



**REPORT OF THE
INVESTIGATION INTO THE LOSS
OF THE "SEA SWALLOW"
ON 27TH JULY 2001.**

The Marine Casualty Investigation Board was established on the 5th, June 2002 under The Merchant Shipping (Investigation of Marine Casualties) Act 2000

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SYNOPSIS

1. SYNOPSIS.

- 1.1 On the morning of Friday the 27th of July 2001 the vessel "Sea Swallow" left Frenchport in Belmullet, Co. Mayo with both Mr. Tony Lavelle and his son Anthony onboard. They were carrying approximately fifty fully-grown shorn ewes to Inishkea North Island for summer pasture. They departed Frenchport at 1120 hrs approximately. The weather was good, the sea was slight with south-westerly winds of 1 knot; it was cloudy and good visibility of 13 miles. The boat appears to have sunk while passing Duffur rocks at about 1200 hrs. The skipper, Mr. Tony Lavelle was rescued but his son Anthony Lavelle has not been recovered.

2. FACTUAL INFORMATION

2.1 DESCRIPTION OF THE VESSEL "SEA SWALLOW"

Name:	Sea Swallow
Type:	Carvel wooden fishing vessel. The frames were of oak and the planks were most likely larch or opepe.
Length:	33ft
Breadth:	10.5ft
Draught:	4.5ft
Gross Tonnage:	6.69
Registered Tonnage:	6.69

Photographs of the "Sea Swallow" in the weeks immediately prior to the casualty are shown in the appendix 8.1.

- 2.2 It is understood that the vessel was fitted with two lifebuoys, lifejackets, a bilge pump, VHF Radio, an anchor and chain. On the day of the casualty she was towing a currach and an outboard motor was kept on the "Sea Swallow".
- 2.3 When originally built the "Sea Swallow" was designed and equipped with a wet exhaust through the transom. At some time this was converted to a dry exhaust with the exhaust led up beside the outside of the wheelhouse. The original exhaust skin fitting was left in the transom of the vessel. Aluminium chequer plate was fitted to the fore deck and bulwarks of the vessel. Mr. Lavelle had purchased the vessel in recent weeks from Galway. He had work carried out on the vessel in Belmullet by a boat builder, Mr. Padraig Patten of Saula Achill and by Mr. Thomas Keane of Blacksod. Mr. Patten fitted two bilge keels to the vessel. He noted that the condition of the hull appeared to be in good order. Mr. Keane fitted a steel channel keel band and fitted a flexi pipe to the dry exhausts and assisted with the fitting of the mast. He noted that the vessel appeared to be in good condition.

EVENTS PRIOR

3. EVENTS PRIOR TO THE INCIDENT

- 3.1 The "Sea Swallow" set out from Frenchport on the morning of the 27th of July 2001 carrying approximately fifty sheep to Inishkea North Island for summer grazing. Mr. Tony Lavelle skippered the vessel and his son Anthony accompanied him. The trip to Inishkea North Island was the first working trip the vessel made for Mr. Lavelle.
- 3.2 There was no record of this vessel being used for the transport of sheep prior to this. Nor was there any record of the vessel being used for transporting cargo.

4. THE INCIDENT

- 4.1 En route to Inishkea North Island when passing Duffur rock at 1200 hrs.approx, the vessel sank. Mr. Tony Lavelle and his son Anthony both fell into the water. Some thirty sheep reached Duffur rock; the remainder of the sheep were presumably drowned. No distress message was received and it is probable that no such message could be sent as the accident and sinking appeared to happen so quickly.
- 4.2 There is no record that the "Sea Swallow" had a Ship's Radio licence. Neither Mr. Lavelle nor his son are recorded as holding certificates of competency for operating marine VHF radio. The alert was raised at 1328 hrs. when a local fisherman saw some sheep on Duffur rock. He also reported dead sheep in the water and an oil slick.
- 4.3 The local fishing vessel "St Theresa" took Mr. Tony Lavelle from the water at 1414 hrs. He had been clinging to an oar from the currach, which they were towing, and a baulk of wood, which had been onboard the "Sea Swallow".
- 4.4 Mr Tony Lavelle was airlifted by Air Corps helicopter to Mayo General Hospital in Castlebar. Mr. Tony Lavelle stated that his son had been clinging to a five-gallon plastic container and was with his father until five minutes before Mr. Tony Lavelle was picked up. Unfortunately, despite extensive searches Anthony was not located.
- 4.5 The wreckage of the vessel was found in about 30 feet of water close to Duffur rock. It was facing a direction heading south and was upright. Divers from the Belmullet Sub-Aqua Club searched the vessel at 1700 hrs searching for Anthony Lavelle. They reported that the vessel's hull was apparently intact without any signs of damage. They found the bodies of several sheep trapped in the forward part of the vessel.
- 4.6 The currents in the area of the accident were considerable and carried both father and son some distance and hampered their ability to swim. Neither Mr. Tony Lavelle nor his son was wearing lifejackets. The weather was good the sea was slight with south-westerly winds of 1knot; it was cloudy and good visibility of 13 miles. A copy of the Met Eireann report for the area at the time of the accident is enclosed at appendix 8.5 to this report.

EVENTS FOLLOWING

5. EVENTS FOLLOWING THE INCIDENT

- 5.1 The Malin Head division of the Irish Coast Guard coordinated the search and rescue operation. The Irish Coast Guard timeline is provided in appendix 8.4 to this report. Please note that all Irish Coast Guard time are given in GMT, which is one hour behind local time at the time of the incident.
- 5.2 An extensive search and rescue operation was carried out to search for both Mr. Tony Lavelle and his son Anthony. Mr. Tony Lavelle was found and picked up and the search concentrated on finding Anthony. Unfortunately he has not yet been found.
- 5.3 The "Sea Swallow" was found in about 30 feet of water facing south. Divers from the Belmullet Sub-Aqua Club noted it to be intact. Over the following days the weather deteriorated and on Thursday the 2nd of August 2001 it had shifted to deeper water of approximately 18m depth and was now facing in an east-west direction. The wheelhouse had become detached from the vessel and was washed up.
- 5.4 Divers reported on the 2nd of August 2001 that a hole was found in the vessel and some planks had sprung. The superstructure of the "Sea Swallow" began to break-up in the days immediately following the casualty. A large amount of debris was washed up and was recovered by persons involved in the search. The Belmullet Sub-Aqua Club recovered the currach on the evening of Friday the 27th of July. The wheelhouse was recovered on the following days together with the nameplate of the vessel. The lifebuoys were also recovered attached to the wheelhouse. The engine cover was recovered on the 2nd of August 2001.

6. CONCLUSIONS AND FINDINGS

- 6.1 Structural failure seems unlikely, as there were no reports of collision or damage to the boat.
- 6.2 There have been reports that the vessel dried out alongside the pier at Frenchport on the day before the accident. Local people have advised that this is an unsuitable place to dry out, as there are rocks on the bottom, which could damage a vessel. However, this appears not to have been a contributory factor in this case as the divers on inspecting the vessel shortly after it's sinking found no evidence of damage to the hull.
- 6.3 The Belmullet Sub-Aqua Club searched the vessel on the evening of Friday the 27th of July 2001 and reported that the hull was intact and undamaged. This indicates that it is unlikely that the vessel was structurally deficient. The boat builders, Mr. Padraig Patten and Mr. Tom Keane, who had worked on the vessel in the preceding weeks, reported that as far as they could ascertain the hull appeared to be in good order.
- 6.4 The number of sheep on board was approximately fifty. Based on data for shorn fully-grown ewes with an average mass of 50kg this gives a total load of cargo of 2.5tonnes.
- 6.5 The figure of fifty sheep is in-line with the stowage factors for sheep, with each sheep occupying 0.3m^2 . With a working deck of approximately 20m^2 there was apparently sufficient space for fifty sheep. However, this does not take into account the stability of the vessel, which also needs to be considered.
- 6.6 Calculations based on the above estimates would indicate an approximate mean draught of 1.5m. This might have lead to the submergence of the opening in the transom for the "old" wet exhaust, which if unsealed would have let water into the hull. If the sheep moved towards one side and aft this would increase the draught aft which could probably have submerged the exhaust opening through the transom. If this exhaust was not sealed then water could have entered the hull and accumulated over time creating a free surface effect. Which due to the shape of the hull, which opens to a wide bilge, would have a significant effect, possible leading to an increase of vertical centre of gravity. This would have a deleterious effect on the stability of the vessel.
- 6.7 Thus the movement of the sheep to one side and towards the stern was the most likely primary cause of the accident. This may have lead to progressive flooding of the vessel and the resulting potential free surface effect would have lead to the vessel's rapid loss as a result of the loss of stability.
- 6.8 It is understood that a high railing together with netting was fitted around the gunwales. This would have prevented the sheep from jumping overboard and would thus have caused them to "pile-up" against the netting with no means of releasing them. This would have increased the overturning moment on the vessel.

CONCLUSIONS

- 6.9 The water depth at the pier alongside at Frenchport was sufficient for loading the vessel and it is unlikely that the vessel touched the ground during loading. The "Sea Swallow" was carrying sheep, which are considered as cargo. She was proceeding to sea and as such the applicable legislation is as follows:

Merchant Shipping (Load Lines) Act, 1968.
Merchant Shipping (Load Line) Rules, 1968.
Merchant Shipping (Fire Appliances) Rules 1967, SI (1967) 101.
Merchant Shipping (Life-Saving Appliances) Rules 1967, SI (1967) 100.
Merchant Shipping (Life-Saving Appliances)(Amendment) Rules, 1978, SI(1978) 216.

- 6.10 This would require the vessel to be in possession of an Irish Load Line Certificate, which would include a stability booklet, which summarises the load carrying capacity of a vessel. The vessel should also have had a hull survey and been inspected to ensure that she was carrying the required life saving and fire appliances for a Class VIIIA vessel. No application had been made for such a survey. The survey would have required the vessel to be fitted with certain other items of safety equipment.

7. RECOMMENDATIONS

- 7.1 That the carriage of livestock should be highlighted as a particularly hazardous activity and that this should be publicised to the farming community in the appropriate farming media, as they may not be served by the fishing media.
- 7.2 That a marine notice be published giving guidance for small vessels on the carriage of livestock to offshore islands and other places.
- 7.3 That such vessels be appropriately certificated including load line and safety equipment.
- 7.4 That all persons on board such vessels wear personal flotation devices at all times.
- 7.5 That lifebuoys should not be tied to the vessel and that they should be float free.
- 7.6 That a bilge alarm be fitted in the engine space and other large spaces, which cannot be readily inspected.
- 7.7 Notify person ashore about departure and expected time of return.

APPENDICES

8. APPENDICES

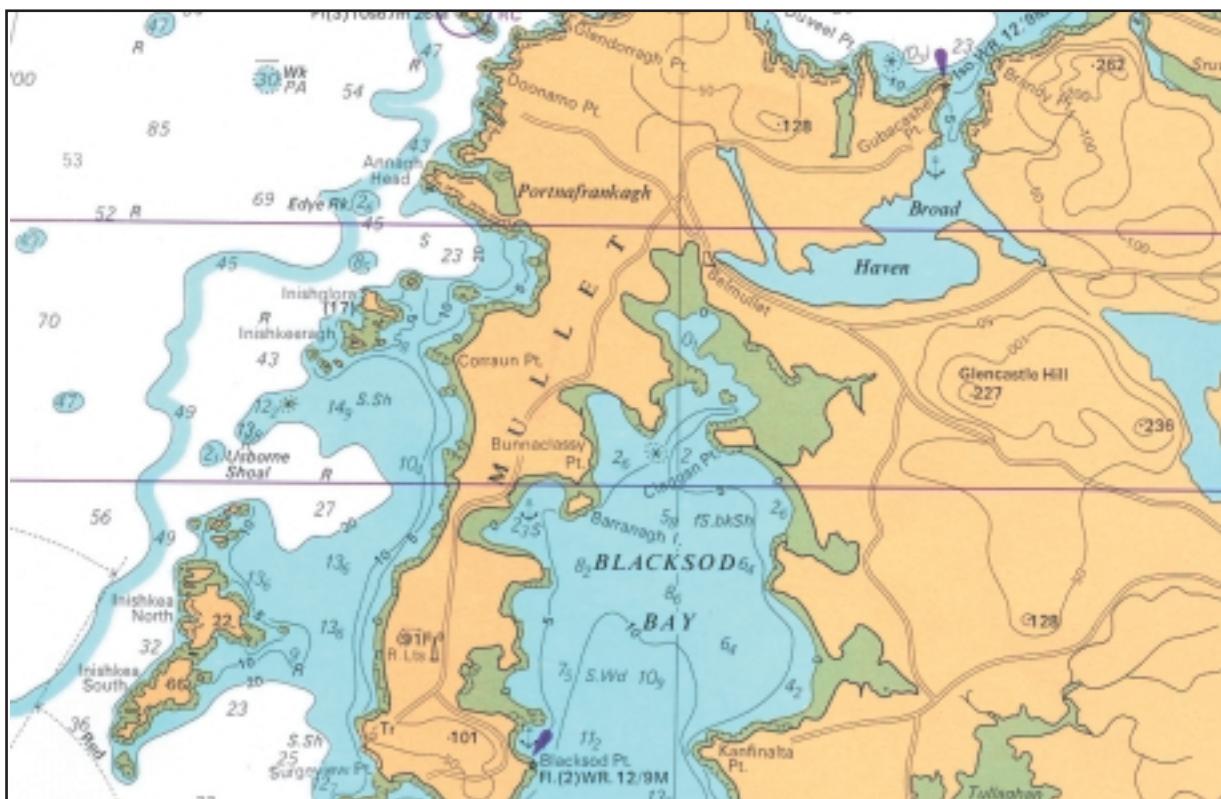
- 8.1 Photographs of the "Sea Swallow"
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8.1 Photographs of the "Sea Swallow"

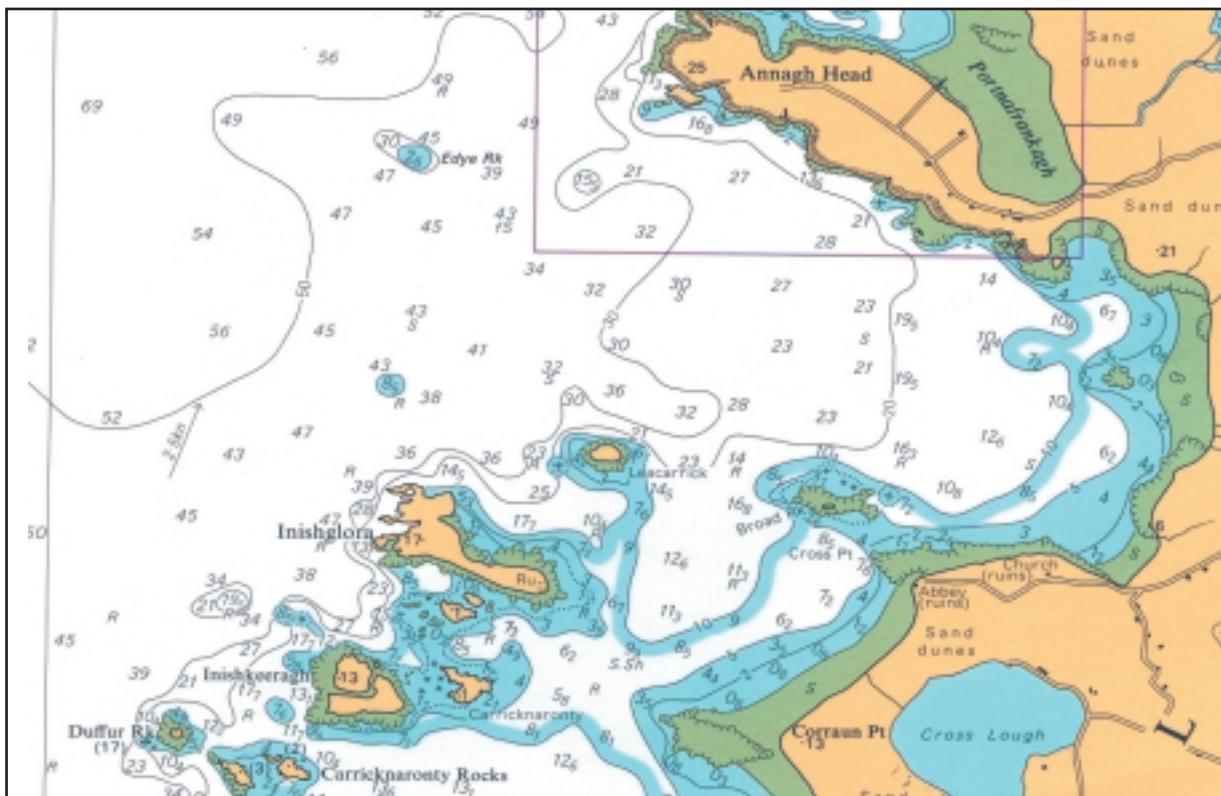


APPENDIX 8.2

8.2 Chart extract Frenchport to Inishkea Island



8.3 Chart of Area Frenchport to Inishkea Island



8.4 Irish Coast Guard Summary of Time

Irish Coast Guard GARDA COSTERA NA HÉIREANN	
27th July 01 - Sea Swallow	
1228z:	FV Dalmore advises EJM of sheep in water and on rocks. Feels Sea Swallow may be in difficulty.
1234z:	Request Ballyglass LB to Launch.
1238z:	R110 tasked. — HELICOPTER AT SLIGO
1242z:	FV Arctic cloud advises sheep on rocks - oil in the water - no sign of Sea Swallow.
1247z:	Mayday relay broadcast.
1253z:	R110 advise - ETA 25 mins.
1259z:	Ballyglass LB - ETA 40 mins.
1315z:	St. Teresa located casualty.
1320z:	R110 on scene and searching.
1324z:	LE Ciara proceeding.
1332z:	Casualty onboard R110 - bound Castlebar hospital.
1336z:	LE Ciara on scene - Appointed OSC.
1421z:	R110 back on search.
1530z:	R115 commences search - R110 refuels Blackpool.

8.5 Met Eireann Weather Report 27/7/2001

Estimation of the weather conditions at the sea area near Duffer Rock off Belmullet Peninsula Co. Mayo on the 27th July 2001 between 10 and 14 hours
General Situation
There was an anticyclone over Ireland.
Details for the area:-
Winds: Light Force 1 to 2 , variable in direction but mainly southerly
Weather: Dry, mostly cloudy but some breaks in the cloud gave sunshine.
Visibility: Good
Seastate: Slight southwesterly swell of approx 0.5 to 1 metre significant wave height.
Note: there was some fog reported well off shore earlier in the morning, but no evidence of any in the area of the incident.

CORRESPONDENCE

9. INDEX OF CORRESPONDENCE RECEIVED ON THE DRAFT REPORT AS CIRCULATED, INCLUDING THE MCIB RESPONSE.

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Mr. Paul J.R.Solly (19/2/2003)

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Mr. Dick Heron
Secretary
Marine Casualty Investigation Board
Leeson Lane
Dublin 2

19 February, 2003

Re: Draft Report of the Investigation into the loss of the "Sea Swallow", 27 July 2001.



Dear Mr. Heron,

I have received the draft report from Mr. John O'Donnell, the Chairman of MCIB, and he has asked me to address my comments on it to you.

I have two points that I would ask you to consider, both of which refer to page 4 of the report, headed "2. Factual Information."

1.

Item No. 1 deleted with the written approval of Mr. Solly

2. The dimensions of the vessel show a Breadth of 10.5 ft. I am not sure at which point this breadth is taken, but if it is at the widest point (approximately at the forward edge of the wheelhouse) then the average breadth of the working deck aft of the wheelhouse was considerably less than 10.5 ft. From memory I would estimate the length of the deck from the stem to the wheelhouse at about 18 ft. The engine hatch cover was about 4 ft. by 3 ft. and was raised above the deck. I would therefore estimate, using an average breadth of 9 ft, the working deck area at about 150 square feet or about 14 square meters rather than the 20 square meters quoted on page 8 of the report (6. Conclusions). I believe this would be insufficient for 50 sheep under the stowage factors, or would be right at the limit of the capacity. Of course the vessel was never designed or intended for the transit of livestock and was registered as a fishing vessel.

These are my only observations on the report and I thank you in advance for your consideration of them.

Yours sincerely,

Paul J R Solly
Paul J R Solly

The MCIB notes the contents of this letter and would add that the dimensions used are the registered dimensions of the "Sea Swallow"

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