11.800	11.400	10.900	9.000	4.500		97.000			
31/03/2011 14:00:00	1009.000		0	0.400	210	17.000	27.000	12.000	11.300	11.000	8.000	4.300		96.000			
31/03/2011 13:00:00	1009.400		1	1.500	220	17.000	25.000	12.100	11.400	10.900	8.000	5.000		96.000			
31/03/2011 12:00:00	1009.200		2	1.700	210	15.000	20.000	12.200	11.500	11.000	9.000	4.600		96.000			
31/03/2011 11:00:00	1008.600		2	1.800	220	16.000	25.000	12.300	11.600	11.000	9.000	5.000		96.000			
31/03/2011 10:00:00	1007.800		1	1.900	220	16.000	21.000	12.200	11.700	10.900	9.000	5.000		97.000			
31/03/2011 09:00:00	1007.400		2	2.600	220	13.000	20.000	11.900	11.400	10.900	9.000	5.100		97.000			
31/03/2011 08:00:00	1006.800		1	3.500	230	13.000	21.000	11.600	10.700	10.900	8.000	5.000		94.000			
31/03/2011 07:00:00	1006.000		1	4.400	240	17.000	25.000	11.700	10.600	10.900	8.000	5.400		93.000			
31/03/2011 06:00:00	1004.800		3	4.500	240	20.000	33.000	12.000	10.700	10.900	8.000	5.400		92.000			
31/03/2011 05:00:00	1003.400		3	3.200	240	23.000	37.000	12.400	10.700	11.000	8.000	5.000		89.000			
31/03/2011 04:00:00	1001.400		3	1.200	230	25.000	41.000	12.800	10.900	11.000	8.000	4.900		88.000			
31/03/2011 03:00:00	1000.400		2	0.200	220	26.000	39.000	12.900	11.500	11.000	7.000	4.500		91.000			
31/03/2011 02:00:00	1000.200		7	0.500	220	26.000	37.000	12.900	11.700	11.000	7.000	4.100		92.000			
31/03/2011 01:00:00	1000.200		5	1.400				13.000	12.000	11.000	6.000	3.700		94.000			
31/03/2011 00:00:00	1000.200		7	2.100	210	25.000	41.000	12.600	12.200	11.000	6.000	3.500		97.000			

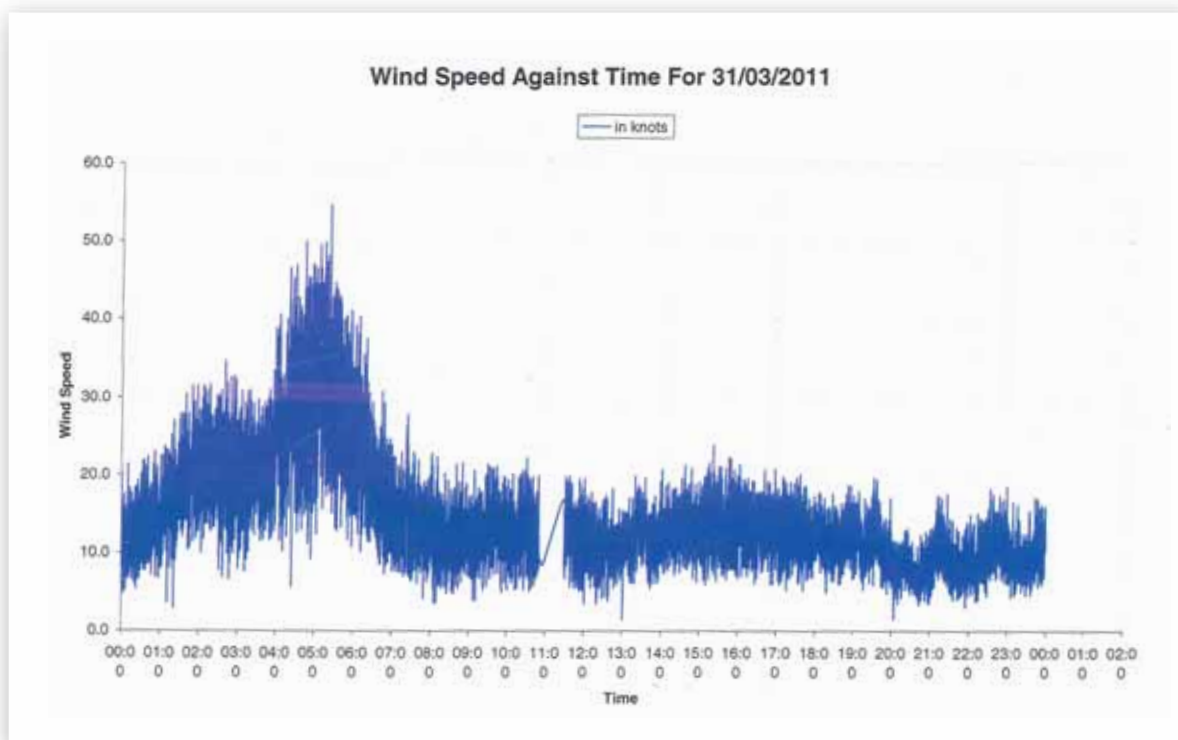
Appendix 8.5 Weather reports from Met Éireann and related data.

&w&bPage 18 E

Sensor Name: M4 Latitude:55.00000000 Longitude:-10.00000000
 Please click on the Table Headers to view a Graph of the Observations.


Time	Aim. Press. (mb)	Char. Press. Tend.	Press. Tend. (mb)	Wind Dir. (°)	Wind Speed (kn)	Max Gust(kn)	Air Temp.(°C)	Dew Point Temp. (°C)	SeaTemp (°C)	Wave Per. (s)	Sign. Wave Hgt. (m)	Max Wave Per. (s)	Max Wave Hgt. (m)	Relative Hum. (%)	Mean Wave Dir. (°)	Cond. (S/m)	Salinity
01/04/2011 00:00:00	998.800		7	3.000	190	25.000	33.000	10.800	9.900	10.300				94.000			
31/03/2011 23:00:00	999.400		8	2.700	180	22.000	31.000	10.100	8.800	10.300				92.000			
31/03/2011 22:00:00	1000.800		8	1.300	180	19.000	27.000	10.500	8.900	10.300				90.000			
31/03/2011 21:00:00	1001.800		0	0.200	190	20.000	25.000	10.300	8.800	10.300				90.000			
31/03/2011 20:00:00	1002.200		1	1.100	200	16.000	25.000	10.700	9.200	10.300				90.000			
31/03/2011 19:00:00	1002.200		3	1.400	220	18.000	25.000	10.800	9.100	10.300				89.000			
31/03/2011 18:00:00	1001.600		3	0.800	210	19.000	27.000	11.000	9.100	10.400				88.000			
31/03/2011 17:00:00	1001.000		5	0.200	220	23.000	31.000	11.300	9.300	10.400				88.000			
31/03/2011 16:00:00	1000.800		8	0.500	210	22.000	31.000	11.000	9.400	10.400				90.000			
31/03/2011 15:00:00	1000.800		7	0.600	200	24.000	31.000	10.300	8.500	10.300				89.000			
31/03/2011 14:00:00	1001.200		0	0.700	200	21.000	27.000	10.400	7.700	10.400				83.000			
31/03/2011 13:00:00	1001.200		0	1.900	220	21.000	27.000	10.600	7.500	10.300				81.000			
31/03/2011 12:00:00	1001.400		1	4.200	230	22.000	29.000	10.600	7.100	10.200				79.000			
31/03/2011 11:00:00	1000.400		1	6.100	250	22.000	33.000	10.500	5.800	10.200				73.000			
31/03/2011 10:00:00	999.200		1	7.600	270	22.000	33.000	10.400	5.500	10.200				72.000			
31/03/2011 09:00:00	997.200		1	9.400	270	25.000	35.000	10.300	5.400	10.200				72.000			
31/03/2011 08:00:00	994.400		2	10.200	270	27.000	39.000	10.500	6.500	10.200				76.000			
31/03/2011 07:00:00	991.600		3	7.200	280	30.000	47.000	10.000	7.000	10.100				82.000			
31/03/2011 06:00:00	987.800		3	1.900	280	33.000	47.000	9.800	8.000	10.100				88.000			
31/03/2011 05:00:00	984.200		6	3.600	210	23.000	33.000	10.900	9.800	10.200				93.000			
31/03/2011 04:00:00	984.400		6	6.100	200	23.000	31.000	10.800	9.900	10.100				94.000			
31/03/2011 03:00:00	985.800		7	7.200	190	21.000	33.000	10.500	9.700	10.000				95.000			
31/03/2011 02:00:00	987.800		8	7.300	150	24.000	31.000	9.600	8.500	10.100				93.000			
31/03/2011 01:00:00	990.600		8	6.500	150	23.000	31.000	9.600	8.300	10.100				92.000			
31/03/2011 00:00:00	993.000		8	5.300	150	22.000	33.000	9.600	8.000	10.100				90.000			

Appendix 8.5 Weather reports from Met Éireann and related data.



Appendix 8.5 Weather reports from Met Éireann and related data.

18H



MET ÉIREANN
The Irish Meteorological Service

Glasnevin Hill, Dublin 9, Ireland. Cnoc Ghlas Naíon Baile Átha Cliath 9, Éire. www.met.ie Tel: +353-1-806 4200 Fax: +353-1-806 4247 E-mail: met.eireann@met.ie

continued *WS3018/2C_14084*.....


6 to 12 hours

Winds: Westerly Gale Force 8 to Strong Gale Force 9, at first, gradually backed south-westerly and decreased to Force 5.


Weather: isolated showers and some bright spells

Visibility: poor to moderate

Waves of 3.5 metres to 5.4 metres, significant wave height, were reported by weather buoys west of Ireland during the period. The highest waves occurred earlier in the period. Similar waves would have occurred on the Atlantic side of the Aran Islands. The waves would have been considerably reduced within Cashla Bay itself.



Evelyn Murphy B.Sc. M.Sc. Meteorologist
Research & Applications Division
Met Éireann



9. CORRESPONDENCE RECEIVED

	PAGE
9.1 Department of Agriculture, Food and the Marine MCIB Response	28 29
9.2 Mr. Reinhard Peters MCIB Response	30 30
9.3 Irish Coast Guard MCIB Response	31 31
9.4 Galway Harbour Company MCIB Response	32 33

Note: The address and contact details of the individual respondent have been obscured for privacy reasons.

Ms Eve Reddin,
Secretariat,
Marine Casualty Investigation Board,
Leeson Lane,
Dublin 2



2nd December 2011

Your Reference: MCIB/199

Dear Ms. Reddin,

I received a letter from the MCIB dated 7th November 2011 and the Draft report of the investigation into the grounding of the M.V. Pantanal at Cashla Bay Rossaveel on 31st March 2011.

I wish to make the following comments:

6. CONCLUSIONS

6.7 The Harbour Master is adamant.....etc.

The Galway Pilot Kevin Walsh confirmed that the Harbour Master had passed on his concerns to him prior to him boarding the vessel at the approaches and that he had agreed to pass this information onto the Master. He also confirmed that when he returned to the Harbour Masters Office immediately after anchoring the vessel that he met with the Harbour Master and reassured him that this information had in fact been passed onto the Master. In addition the Master admitted in statements given after the event that he had thus been informed. It is a Standard Operating Procedure pertaining to the entry into Cashla Bay of any large commercial vessel that the ships agent are advised that should an anchorage be available then would only be available during daylight hours and suitable weather conditions prevailing.

Below is an extract from my statement on a report of the incident given to the Marine Survey Office (MSO) and the Marine Casualty Investigation Board (MCIB) shortly after the grounding:

"The agents City of Galway Shipping Ltd, have past knowledge of large commercial vessels entering and working off anchor in Cashla Bay as they have handled various vessels in the past. As would be the routine they were advised of the port requirements for entry of the M.V Pantanal, which included entry into the bay during daylight hours only and suitable weather conditions. The agent was also provided with the co-ordinates of two recommended anchorages that had been used previously by large commercial vessels. (see Annex 1 attached).

On Wednesday morning 30th March prior to the vessels arrival the owner's representatives, cargo owners and a rep from the ships agent met in my office by way of introduction. The owner's rep rang the master on the vessel and established that the master would be requesting a pilot even though pilotage was not compulsory. The agent consequently contacted Galway Harbour and organised a pilot to come to Ros A' Mhíl Harbour."

An Roinn
Talmhaíochta,
Bia agus Mara
Department of
Agriculture, Food
and Marine

Lárionad Chuan
Iascaigh Ros an
Mhíl
Ros an Mhíl
Fishery Harbour
Centre

Ros an Mhíl
Co. Na Gaillimbe
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Ros an Mhíl
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e-mail/post:
johnc.donnelly@agriculture
.gov.ie

The Harbour Master concerns about the inclement weather were also expressed at the above meeting.

Practically all communication involving a large commercial ships entry into Cashla Bay would be via through the ships agent. The earliest available opportunity for the harbour to communicate directly with a vessel would be as the vessel approaches the harbours jurisdiction. Considering the possibility of language communication problems etc between vessels and shore side it was thought at the time that the most prudent method of ensuring that this important information was passed onto the master (in addition to the ships agent and cargo reps) was via the Galway Pilot.

7. RECOMMENDATIONS

7.1 There was numerous contact by phone and e mail correspondence between the ships agent and the Harbour Master well in advance of the vessels entry. The dimensions of the vessel were known in ample time as this information (normal SOP's) had been passed onto the Harbour Master by the ships agent via e mails, which showed the Nomination details, including vessels dimensions, for the Pantanal dated 18th March 2011.

Cashla Bay is a safe anchorage provided that all the well documented requirements for a vessels entry and SOP's for the normal practice of good seamanship are followed. While not a frequent occurrence the anchorage in Cashla Bay has been and still is used successfully and safely by numerous large commercial vessels including passenger vessels such as the MV Black Prince, MV Ocean Prince, MV Adriana and the Heavy Lift General Cargo Vessel MV Paula.

The MV Paula's use of the anchorage was similar to what was to take place with the MV Pantanal i.e. it used the anchorage successfully to offload from its deck a domestic passenger vessel for use in Rossaveel. The Paula with dimensions of 8,397 GT, LOA 151.6 Mts, Draft 7.8 Mts was a much larger vessel than the Pantanal.

Mise le meas


Captain John C. Donnelly
Harbour Master



An Roinn
Talmhaíochta,
Bia agus Mara
Department of
Agriculture, Food
and Marine

Lárionad Chuan
Iascaigh Ros an
Mhíl
Ros an Mhíl
Fishery Harbour
Centre

Ros an Mhíl
Co. Na Gaillimhe
Éire
Ros an Mhíl
Co. Galway
Ireland

Fon/Telephone
+353-(0)-91-572108/589
Facs/Fax +353-(0)-91-572131
e-mail/post:
johnc.donnelly@agriculture
.gov.ie

MCIB RESPONSE

The MCIB notes the contents of this correspondence.

Reinhard Peters

Hatten, 27. Nov 2011

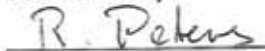
Your Reference: MCIB/199

Dear Mr O'Donnell,

thanks a lot for your Investigation Report.

As far as I have seen there are neither comments nor observations on the draft report from my side.

Yours sincerely



Reinhard Peters



MCIB RESPONSE

The MCIB notes the contents of this correspondence.



17 November 2011

MCIB/199
Our Ref. 22/52/2

Ms. Eve Reddin
Secretariat
Marine Casualty Investigation Board
Leeson Lane
Dublin 2

Draft Report of the Investigation into the grounding of the "Patanal" at Cashla Bay, Rossaveal on 31st March 2011

Dear Ms Reddin,

I wish to advise that the draft report in relation to this incident has been reviewed and may I suggest that a Marine Notice be issued to remind mariners of their obligation to report a ship casualty to the Coast Guard and the National Authorities.

Yours sincerely,



Chris Reynolds
Director



Administration Office, Irish Coast Guard, Department of Transport, Leeson Lane, Dublin 2, Ireland.
Oifig Riaracháin, Garda Cóstá na hÉireann, An Roinn Iompair, Lána Chill Mochargán, Baile Átha Cliath 2, Éire.
Tel: + 353 1 6783455 / 3427, Fax: + 353 1 6783459, email: admin@irishcoastguard.ie

MCIB RESPONSE

The MCIB notes the contents of the correspondence and has included this suggestion in the recommendations.



Galway Harbour Company

COMHILACHT CUAIN NA GAILLIMHE

Harbour Office,
New Docks,
Galway,
Ireland.

Oifig an Chaitin,
Na Dugai Nua,
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Tel 00 353 91 561874 / 562329
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Email: info@galwayharbour.com
www.galwayharbour.com

14th November 2011.

Mr. John O'Donnell,
Chair,
MCIB
Leeson Lane,
Dublin 2.

Your Ref: MCIB/199

RE:

Dear John,

Thank you for your letter and report into the grounding of the MV Pantanal in March 2011.

I can comment as follows:

3.4 The Pilot & Master were not satisfied with the initial anchoring position after the vessel was brought up so the anchor was heaved up and the vessel was repositioned and re-anchored. This due to restricted swinging circles in the anchorage.

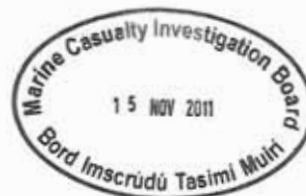
5.5 This paragraph refers to "two anchors being laid out". I think to avoid confusion it should be reworded to clarify that the anchors were not the ships anchors but two other anchors that were laid by a local boat operator to assist in getting the Pantanal off the shore.

6.1 The use of the port anchor in the northern hemisphere and starboard anchor in the southern hemisphere is noted. However, modern day shipping, the anchors are rotated when the vessel requires to be anchored and this is accepted practice. The use of either anchor in this grounding had no material affect on the outcome of what followed on the early hours of the 31st March 2011.

6.3 Same comment as to point 6.1 it did not matter which anchor was used. The rule of port anchor in the N Hemisphere and starboard anchor in the S Hemisphere relates to wind shifts and to avoid anchors becoming fouled if both anchors are dropped. This was not the case of the Pantanal.

Mr. Eamon Bradshaw - CHIEF EXECUTIVE OFFICER
Capt Brian Sheridan - HARBOUR MASTER.

Galway Harbour Company Limited Regd Office: Harbour Office, New Docks, Galway, Ireland. Regd Number 262564
DIRECTORS: Mr. E. Bradshaw, Mr. P. Carey, Ms. M. Cleary, Ms. M. Conroy, Mr. J. MacNamee, Mr. T. McIlwain, Mr. R. Molloy.





Galway Harbour Company
COMHLACHT CUAIN NA GAILLIMHE

Harbour Office,
New Docks,
Galway,
Ireland.

Oifig an Chuan,
Na Dugai Nua,
Gaillimh,
Éire.

Tel 00 353 91 561874 / 562329
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www.galwayharbour.com

My own conclusions are that if the Master of the Pantanal had taken the professional advice of the Harbour Master in Rossaveal and that of the pilot which was to leave the anchorage if the weather deteriorated, then this incident would not have occurred.

Yours sincerely,

Captain Kevin Walsh
Pilot



Mr. Eamon Bradshaw - CHIEF EXECUTIVE OFFICER.

Capt Brian Sheridan - HARBOUR MASTER.

Galway Harbour Company Limited Regd Office: Harbour Office, New Docks, Galway, Ireland. Regd. Number 26264

DIRECTORS: Mr. E. Bradshaw, Mr. P. Carey, Ms. M. Clery, Ms. M. Conroy, Mr. J. MacNamara, Mr. T. McEwan, Mr. R. Molloy

MCIB RESPONSE

The MCIB notes the contents of this correspondence and has made the necessary amendments.

