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**REPORT OF THE  
INVESTIGATION INTO THE  
DEATH OF KAYAKER ON THE  
RIVER GADDAGH, CO. KERRY  
ON 28th DECEMBER 2007**

The Marine Casualty Investigation Board was established on the 25<sup>th</sup> March, 2003 under The Merchant Shipping (Investigation of Marine Casualties) Act 2000

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## 1. SYNOPSIS

- 1.1 On 28th December 2007 at approximately 11.00 hrs., a party of kayakers gathered at Cronin's Yard, located at the foothills of Carrauntuohil, Co. Kerry to kayak on the Gaddagh River.
- 1.2 The party formed into two subgroups, and entered the river some distance above Cronin's Yard. The river level was elevated following a recent period of extended heavy rain
- 1.3 Having traversed the first stage of the planned river course at a point approximately 1 kilometre from their start point, the lead group encountered difficulties due to obstructions in the river resulting in members of the group capsizing, losing contact with their kayaks and being forced to swim in difficult conditions.
- 1.4 As a result members of this group were separated from each other.
- 1.5 Shortly after encountering difficulties a member of that first group, Ms. Deirdre Conroy was found unconscious a short distance downstream, entrapped under the submerged roots of a tree.
- 1.6 She was removed to Kerry General Hospital in Tralee by the local emergency services, where despite prolonged efforts to revive her, she was pronounced dead later that afternoon.

## 2. FACTUAL INFORMATION

### 2.1 The Canoeing Party

Group 1:

Mr. Cormac Lynch  
Ms. Deirdre Conroy  
Mr. Conor Croke  
Mr. Fergal Corkery  
Mr. Richard Nelson

Group 2:

Mr. Killian Halpin  
Mr. Michael O'Donnell  
Mr. Simon Coyle Rowan  
Mr. David Cox

2.1.2 The members of this party were experienced and all had been Kayaking for a number of years.

2.1.3 Irish Canoe Union (ICU) Proficiency qualifications within the group ranged from Level 3 (Intermediate) to Level 5(Highest proficiency).

Mr. Cormac Lynch was a qualified Grade 4 Instructor, while a number of the group had completed advanced river rescue courses for kayaking.

2.1.4 One of the members Mr. Michael O'Donnell, was a qualified paramedic with the emergency services.

### 2.2 The River Gaddagh

2.2.1 The headwaters of the River Gaddagh form in Lochs Callii and Gabhracht on the north side of the Macgillycuddy Reek mountain range.

2.2.2 The river flows through Hags Glen acquiring further tributaries, down the Carrauntoohil Valley, before joining the River Leaune, finally discharging into the sea at Killorglin.

2.2.3 The Gaddagh originates at a height of some 450 metres and maintains a steep gradient for the majority of its transit through Hags Glen. Over time in these upper sections, it has cut a series of terraces through the mountain, producing a number of natural "drops" or waterfalls, used by Kayakers.

2.2.4 The terrain through which the river passes, varies from open gorse bogs for the first 1.5 km to heavily wooded sections lining the riverbanks below Cronin's Yard.

2.2.5 Cronin's Yard is a base point for hill walkers and climbers proceeding up Carrauntoohil providing parking, showers and café facilities on a cul de sac, some 5 km from the main Fossa/Glencar Road. Kayakers also use it as it is adjacent to the Gaddagh River which flows some 500 metres to the west.

- 2.2.6 The river's flood pattern is unusual; it may flood between three to six occasions per annum, dependent on specific weather and rainfall conditions, at half flood, river levels are sufficient for kayakers to paddle. For the remainder of the year, there is insufficient water for kayakers to paddle the river.
- 2.2.7 For such conditions to occur, a period of continuous heavy rain is required, generally supplied by a series of low pressure, slow moving weather fronts approaching from the west. The height and profile of the mountains causes rainfall enhancement, due to orographic uplift, saturating the slopes and causing the Gaddagh river levels to rise rapidly.
- 2.2.8 Such flood periods may only last a few hours, but during that time the river levels will rise dramatically in some instances by several metres. On such occasions, the river transforms into a high volume, fast flowing continuous river, with significant levels of white water, closely resembling Alpine river conditions.
- 2.2.9 This feature makes it attractive to kayakers, however the sporadic frequency and relatively short duration of flooding, means it is normally not possible to plan an expedition to this river, hence any decision to paddle the river is generally taken at short notice by groups of kayakers, who may happen to be in the area.
- 2.2.10 During such periods, the river levels, profile, and direction may change significantly as large amounts of debris and boulders are moved along the riverbed, riverbanks are overflowed, adjacent trees can be uprooted and washed downstream and new channels formed in the rivers path.
- 2.2.11 When in flood, the Gaddagh may be rated as Grade 3-5 by kayakers, based on a generally accepted International River Grading System (Appendix 8.4), where higher figures equate to more difficult conditions and require associated higher skill and experience levels.
- 2.2.12 The segment of the river generally used by canoeists may extend from a "get on point" above Hags Glen, through a series of waterfalls or "drops" to a "get off point" some 5 km downstream adjacent to the Gaddagh Bridge on the Glencar Road.
- 2.2.13 When in flood, this segment of river may in turn be considered as composing of three distinct sections.
- The top section, above the waterfalls or "drops" in Hags Glen is considered as potentially Grade 5.
  - The middle section below the drops to a point below Cronin's Yard is regarded generally as Grade 4.
  - The final part of the course extends from Cronin's Yard to the Gaddagh Bridge is considered as a Grade 3. By this stage the river has widened, its gradient has reduced and the intensity of the flow reduced.

2.2.14 A number of River Alert schemes, whereby conditions and dangers noted by kayakers on national rivers are posted on various Web Sites. Entries are made on a voluntary basis, there is no formal management of the scheme, consequently much of the information is not amended and can be out of date.

### **2.3 Canoeing Clubs**

- 2.3.1 The Irish Canoe Union (ICU) is recognised by the Irish Sports Council and the Olympic Council of Ireland (OCI) as the governing body of the sport and recreation of canoeing in Ireland and is affiliated to International and European Canoe Federations.  
The ICU oversees training and qualification standards for the sport.  
Canoeing Clubs are affiliated to and regulated by the Union.
- 2.3.2 The Irish Canoe Union operates a qualifications proficiency grading system for its members ranging from Level 1 to Level 5.
- 2.3.3 Irish Universities form a significant portion of Canoeing Clubs, tending to specialise in freestyle and white water kayaking.
- 2.3.4 The period 27th December 2007 - 2nd January 2008 was a holiday period and an occasion where many Clubs travelled to the Glenbeigh / Rossbeigh region of Kerry, to kayak at a range of locations in the area.
- 2.3.5 College canoe clubs represent the majority of this group, with many clubs organising official trips to the area, attended by students and former students.
- 2.3.6 U.C.D. Canoe Club members travelled down to the Glenbeigh area of Kerry on the evening of 27th December. Also with this group were a number of former club members.
- 2.3.7 The UCD Canoe Club has defined policies, as to which grade of rivers they will allow their members to operate on, these are based on levels of members experience, training and qualifications.
- 2.3.8 Ms. Conroy was an active member of UCD Canoe Club and at that time was the Club's Safety Officer.
- 2.3.9 While consisting of current and former UCD Club members, the group of paddlers on the Gaddagh that morning was a private party and the event was separate to and independent of the official UCD club schedule planned for that week.

## 2.4 Kayaks and Personal Equipment used

- 2.4.1 Group members were using their own personal equipment and boats, the only exception was that Deirdre Conroy decided to use a Creek Boat belonging to UCD Canoe Club, rather than her own personal playboat (Appendix 8.3).
- 2.4.2 The creek boat was better suited for the white water conditions expected. Its larger volume offered greater buoyancy, hence protection against submerging and its profile provided superior tracking allowing the occupant to maintain correct approach lines to bends and obstacles on the river.
- 2.4.3 Ms. Conroy had previous experience in the use of Creek Boats.
- 2.4.4 Ms. Conroy had been kayaking for three years, held a Level 3 proficiency rating and was an active member of UCD Canoe Club. She had previously kayaked with members of this group in Uganda and would have been regarded as experienced.
- 2.4.5 Clothing worn by members of the group was fit for purpose and suitable for the conditions on the day.
- 2.4.6 Ms. Conroy was equipped with the following:
- Full length wetsuit
  - Outer layers of waterproofs
  - Protective helmet CE Marked
  - Spray Deck
  - Lifejacket/PFD CE Marked EN 393.
  - Canoe boots
- 2.4.7 The group also carried individual safety equipment consisting of throw bags, carabiners, rescue ropes and knives. All members were equipped with whistles to attract attention in the event they required assistance. The object of carrying this equipment is to provide paddlers with a self-rescue capacity, when operating in remote areas not readily accessible by the Emergency Rescue Services.



## 3. EVENTS PRIOR TO THE INCIDENT

- 3.1 On the 28th December 2007, at approximately 11.00 hrs. a group of 10 Canoeists arrived at Cronin's Yard, to paddle the Gaddagh River. While consisting of current and former UCD Club members, the group was a private party and the event was separate to and independent of the official UCD club schedule planned for that afternoon.
- 3.2 In addition to this group, at least two further separate groups of kayakers were present on the river that day.
- 3.3 Local weather conditions on 28th December 2007 consisted of intermittent heavy rain in the morning, followed by a fresher westerly air stream developing in the afternoon. There had been heavy persistent rain in the area overnight and all of the previous day.
- 3.4 The intended river trip, extended from a point some 1.0 Km above Cronin's Yard, to the bridge on the Glencar Road, a distance of some 4 km.
- 3.5 A number of the group arranged a car drop at their intended river get off point, adjacent to Gaddagh Bridge on the Glencar Road, before returning to Cronin's Yard.
- 3.6 After donning their wetsuits the group travelled with their equipment to a spot beyond Cronin's Yard, which offered a vantage point over the river.
- 3.7 The river was observed in flood, water levels were some 1.5m above normal, providing adequate conditions for kayakers to paddle the river. No major obstructions were noted on that section of the river.
- 3.8 Based on river conditions observed, the group decided to get on the river at the middle section, (ref: 2.1.12) below the series of "drops" (waterfalls). The general consensus of the group on the day, was that the top section of the river above the "drops", was at Grade 5 level, while below, it would prove to be a challenging Grade 4, prior to the river gradient decreasing and reducing to a Grade 3 for latter part on the intended run.
- 3.9 Mr. Cormac Lynch, the most experienced member of the party and the only individual to have previously kayaked the river, briefed the group.
- 3.10 The briefing identified known physical obstructions and the potential risks associated with paddling the Gaddagh. Also mentioned were a number of issues relating to the proposed course, highlighting it was a fast and continuous river, without flat sections and with few eddies where kayakers could achieve respite. Having got on, these factors would make it difficult for individuals to exit the river and any swims could potentially be over long distances. In addition, the nature of the river presented few opportunities for Kayakers to offer assistance to other individuals in trouble.

- 3.11 The decision to get on the river was a personal one for each group member, based on their own evaluation of the conditions, their skill levels and experience.
- 3.12 Of the ten individuals present, one member elected not to go and returned to Cronin's Yard with the intention of travelling downstream to meet the group at their intended get off point adjacent to the Gaddagh Bridge.
- 3.13 Given conditions on the river and to avoid congestion, it was decided to form two subgroups and enter the river independently with a time separation between them of some 5 minutes. The groups were chosen on the basis of their experience and qualifications.
- 3.14 Both Groups assembled at the riverbank, it was noted that a fallen tree caused a possible obstruction to the group below the get on point. As a precaution, Mr. Michael O' Donnell positioned himself with a rescue rope at the tree, to offer assistance in the event the first group experiencing difficulty.
- 3.15 To ensure each team remained together on the river, it was arranged that individuals in each group would undertake a Seal-Launch in quick succession from the bank, attain the centre of the river as soon as possible and proceed downstream. The most experienced member would be in the lead, with the next most experienced acting as "sweeper" at the rear of the group.
- 3.16 Shortly after midday, the first group entered the river, at the middle section, graded as level 4. (Appendix 8.2, Fig. 1) and proceeded downstream. The transit through this stage brought them through open gorse terrain before the river entered a heavily wooded section. (Appendix 8.2, Fig. 2). The second group entered the river five minutes later.
- 3.17 During this stage, each group experienced difficulties and had various members capsize or encounter obstructions, in addition, it was noted that their canoes were encountering rocks and boulders carried along in the stream. Despite these difficulties, group members retained control of their situation and all remained in their boats.
- 3.18 The initial group took approximately 20 minutes to complete the first stage, after which the river intensity diminished slightly and conditions improved. An eddy was located on the river right bank and the first group stopped here for a rest.
- 3.19 Following a brief rest period the group discussed their options, which consisted of continuing downstream, or exiting the river at that point and walking back to Cronin's Yard, some 300 m to the east. The group believed they had completed the most difficult stage of their planned route, the river gradient had diminished and as previous knowledge indicated there were no known dangers downstream in the river, they elected to carry on to the Gaddagh Bridge.

## 4. THE INCIDENT

- 4.1 At approximately 12.30 hrs. the first group of Kayakers comprising of:  
Mr. Cormac Lynch  
Ms. Deirdre Conroy  
Mr. Fergal Corkery  
Mr. Richard Nelson  
Mr. Conor Croke  
had completed the initial section of the intended course and were resting in an eddy on the river right bank.
- 4.2 By this point, the river intensity had diminished to some extent, and the gradient had reduced.  
Beyond the eddy the group was resting in the river banks which were heavily lined with trees, however the river itself appeared to be clear of obstacles, other than one tree noted as blocking the right hand bank.  
A short distance beyond their stop point, the river assumed a right hand bend, beyond which it was not possible for the group to view its aspect.  
Having discussed their options, the group decided to proceed to complete the second stage of their intended course. (Appendix 8.2, Fig. 3).
- 4.3 The group re-entered the river's main flow and headed downstream.
- 4.4 On rounding the bend, the conditions changed dramatically, the river now ran in a generally straight profile, but was obstructed over a 100 m section on both sides by approximately a dozen fallen trees. (Appendix 8.2, Figs. 4 & 5).  
Given the relatively short distance between riverbanks, the sequence of fallen trees formed a complete obstruction across the river in a number of places.
- 4.5 These obstructions coupled with the intensity of the river, produced immediate difficulties for the first group, causing it to split up as individual members were carried onto the fallen trees.
- 4.6 Despite individual's attempts to avoid the obstructions, by passing around, or rolling under them, all found themselves separated from their Kayaks at an early stage on this section of the river.
- 4.7 The sequence or timing of the capsizing remains unclear, but witness accounts place Mr. Lynch and Ms. Conroy separated from their canoes, in the water close together.  
Ms. Conroy was noted as mobile and swimming at this point.
- 4.8 Approximately 200 m beyond these obstacles, the river made a sharp left hand turn and opened out in profile with the distance between banks widening to some 100 m. At this point, between the banks the river split into a number of channels, between which there lay a number of raised banks formed by rocks, gravel and debris deposited by the river.

- 4.9 While the main flow of the river made a left hand turn, a tributary stream directed by one of the gravel islets, separated along the right river bank carried on in a straight line, through a heavily wooded section. This stream rejoined the main river some 150 m downstream. This tributary while narrow, produced a deep and fast flowing stream of water, consequently any floating item on the river right bank was directed into it. (Appendix 8.2, Fig. 6).
- 4.10 Mr. Lynch having noted Ms. Conroy was close to him at the time he lost his kayak, was in turn swept ashore onto one of the islets formed by the river left channel. This was a distance of some 150 m from the obstructing trees and took approximately 2 minutes from leaving his boat.
- 4.11 From this point he noted an individual he identified as Ms. Conroy in the river right channel, pinned under what appeared to be the branches of a fallen tree, which had itself been swept into the right river channel. (Appendix 8.2, Fig. 7). Ms. Conroy did not appear to be moving, but at that point appeared to have her head above water level and was noted as having her helmet in position.

## 5. EVENTS FOLLOWING THE INCIDENT

- 5.1 Mr. Lynch shouted to Ms. Conroy, who did not respond. He then re-entered the main central channel of the river, in attempt to cross to the right hand bank in order to assist her.
- 5.2 Despite being swept downstream he managed to transit the river and return to the point Ms. Conroy was trapped. Crossing the river took approximately one minute.
- 5.3 In the interim short period her head was now submerged, Mr. Lynch re-entered the river to assist her but was himself pinned against the tree by the flow of water. On a second attempt, he managed to position himself above her on the tree and using the straps of her buoyancy aid, attempted to lift her vertically out of the river. This proved unsuccessful, but he did manage to lift her face clear of the water, she was not conscious at this point.
- 5.4 Mr. Lynch, unable to extract Ms. Conroy, now concentrated on keeping her head and airways clear of the water, while he attempted to attract assistance by blowing on his whistle.
- 5.5 Mr. Conor Croke, having experienced difficulties due to the obstructions upstream had left his canoe, now appeared on the river right bank adjacent to incident. Locating to a position upstream, using a rescue rope he attempted using a vector pull, to haul Ms. Conroy away from the tree. This is a recognised rescue procedure, whereby the victim is removed in the same direction upstream, as they were swept onto an obstacle.
- 5.6 Mr. Lynch in the meantime remained with her on the tree continuing to keep her head clear of the water.
- 5.7 Their initial efforts were unsuccessful due to the intensity of the river flowing into the right hand culvert.
- 5.8 At this time Mr. Fergal Corkery, who was also a member of the first group, was viewed swimming down river, he in turn was also carried into the right hand culvert and pinned on the same tree as Ms. Conroy - there were now two of the group trapped in the same location.
- 5.9 Mr. Lynch, from his position on the tree above the river, moved to assist Mr. Corkery, who managed to free himself and was carried down stream some distance. He subsequently made his way back to the scene of the incident and joined Mr. Croke in a further attempt to remove the victim from the tree using the rescue rope.
- 5.10 With two of the group pulling on the rescue rope they were still unable to free Ms. Conroy, due to the intensity of the river.

- 5.11 In the meantime, the second group had experienced similar difficulties on the river and most had been forced to swim from their boats.
- 5.12 Some three minutes later, a member of the second group Mr. Michael O'Donnell appeared at the incident scene and was able to assist in the rescue attempt. With three persons now pulling, Ms. Conroy was extracted from under the tree and moved to the adjacent river right bank.
- 5.13 Their situation on the river right bank was difficult; a steep bluff rose some 6 m directly above them and was unstable due to recent heavy rainfall. The riverbank at the base of this bluff was limited to a one-meter long strip, approximately a half metre wide, with a deep fast flowing river adjacent.
- 5.14 Rather than attempt to move Ms. Conroy to the top of the bluff and out of the river, the decision was made to immediately commence Cardiac Pulmonary Resuscitation (CPR) on site.  
Mr. O'Donnell, a trained Paramedic with the Emergency Services, commenced CPR assisted by other members of the group.
- 5.15 Mr. Killian Halpin, a member of the second group had also encountered difficulties on the river and been forced ashore upstream. Due to the difficult terrain he left the river and travelled overland looking for members of his group. As a result he now arrived at the top of the steep slope above the incident site and was instructed to seek outside assistance and alert the emergency services.
- 5.16 Mr. Halpin proceeded to the road and travelled in the direction of Cronin's Yard. The first house he encountered belonged to Mr. Martin O'Shea, a farmer through whose lands the river flows. He requested the occupants call the Emergency Services and overheard the controller divert an ambulance, which happened to be in the area, to the incident site. Emergency Service records a time of 12.52 hrs. for time of call to incident.
- 5.17 At 13.06 hrs., an ambulance with two paramedics arrived on scene and were briefed by group members. The ambulance located on the adjacent road, was some 200 m above the river, accessing the incident required traversing down a steeply sloping field, before arriving at the top of the vertical bank, some 6 m above the river.  
Ms. Conroy was at the base of this point.  
Given the nature of the terrain, the Ambulance staff in turn requested the assistance of the Fire Brigade. Members of Mr. O'Shea's family travelled to the main road to assist in directing the Killarney Fire Brigade to the scene.
- 5.18 Having collected their equipment, both Paramedics now proceeded to the incident site, at the bottom of the field above the river. At 13.14 hrs., one paramedic wearing a borrowed lifejacket was lowered down the slope to the riverbank to assist in the CPR efforts. The river bank at this point was only a narrow strip of ground consequently those engaged in providing CPR were forced to stand in the river.

- 5.19 Shortly afterwards, the second paramedic was also lowered to the riverbank to assist in supervising the transfer of Ms. Conroy to a spinal board. The group, using a combination of their rescue ropes and the paramedic's spinal board, organised means to transfer the victim from the riverbank to the top of the bluff.
- 5.20 By this stage there were a significant number of persons on site, including local Gardai from Killarney who provided an escort for the ambulance. Members of the group and paramedics, swiftly and efficiently undertook the transfer of Ms. Conroy from the river to the ambulance, whilst maintaining CPR.
- 5.21 The ambulance departed the scene at 13.40 hrs. During the journey from the incident site, the paramedics continued to apply CPR. Just after 14.00 hrs., a stop was made at the Killarney Medical Centre, where three local Doctors, made further efforts over a thirty-minute period in the ambulance, to resuscitate her.
- 5.22 Ms. Conroy was then transferred to the Kerry General Hospital in Tralee, arriving at 14.45 hrs. At no point did she regain consciousness and despite the efforts of Hospital Staff to revive her, was pronounced dead at 16.00 hrs.

## 6. CONCLUSIONS

- 6.1 River conditions on that day were challenging and would have been physically demanding, however, the presence of the fallen trees on that river section, altered the balance of conditions from difficult to dangerous. Had that sequence of fallen obstructions not occurred, it is most likely the group would have exited safely at their intended get off point.
- 6.2 Other than inspection of the river from the "get on point" and from sections of river visible from the road while approaching Cronin's Yard no attempt was made by the group to undertake additional scouting of the river to identify potential hazards.  
While considering the remoteness of sections of the river, the distances involved and conditions on the day, it would have taken several hours to physically undertake an effective scouting of the entire planned route, however, some time and effort should have been allocated to viewing the various sections of the river.
- 6.3 The group did not have any local information of possible snags on the river. The local Landowner was aware there were trees obstructing the river in places, but was not contacted by any of the groups on the river that day.
- 6.4 The group was operating as a private trip and outside the remit of UCD Canoeing Club, a comprehensive briefing was given prior to getting on the river. For each member it was a personal decision to get on the river or not. The safety ethos for such groups is to be equipped for self-rescue and of the group offering assistance to individuals in trouble, both groups managed to maintain this until such time as they were overwhelmed by conditions on the river that day - albeit for a brief period, for this system to fail.
- 6.5 The decision to change boats from her own personal playboat to a larger volume creek boat by Ms. Conroy was appropriate for the conditions experienced.
- 6.6 Inspection of the Creek boat following the incident revealed that other than minor previous damage to the bow area, it to be in satisfactory condition and fit for purpose.
- 6.7 Ms. Conroy's safety equipment including buoyancy aid, helmet and clothing worn on the day were subsequently inspected at Tralee Garda Station and noted as being in good condition and fit for purpose.
- 6.8 A review of experience levels, qualifications and equipment of the group would indicate all were qualified to be on the section of river chosen on 28th December 2007.



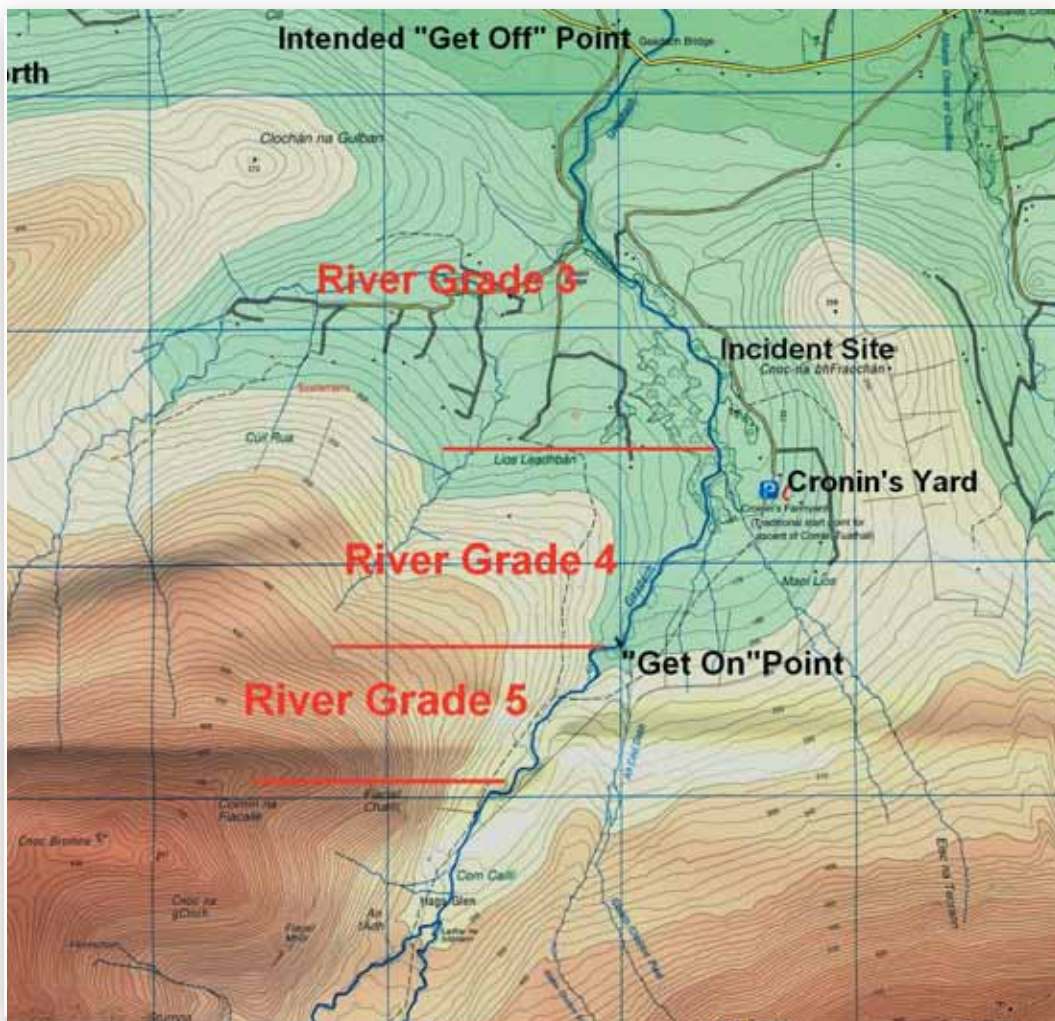
## 7. RECOMMENDATIONS

- 7.1 The Irish Canoe Union, should review this incident and produce guidelines for members intending to Kayak on extended sections of infrequently used rivers such as the Gaddagh.
- 7.2 Such Guidelines should cover the need for and means of, adequate preplanning and on site scouting on such rivers.
- 7.3 Kayaking groups are encouraged to develop local contacts in order to obtain details of current river conditions and dangers, particularly on infrequently used rivers. Such details may be incorporated and updated on the existing web based River Alert schemes.
- 7.4 The carriage of mobile phones in suitable watertight covers, by kayakers, for use to summon assistance in emergency situations should be considered.

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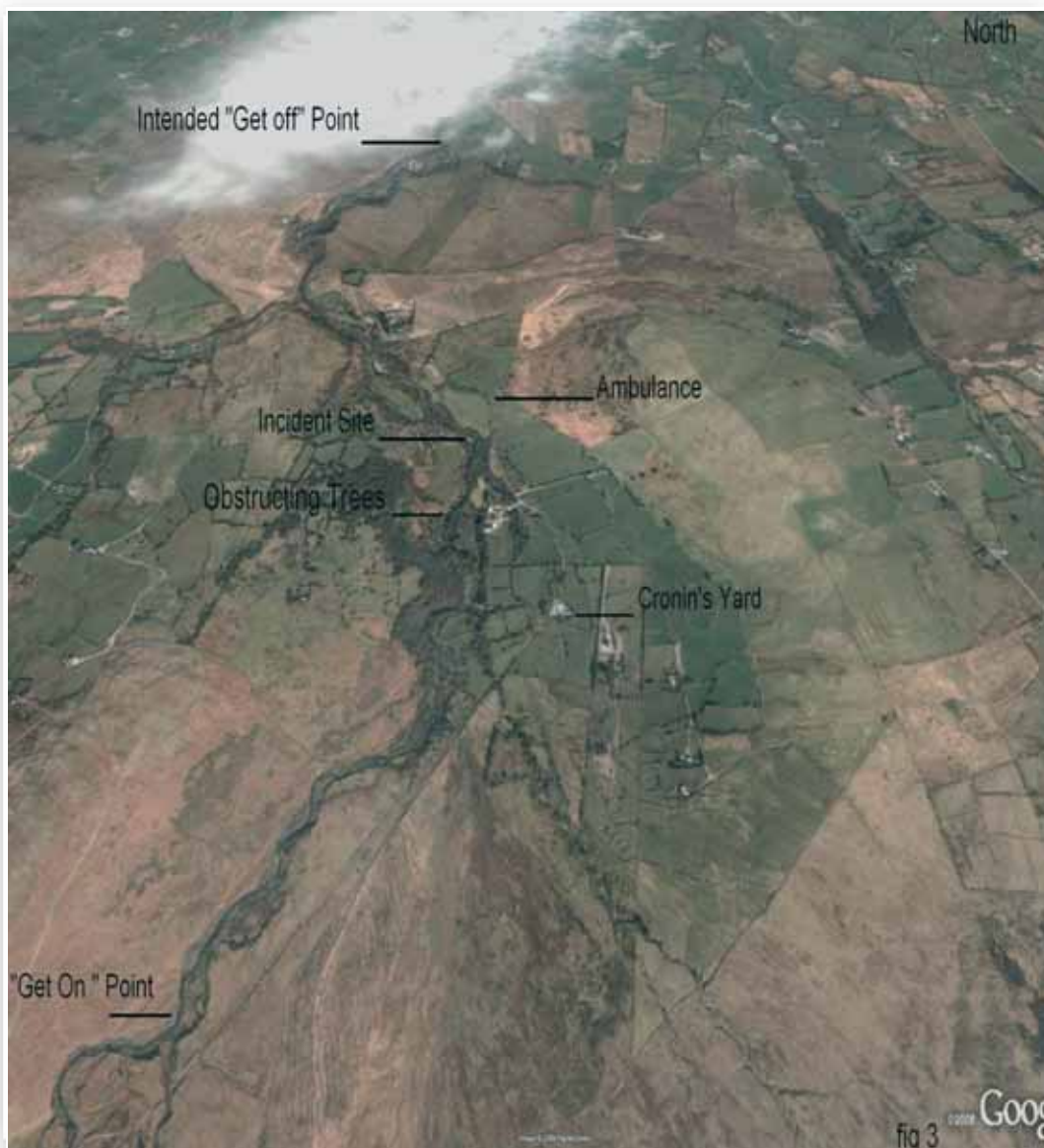
Appendix 8.1 Maps and Aerial Photographs of area.  
Fig. 1 - Map of Gaddagh River.



Appendix 8.1 Maps and Aerial Photographs of area.  
Fig. 2 - Incident Site.



Appendix 8.1 Maps and Aerial Photographs of area.  
Fig. 3 - Gaddagh River aerial photograph.



### Appendix 8.2 Gaddagh River Photographs.



Fig. 1 - River at "get on point".



Fig. 2 - River conditions on first stage of transit.

Appendix 8.2 Gaddagh River Photographs.



Fig. 3 - River on second stage of transit.



Fig. 4 - Fallen Trees obstructing river.

Appendix 8.2 Gaddagh River Photographs.



Fig. 5 - Fallen trees.



Fig. 6 - View up stream of Incident Site.



Appendix 8.2 Gaddagh River Photographs.



Fig. 7 - Incident Site.

Note:

- (a) River levels were approximately 1 metre higher at the time of incident occurring.
- (b) High embankment above incident site.

## APPENDIX 8.3

### Appendix 8.3 Kayak Details.

Manufacturer: Perception Kayaks  
Bellbrook Business Park  
Uckfield  
East Sussex  
England

Model: Java

Material: Polyethylene

Length: 2.36m

Width: 0.62m

Volume: 252 ltrs

Weight: 16kg

Suitable for Paddler weight of 50 - 90 kg.



Appendix 8.4 International River Grading System.

Grade 1



Moving water, unobstructed and without technical difficulties. There may be small waves and riffles to challenge the paddler.

Grade 2



Waves, small stoppers and other minor obstructions to avoid. Eddies and cushion waves may be strong.

## Appendix 8.4 International River Grading System.

### Grade 3



Waves, stoppers and technical difficulties are more severe. There may be drops and powerful constrictions. The main distinguishing factor of Grade 3 water is that the paddler will have to follow a recognisable route to avoid obstacles and hazards.

### Grade 4



Severe waves, drops, stoppers and other obstructions. The route is not easily recognisable and will usually require careful inspection from the boat or bank. Grade 4 encompasses a wide range of rivers, from those with pool-drop rapids to those with extended continuous rapids; so there is a huge variation in difficulty. It is common to distinguish easier grade 4 rapids by grading them as 4- and harder rapids as 4+ (or in some cases, 3/4 or 4/5).

**Appendix 8.4 International River Grading System.**

**Grade 5**



Extremely difficult rapids with precise and technically demanding routes to be followed. Stoppers, currents and waves will be powerful and inspection is essential.

## 9. LIST OF CORRESPONDENCE RECEIVED

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Mr. Peter Coulahan	31
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The Marine Casualty Investigation Board,  
Leeson Lane,  
Dublin 2.

February 17<sup>th</sup> 2009

**Re/ Draft Report of the Investigation into the death of Kayaker, Ms. Deirdre Conroy, on the River Gaddagh, Beaufort, Co. Kerry on 28 December 2007.**

Dear Mr. O'Donnell,

Thank you for your letter of January 21<sup>st</sup> 2009 and the attached draft report into the tragic death of Deirdre Conroy. University College Dublin has expressed its sincere condolences to the family and friends of Deirdre on her sad and untimely death.

UCD acknowledges and accepts the finding of the Marine Casualty Investigation Board report that the descent of the River Gaddagh on that day was operating as a private trip and outside the remit of the UCD Canoe Club. However given the involvement of some UCD students (including Deirdre Conroy) and the serious and ultimately fatal outcome of the river descent, UCD commissioned the Royal Society For The Prevention Of Accidents to prepare an independent report into the incident. The purpose of that report was to report on the circumstances with the aim of improving safety and avoiding accidents of a similar type in the future.

UCD is committed to implementing in so far as possible the recommendations of that independent report and also where relevant the recommendations of the MCIB statutory report in all future operations.

Yours sincerely,

Dr. Peter Coulahan  
University Safety Officer



**MCIB RESPONSE**

The MCIB notes the contents of this response and wishes to point out that the ROSPA Report referred to was not supplied to the MCIB. The MCIB wishes to state that its conclusions and recommendations stand.



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

**Response to DRAFT Report of the Investigation into the death of kayaker, Ms. Deirdre Conroy, on the River Gaddagh, Beaufort, Co. Kerry on 28<sup>th</sup> December 2007.**

Dear Ms. Reddin

Thank you for the copy of the above report received on the 22<sup>nd</sup> January 2009. The report provides a comprehensive analysis of the events which occurred on the 28<sup>th</sup> December 2007. The contents of the report are in agreement with the findings of the Irish Canoe Union's internal investigations.

The recommendations within the report will be taken on board and presented to the Irish Canoe Unions Training and Development Committee upon official release of the report.

We have no additional comments or observations to be added to the report.

Yours Sincerely

Michael Scanlon  
Chief Executive Officer



## MCIB RESPONSE

The MCIB notes the contents of the response.



Mr John O'Donnell B.L.  
Marine Casualty Investigation Board  
Leeson Lane  
Dublin 2

12 February 2009

Re: MCIB/155

Dear Mr O'Donnell

Thank you for your letter of 5 February 2009 enclosing the draft MCIB report into the death of Deirdre Conroy on the river Gaddagh in Co Kerry on 28 December 2007.

I welcome the findings in the draft report and would like to make the following comments on conclusions it contains:

Conclusion 6.2

*"...some time and effort should have been allocated to viewing the various sections of the river."*

While additional bank inspection may have revealed the presence of the fallen trees it would not necessarily have done so. Given that the series of approximately a dozen fallen trees was confined to a difficult-to-access 100-metre section on a river which is some several kilometres in length, and that such a series of closely-spaced fallen trees was out of character with the rest of the river, or rivers in Ireland generally, there is no guarantee that additional bank inspection would, on the day, have revealed the presence of the fallen trees. A kayaker from another group present on the river that day, whose group also encountered the fallen trees, stated afterwards that in 20 years kayaking all over the world he has never seen such a situation.

Only by walking the full length of a river can certainty be reached as to the entirety of its condition which inspection could take a whole day and would expose kayakers to grave danger in climbing down and back up wet river banks to inspect every single section of the river. It is also difficult to assess from such inspections the exact conditions that kayakers will later encounter at water-level. Full-length bank inspections are never carried out by kayakers in the same way that full-length road inspections are never carried out by motorists. In the vast majority of cases it is far safer for a group to kayak down the river with caution, only making bank-level inspections when warranted. Such inspections are normally warranted to inspect an upcoming hazard if one is indicated, however while he was carrying out the accident investigation commissioned by UCD one



of the investigators from the Royal Society for the Prevention of Accidents (RoSPA), who is a qualified BCU Level 5 white-water kayaking coach, told members of the group that were he with us on the day nothing immediately before the incident site would have prompted him to exit the river and carry out a bank inspection. The RoSPA report, for the production of which members of the group were requested to travel with the investigators to the accident site, concluded that the group was not reckless in the manner in which it undertook the planning and execution of the trip but was in fact 'cautious and pragmatic'.

Conclusion 6.3

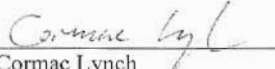
*"The local Landowner... was not contacted by any groups on the river that day."*

While information from locals may have been helpful, due to the specialist nature of white-water kayaking such information from lay-people would have been relatively meaningless in a kayaking context.

People with no experience of white-water or white-water kayaking can often assume a set of conditions is hazardous to kayakers when such is not the case and more importantly can often assume a set of conditions is safe when kayakers will recognise a hidden danger. Even if local information was reliable and kayakers were to rely on it they may then only encounter a person who is unaware of hazards present and may not encounter the person who knows of a potential hazard. For these reasons it is highly unusual, to the point of being unheard of, for kayakers to rely on information on river conditions from non-kayakers. Instead kayakers are self-reliant and use additional information available from reliable sources - a limited number of river gauges, information passed on by other kayakers, and warnings posted on kayaking websites. It is to be noted by kayakers that in some instances locals may be able to provide another layer of information. The RoSPA investigators, a former fireman and a white-water kayaking expert, assessed preparations made on the day and concluded that the group was not reckless in the manner in which it undertook the planning and execution of the trip but was in fact 'cautious and pragmatic'.

Please include these observations as an appendix to your final report.

Yours sincerely

  
Cormac Lynch

### MCIB RESPONSE

The MCIB notes the contents of this response and wishes to point out that the ROSPA Report referred to was not supplied to the MCIB. The MCIB wishes to state that its conclusions and recommendations stands.



