

**REPORT INTO THE INCIDENT
INVOLVING A ROYAL
ST. GEORGE YACHT CLUB RIB
IN DUBLIN BAY ON
23rd MAY, 2004**

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1. SYNOPSIS

- 1.1 On the 23rd May 2004 four people, all wearing personal flotation devices, departed in a RIB from the Royal St George Yacht Club in Dun Laoghaire for a trip to Sutton. Two of the people transferred to a local RIB off Sutton.
- 1.2 On the return trip to Dun Laoghaire, both remaining crewmembers were thrown out of the RIB into the sea. After initially clinging to a racing mark, they were subsequently rescued by a Dublin Port pilot cutter, which was returning to the port. They were cold but uninjured. The RIB was recovered from the shore adjacent to the Poolbeg light house.
- 1.3 All times are given in BST.

2. FACTUAL INFORMATION

2.1 Particulars of the RIB:

Make: Stingray Marine S.A.
Model: Searaider.
Length: 6.20 metres.
Owner: Royal St. George Yacht Club, Dun Laoghaire.
Purchased: New in 2003.
Engine: Yamaha, Four stroke, 100 H.P.
Description of RIB: Rigid inflatable boat with a single V form planing hull.
A photograph of the RIB is given in Appendix 9.1.

2.2 The crew of the RIB at the time of the incident were:

1. Mr. Ian Cummins aged 18 years from Dublin and
2. Mr. Patrick Hillery aged 19 years also from Dublin.

Earlier in the same day of 23rd May 2004, both men had successfully completed an Irish Sailing Association Power Boat Level 3 course at Dun Laoghaire.

3. CIRCUMSTANCES PRIOR TO THE INCIDENT

- 3.1 An Irish Sailing Association Power Boat Level 3 course was completed by Ian Cummins and Patrick Hillery on May 23rd 2004 at the Royal St George Yacht Club in Dun Laoghaire. After completion of the course it was arranged that one of the course instructors Mr. Jonathan O`Brien and also one of the participants would be taken to Sutton by Mr. Cummins and Mr. Hillery, both of whom had successfully completed the same course. The Dublin Bay area is shown on the chart extract in Appendix 9.2.
- 3.2 The RIB departed from the Yacht Club bound for Sutton at about 1530 hours BST on Sunday 23rd May 2004 with these four people on board. All were wearing personal flotation devices. Mr. O`Brien was at the helm on the trip across to Sutton. He took a direct route across and met up with a RIB from Sutton to the north of No.3 Dublin Port shipping channel buoy. Mr. O`Brien, and the course participant from the Sutton area, then transferred to the Sutton RIB, leaving Mr. Cummins and Mr. Hillery on the Royal St George Yacht Club RIB for the trip back to Dun Laoghaire.

4. THE INCIDENT

- 4.1 Mr. Hillery then took the helm with the kill cord attached around his ankle. The VHF radio was over the back of the center console seat. The RIB headed towards Dun Laoghaire. According to Mr. Hillery the RIB was at about half speed and the motion was not bad. The Met Eireann weather report, which is given in Appendix 9.3, states that the winds were light to moderate force 3 to 4, between south east and south west in direction but mainly from a south to south-east direction. The sea state is given as calm or rippled with very good visibility.
- 4.2 Mr. Hillery then handed over the helm to Mr. Cummins who then attached the kill cord to his ankle. They were heading into the waves and wind. The bow was rising as they proceeded so they decided to head towards Sandymount in order to ease the motion of the RIB. They were both sitting on the centre seat.
- 4.3 They then appear to have hit a wave and both men were thrown out of the RIB to port into the water, clear of the tubes.

EVENTS FOLLOWING THE INCIDENT

5. EVENTS FOLLOWING THE INCIDENT

- 5.1 After the crew were thrown from the RIB it proceeded towards the coast. Both men swam towards the RIB for about five minutes but then gave up and swam towards the South Bar racing mark. See position in Appendix 9.2.
- 5.2 They were swimming for about 10 or 15 minutes into the waves before they reached the buoy. They used the buoy as a flotation device and were waving at passing traffic without success. A couple of vessels passed while they were at the buoy.
- 5.3 They were about 10 minutes at the buoy when the pilot cutter "Tolka" arrived and rescued them at 1639 hours. They spent approximately 30 minutes in the water. The "Tolka", which was inward bound, was investigating reports of an unmanned craft in the vicinity of the Poolbeg lighthouse, which had been reported to the Irish Coast Guard by members of the public.
- 5.4 The crew of the "Tolka" assisted both men, as they were very cold. They headed immediately for the pilot station and called port radio for medical assistance. On the inward passage the casualties were put in thermal blankets and given fresh clothing.
- 5.5 After arrival at the pilot station, both rescued men were taken by ambulance to the Mater Hospital at 1658 hours. They were assessed en route. After some time at the Accident and Emergency Dept, they were discharged, as they had no injuries. They subsequently got a taxi back to the Royal St George Yacht Club in Dun Laoghaire.
- 5.6 The RIB ran ashore starboard side to the Great South Wall to the west of the Poolbeg lighthouse. The engine was still running as it went ashore onto the rocks but it subsequently stopped. The RIB was initially tied up onto the rocks. Due to its motion there was a danger of damage to the RIB. The engine was restarted and the RIB was brought to the Dublin Port pilot station under its own power. Later it was brought back to the Royal St George Yacht Club in Dun Laoghaire, also under its own power.
- 5.7 An examination of the RIB revealed chipping of the coating on the hull area. This chipping was more evident on the starboard side than on the port side of the hull. The propeller blades were damaged from contact with a hard object. See photographs in Appendix 9.4.
- 5.8 At the time of the incident, there was an ebb tide.

- 6. INFORMATION OBTAINED FROM THE RADAR RECORDINGS FROM DUBLIN PORT**
- 6.1** Recordings of the events surrounding the incident were obtained from the radars at Dublin Port Company. The following information was obtained directly from these recordings. The recordings as indicated are reproduced in Appendix 9.5.
- 6.2** The recording for the time 16:07:06, given at Appendix 9.5.1, shows the RIB to the north west of buoy No. 3. At this time the wind recorded by Dublin port is from a direction of 152° at a speed of 14 knots.
- 6.3** The measured speed of the RIB, obtained from the radar recordings, between the times of 16:07:06 and 16:08:30 is about 23.9 knots over the ground.
- 6.4** The recording for the time 16:09:06, given at Appendix 9.5.2, shows the RIB in a position to the south-south-east of the South Bar racing mark. At this time the wind recorded is from a direction of 152° at a speed of 14.8 knots. The RIB appears to have passed to the west of the South Bar mark and then altered to port.
- 6.5** The recording for the time 16:10:06, given at Appendix 9.5.3, shows that the RIB has returned to a position close to the west of the South Bar racing mark. At this time the wind recorded is from a direction of 146° at a speed of 10.3 knots. It is not possible to establish the courses taken by the RIB between the times of 16:09:06 and 16:10:06.
- 6.6** The radar recording for 16:24:18 hours is reproduced in Appendix 9.5.4. This shows the track history of the RIB from a position to the west of the South Bar racing mark until just before it went ashore on the Great South Wall to the west of the Poolbeg lighthouse. In this recording the vessel "BG Ireland" can be seen leaving the port and the High Speed Craft "Jonathan Swift" can be seen entering the port through the shipping channel.
- 6.7** The measured speed of the RIB, obtained from the radar recordings, between the times of 16:10:30 and 16:24:42, when the RIB went ashore, is about 4.16 knots over the ground.

The above details are the best information that can be obtained from the recordings taking into account the size of the echoes and the time scale involved.

7. CONCLUSIONS

- 7.1 The kill cord was found in the RIB after it went ashore. The engine stopped or cut out shortly after running aground. In this case the consequences of an unmanned RIB proceeding under its own power at sea could have been far more serious.
- 7.2 The damage to the hull of the RIB is consistent with damage caused after going ashore onto rocks. The damage to the propeller appears to have been caused from contact with rocks and it would appear that some of the damage was caused prior to the engine stopping or cutting out.
- 7.3 There is no evidence of the RIB colliding with any object which could have caused the two crewmembers to be thrown out of the craft.
- 7.4 Earlier in the same day of 23rd May 2004, both men had successfully completed an Irish Sailing Association Power Boat Level 3 course at Dun Laoghaire.
- 7.5 Mr. Cummins, the person at the helm, had not driven the RIB before that day. He was familiar with the handling of other RIB`s, which have an engine power of 40 Horse Power and had carried out the Power Boat Level 3 course in one of these RIB`s. The other crewmember had carried out the Power Boat Level 3 course in the 100 Horse Power RIB in which the incident occurred.
- 7.6 Notwithstanding the fact that both men were well qualified, the helmsman was not fully familiar with the 100 Horse Power RIB and its operational limitations. The most likely cause of this incident was excessive speed in the weather conditions.
- 7.7 The only explanation for the speed in which the RIB went ashore is that as the helmsman was being thrown out of the RIB, he may have unknowingly pulled the speed control back to a speed consistent with the subsequent speed of the RIB in the weather and tidal conditions.
- 7.8 Both men were fortunate that they were spotted and rescued by the pilot cutter. It is not known what the consequences would have been if they had remained in the water for a longer period of time. They were also fortunate that the incident occurred close to the shipping channel. They had no means of communication with the shore. The VHF was still in the RIB when it went ashore. One of the crewmembers had a mobile phone but it was not working, as it had got wet. Following the incident, the Royal St George Yacht Club published its own requirements regarding the use of club RIB`s outside the harbour and these are given in Appendix 9.6

8. RECOMMENDATIONS

- 8.1** No matter how well qualified a helmsman may be, it is recommended that all helmsmen are fully familiar with the craft they are operating, particularly with regard to manoeuvring characteristics taking into account engine power and operational and speed limitations in the different weather conditions.
- 8.2** The kill cord must at all times be positively connected to the helmsman.
- 8.3** An operational waterproof VHF radio should be attached to one of the crewmembers, who is familiar with its operation.
- 8.4** A Marine Notice or Information Leaflet pointing out these matters should be published and distributed to the appropriate sectors.

LIST OF APPENDICES

9. LIST OF APPENDICES

9.1 Photograph of the RIB.

9.2 Chart extracts showing Dublin Bay.

9.3 Met Eireann weather report.

9.4 Photographs of the damage to the RIB.

9.5 Information obtained from the radar recordings from Dublin Port.

9.5.1 Recording for the time 16:07:06.

9.5.2 Recording for the time 16:09:06.

9.5.3 Recording for the time 16:10:06.

9.5.4 Recording for the time 16:24:18.

9.6 Royal St George Yacht Club notice regarding the use of club RIB's outside the harbour

Appendix 9.1

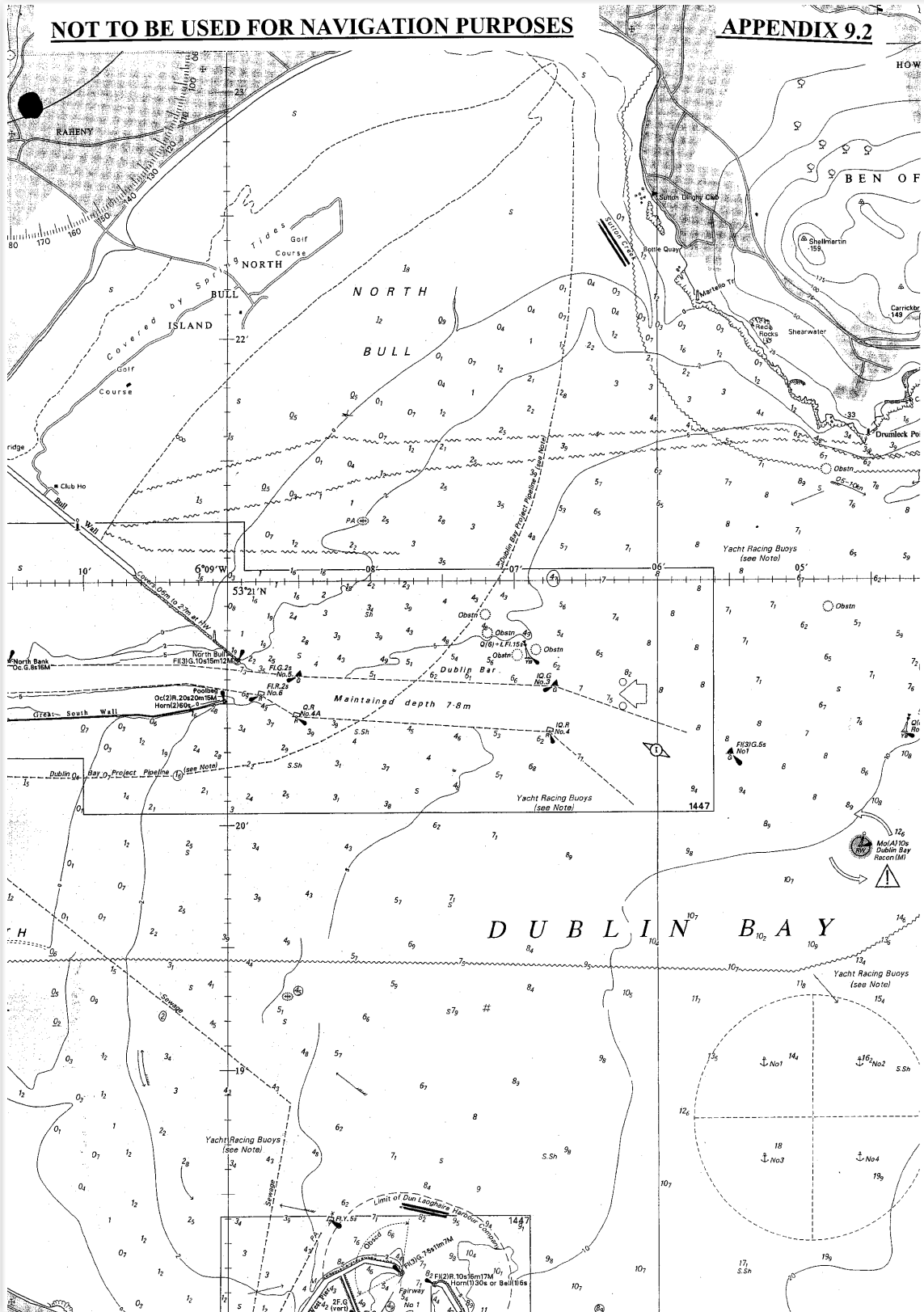
Photograph of the RIB.



APPENDIX 9.2

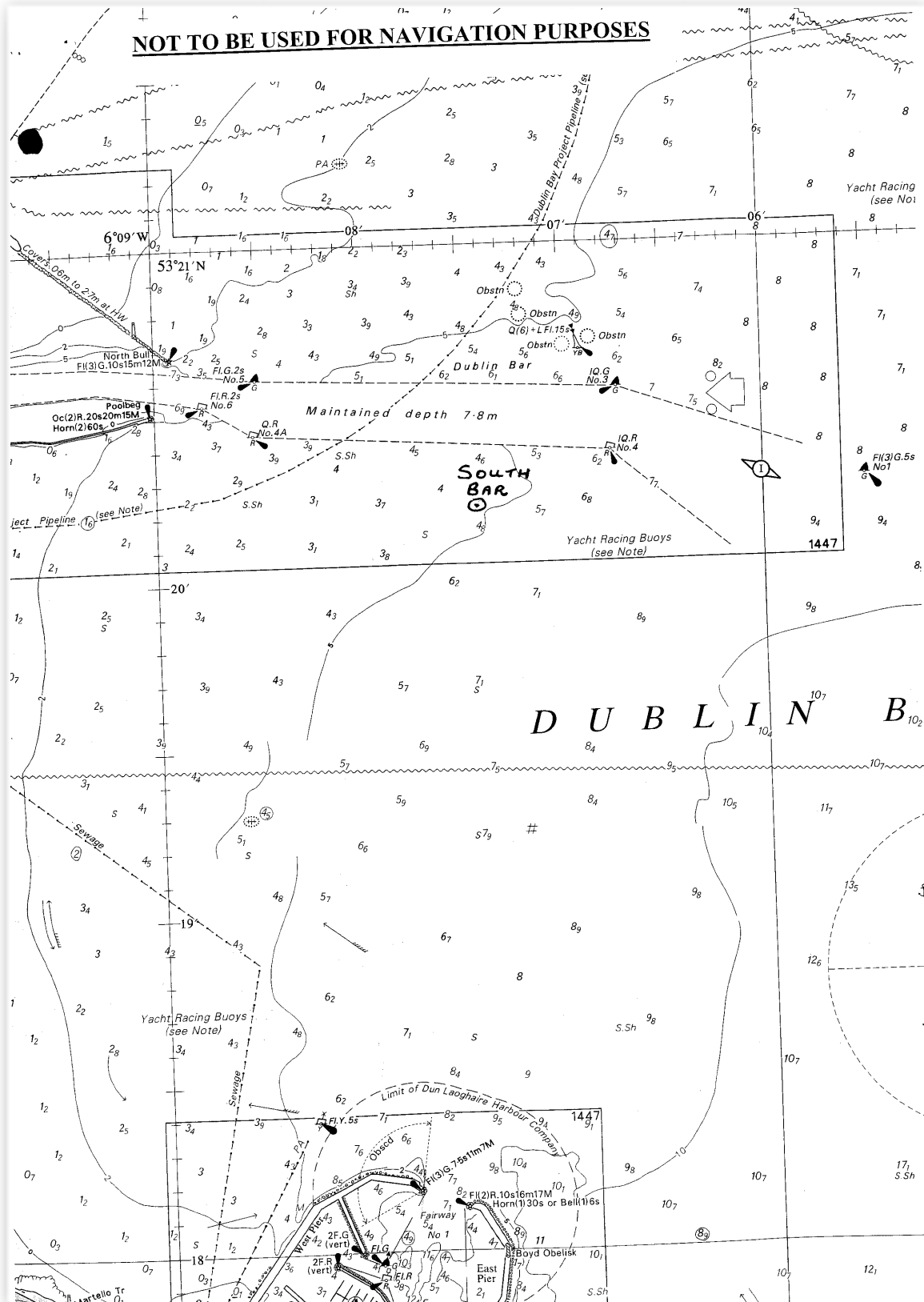
Appendix 9.2

Chart extracts showing Dublin Bay.



Appendix 9.2

Chart extracts showing Dublin Bay.



Appendix 9.3

Met Éireann weather report.



MET ÉIREANN
The Irish Meteorological Service

APPENDIX 9.3

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

Weather Report for Dublin Bay on the 23rd May 2004 Between 14 and 18 hours BST

General Situation: A weak area of High Pressure remained over and to the south of Ireland

Details:

Winds: Light to moderate winds Force 3 to 4, between south east and south west in direction but mainly from a south to south-east direction.

Weather: dry with sunny spells

Visibility: very good

Seastate: calm or rippled.

Recorded observations from

Dun Laoghaire Harbour: at 17:33 hours BST- winds: SSW Force 3

M2 Buoy at 17:00 hours BST - winds: SSW Force 3

Dublin Airport at 17:00 hours BST - winds: SE Force 4



Appendix 9.3

Met Eireann weather report.

Wave Heights:

The wave height is the vertical distance between the crest and the preceding or following trough. The table below gives a description of the wave systems associated with a range of significant wave heights. The significant height is defined as the average height of the highest one-third of the waves. It is very close to the value of wave height given by an experienced seaman when making visual observations of wave height.

Individual waves in the wave train will have heights in excess of the significant height. The highest wave of all will have a height about twice the significant height.

STATE OF SEA

Descriptive terms	Height* in metres
Calm	0 - 0.1
Wavelets	0.1 - 0.5
Slight	0.5 - 1.25
Moderate	1.25 - 2.5
Rough	2.5 - 4
Very rough	4 - 6
High	6 - 9
Very high	9 - 14
Phenomenal	Over 14

Appendix 9.3

Met Eireann weather report.

BEAUFORT SCALE OF WIND

BEAUFORT NUMBER	DESCRIPTIVE TERM	VELOCITY EQUIVALENT AT A STANDARD HEIGHT OF 10 METRES ABOVE OPEN FLAT GROUND				SPECIFICATIONS			Probable wave height* in metres	Probable wave height* in feet
		Mean velocity in knots	m s ⁻¹	km h ⁻¹	m.p.h.	Land	Sea	Coast *		
0	Calm	< 1	0-0.2	< 1	< 1	Calm; smoke rises vertically	Sea like a mirror	Calm	—	—
1	Light air	1-3	0.3-1.5	1-5	1-3	Direction of wind shown by smoke drift but not by wind vanes	Ripples with the appearance of scales are formed, but without foam crests	Fishing smack just has steerage way	0.1 (0.1)	¼ (¼)
2	Light breeze	4-6	1.5-3.3	6-11	4-7	Wind felt on face; leaves rustle; ordinary vanes moved by wind	Small wavelets, still short but more pronounced; crests have a glassy appearance and do not break	Wind fills the sails of smacks which then travel at about 1-2 knots	0.2 (0.3)	½ (1)
3	Gentle breeze	7-10	3.4-5.4	12-19	8-12	Leaves and small twigs in constant motion; wind extends light flag	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses	Smacks begin to careen and travel about 3-4 knots	0.6 (1)	2 (3)
4	Moderate breeze	11-16	5.5-7.9	20-28	13-18	Raises dust and loose paper; small branches are moved	Small waves, becoming longer; fairly frequent white horses	Good working breeze, smacks carry all canvas with good list	1 (1.5)	3½ (5)
5	Fresh breeze	17-21	8.0-10.7	29-38	19-24	Small trees in leaf begin to sway; crested wavelets form on inland waters	Moderate waves, taking a more pronounced long form; many white horses are formed (chance of some spray)	Smacks shorten sail	2 (2.5)	6 (8½)
6	Strong breeze	22-27	10.8-13.8	39-49	25-31	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty	Large waves begin to form; the white foam crests are more extensive everywhere (probably some spray)	Smacks have double reef in main-sail; care required when fishing	3 (4)	9½ (13)
7	Near gale	28-33	13.9-17.1	50-61	32-38	Whole trees in motion; inconvenience felt when walking against wind	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind	Smacks remain in harbour and those at sea lie to	4 (5.5)	13½ (19)
8	Gale	34-40	17.2-20.7	62-74	39-46	Breaks twigs off trees; generally impedes progress	Moderately high waves of greater length; edges of crests begin to break into the spindrift; the foam is blown in well-marked streaks along the direction of the wind	All smacks make for harbour, if near	5.5 (7.5)	18 (25)
9	Strong gale	41-47	20.8-24.4	75-88	47-54	Slight structural damage occurs (chimney pots and slates removed)	High waves; dense streaks of foam along the direction of the wind; crests of waves begin to topple, tumble and roll over; spray may affect visibility	—	7 (10)	23 (32)
10	Storm	48-55	24.5-28.4	89-102	55-63	Seldom experienced inland; trees uprooted; considerable structural damage occurs	Very high waves with long overhanging crests; the resulting foam, in great patches, is blown in dense white streaks along the direction of the wind; on the whole, the surface of the sea takes on a white appearance; the tumbling of the sea becomes heavy and shock-like; visibility affected	—	9 (12.5)	29 (41)
11	Violent storm	56-63	28.5-32.6	103-117	64-72	Very rarely experienced; accompanied by widespread damage	Exceptionally high waves (small and medium-sized ships might be for a time lost to view behind the waves); the sea is completely covered with long white patches of foam lying along the direction of the wind; everywhere the edges of the wave crests are blown into froth; visibility affected	—	11.5 (16)	37 (52)
12	Hurricane	64 and over	32.7 and over	118 and over	73 and over	—	The air is filled with foam and spray; sea completely white with driving spray; visibility very seriously affected	—	14 (—)	45 (—)

* This table is only intended as a guide to show roughly what may be expected in the open sea, remote from land. It should never be used in the reverse way, i.e. for logging or reporting the state of the sea. In enclosed waters, or when near land, with an off-shore wind, wave heights will be smaller and the waves steeper. Figures in brackets indicate the probable maximum height of waves.

Appendix 9.4

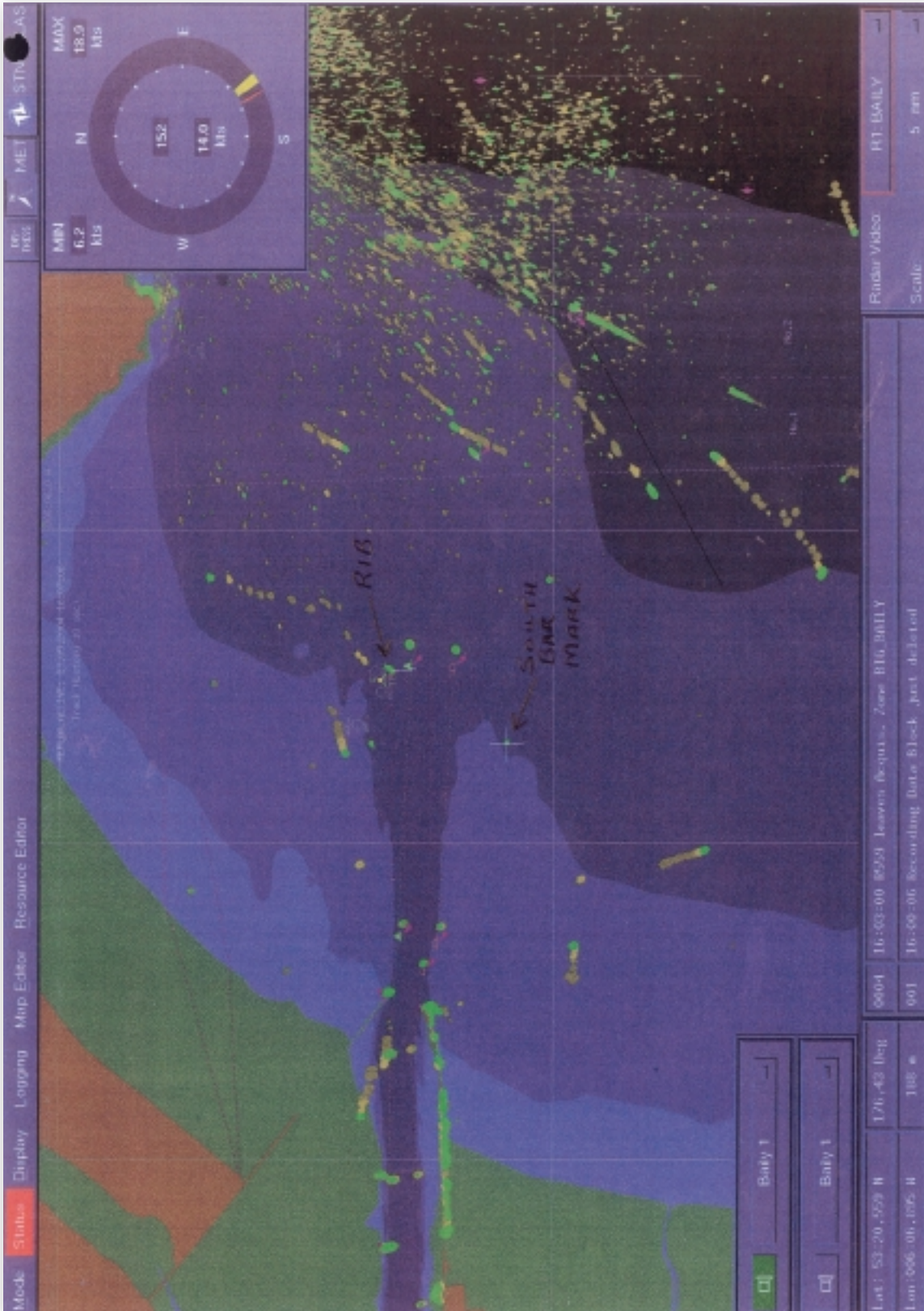
Photographs of the damage to the RIB.



APPENDIX 9.5

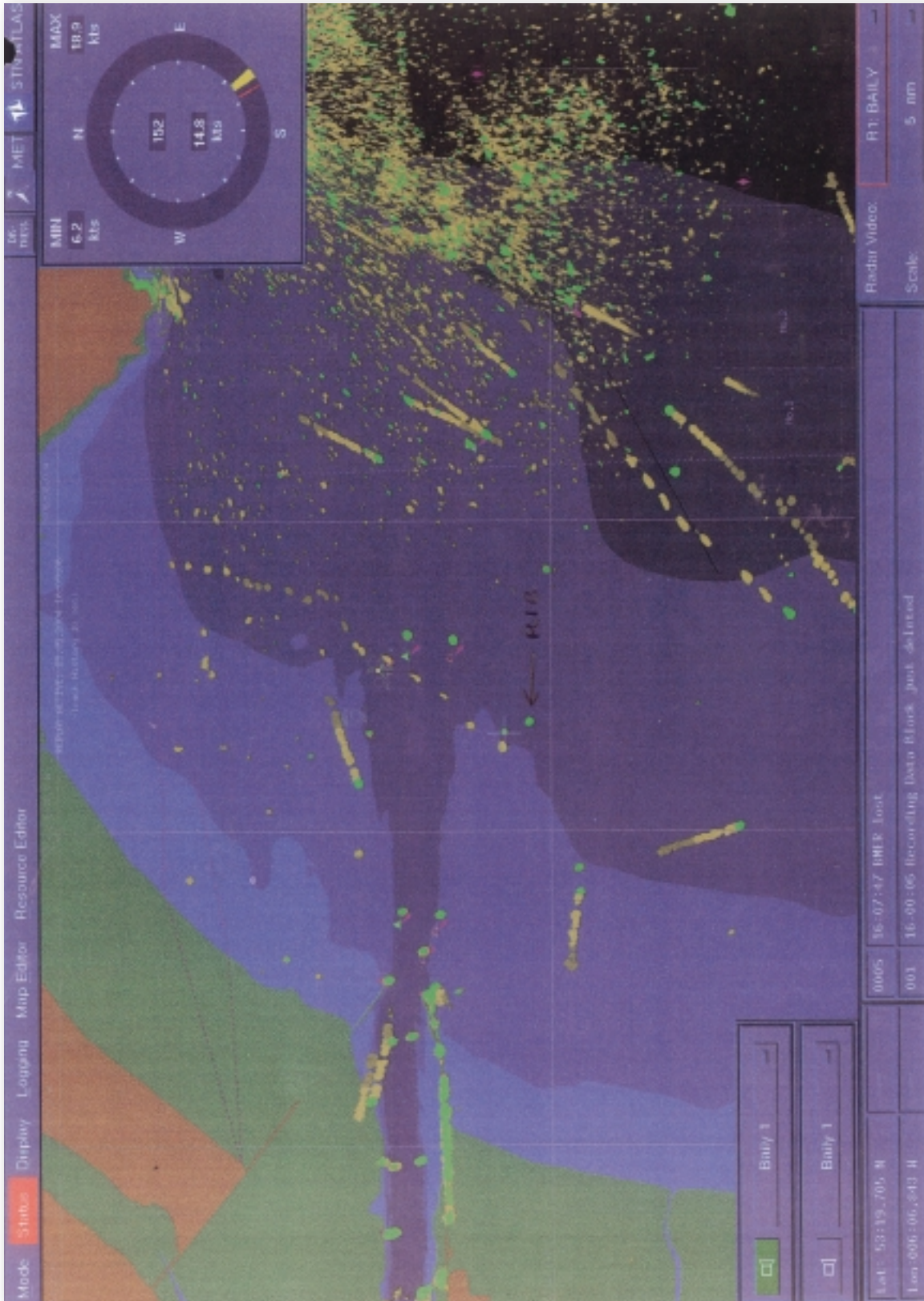
Appendix 9.5 Information obtained from the radar recordings from Dublin Port.

9.5.1 Recording for the time 16:07:06.



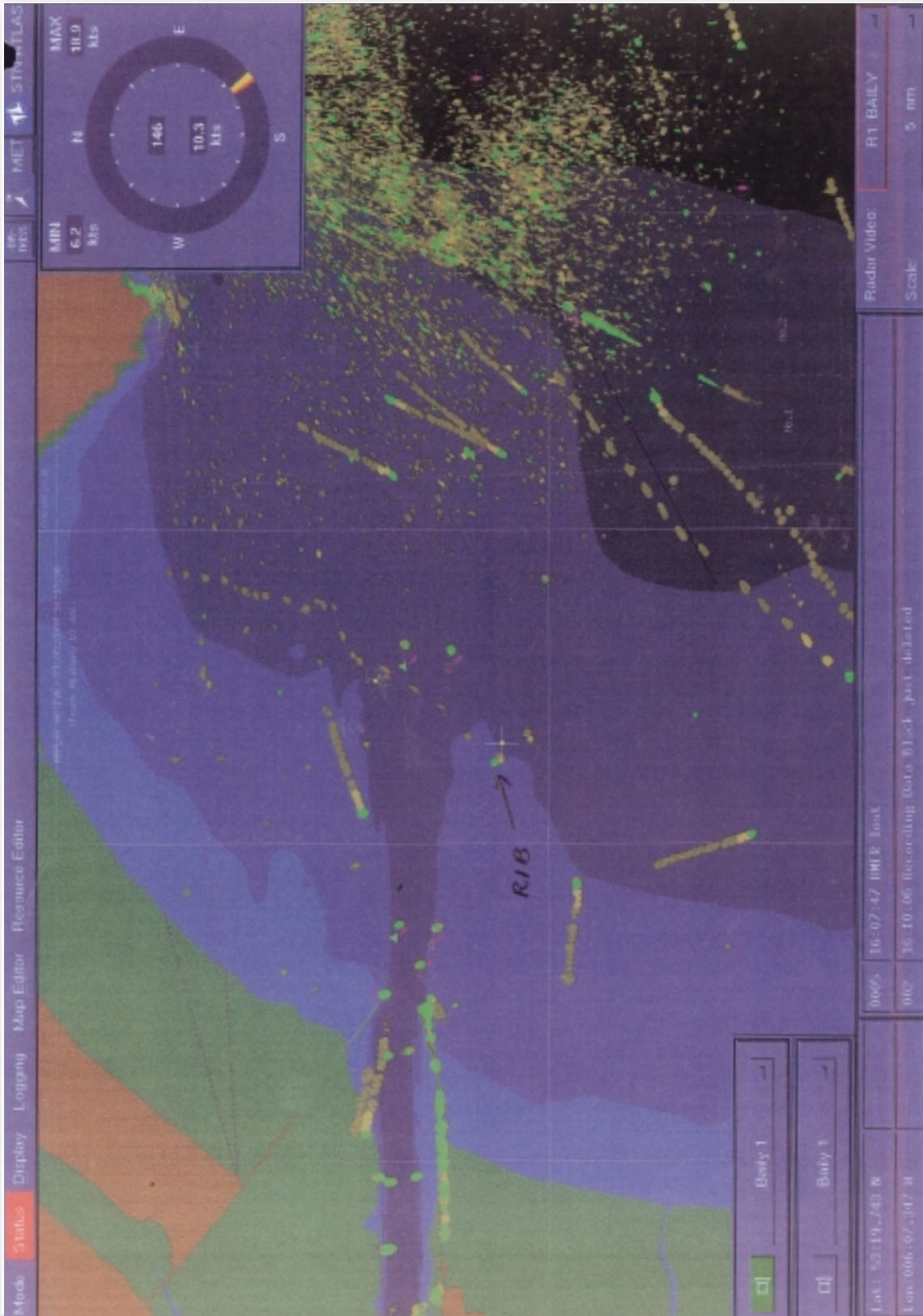
Appendix 9.5 Information obtained from the radar recordings from Dublin Port.

9.5.2 Recording for the time 16:09:06.



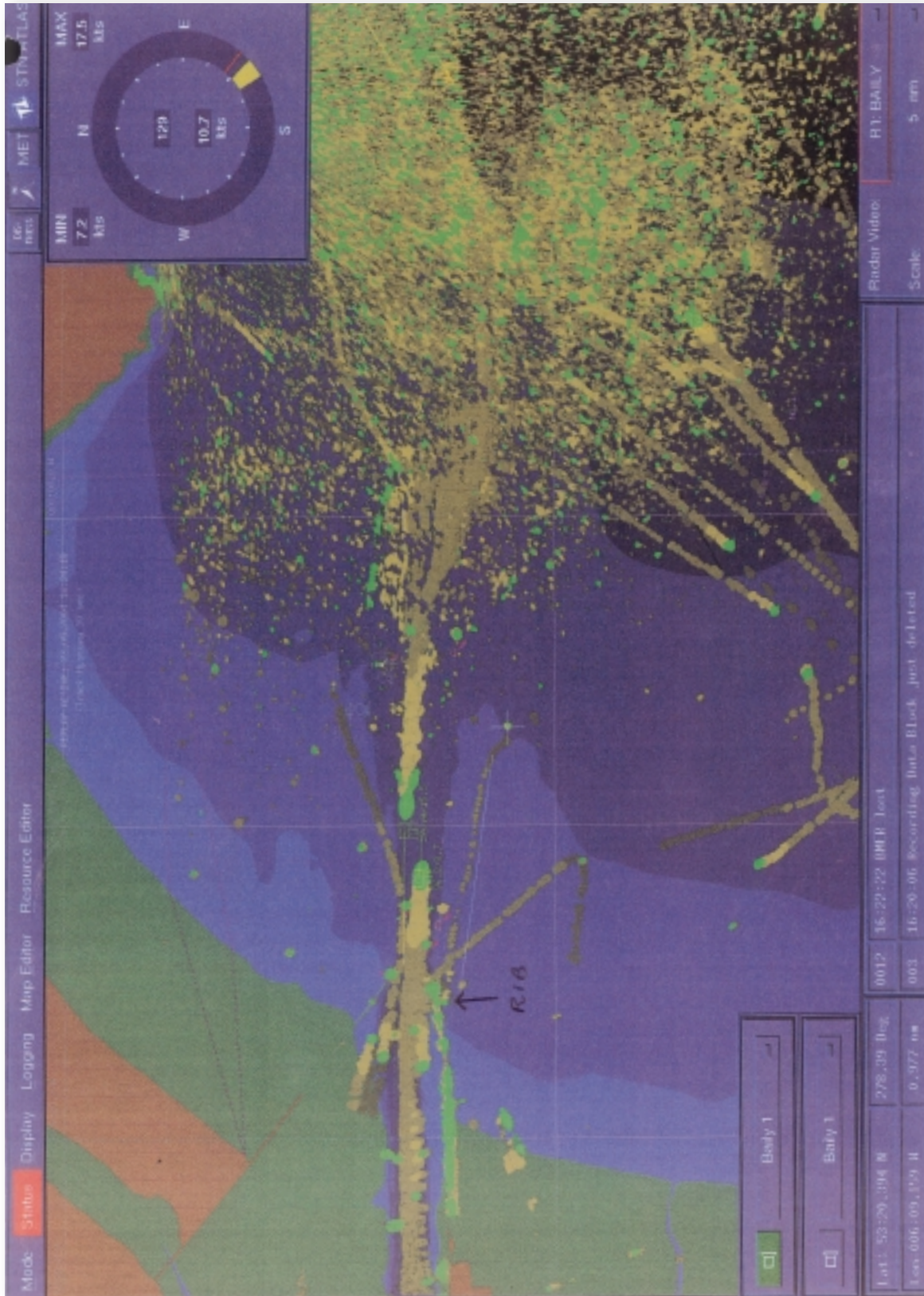
Appendix 9.5 Information obtained from the radar recordings from Dublin Port.

9.5.3 Recording for the time 16:10:06.



Appendix 9.5 Information obtained from the radar recordings from Dublin Port.

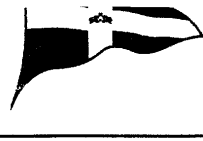
9.5.4 Recording for the time 16:24:18.



Appendix 9.6

Royal St George Yacht Club notice regarding the use of club RIB's outside the harbour.

● **Royal St. George Yacht Club notice regarding the use of club RIB's
outside the Harbour**



USE OF CLUB RIBS OUTSIDE THE HARBOUR

Any Club RIB leaving the harbour but not involved in an event or under the control of a PRO will be accompanied by another Club RIB.

Before leaving, the drivers will report to the Boathouse Staff who will record on their chalkboard when the RIBs leave, who is on board, where they are going and when they are expected to return.

Each RIB will have a driver and crew.

Both RIBs shall have VHF radios operating on channel 16 and these must be fitted in waterproof cases and worn or harnessed to the person of the driver or crew. It is imperative that whoever is carrying the radio for the RIB is familiar with the operation of the VHF radio.

It is necessary that whoever is taking the RIBs has the permission of the Junior Organiser, the Sailing Secretary or the Rescue Co-ordinator.

No boat shall be taken without such permission being given and the Boathouse record being made.

By Order

The Sailing Committee
June 2004

10. LIST OF CORRESPONDENCE RECEIVED

Correspondent	Page No.
Royal St. George Yacht Club	26
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ROYAL ST GEORGE YACHT CLUB

DUN LAOGHAIRE, CO DUBLIN, IRELAND

Tel 353 1 2801811 Fax 353 1 2843002 www.rsgyc.ie info@rsgyc.ie

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

20th December 2004

Dear Mr Heron,

Thank you for the draft report on the incident in Dublin Bay on 23rd May 2004 involving a RIB from the Royal St George YC.

We have reviewed your report and agree with it in its entirety. We have no comments or amendments to offer.

Yours sincerely

Patrick J O'Reilly
Secretary

MCIB RESPONSE

The MCIB notes the contents of this letter.

