SHERIFFDOM OF GRAMPIAN, HIGHLAND AND ISLANDS AT INVERNESS

UNDER THE FATAL ACCIDENTS AND SUDDEN DEATHS INQUIRY (SCOTLAND) ACT 1976

DETERMINATION

by

Sheriff Alasdair Lorne MacFadyen

In an Inquiry into the death of

KAYLEE SUSAN McINTOSH

INVERNESS, 27th MAY 2009

The sheriff, having resumed consideration of all the evidence adduced, Determines in terms of the Fatal Accident and Sudden Deaths Inquiry (Scotland) Act 1976 section 6(1):

(a) Kaylee Susan McIntosh, Rooemah, Camaloun, Fyvie, Aberdeenshire, born 10 October 1992 died between 10.15am and 1.20pm on 3 August 2007 in Loch Carnan, Isle of South Uist following an accident, namely the capsize of a boat, namely a Rigid Raider Mark II, in which she was being carried during a training exercise held by the Army Cadet Force in said Loch Carnan, on that date.

(b) (i) The cause of death was immersion in water under the upturned hull of the boat leading to either drowning or reflex cardiac arrest. Once the lifejacket worn by the deceased inflated she would have been unable to escape from under the upturned boat. The chances of survival diminished as time went on.

(ii) The causes of the accident resulting in the death were:

i. The Rigid Raider II was being operated in weather conditions at or beyond its design capacity. The operating limit of the vessel was Beaufort force 5. The weather forecast issued at 0700 for the morning of 3 August 2007 indicated that the wind was south or southwest 5 to 7, perhaps gale 8; the sea state slight to moderate, becoming moderate or rough, occasionally very rough in west. There was a significant swell beyond the shelter of the area at the jetty at Loch Carnan.

ii. The boat was overloaded and was subject to bad trim. There were 10 seats but 12 passengers. A General Purpose Machine Gun and its tripod, which were heavy, together with an instructor were positioned at the bow of the vessel. The boat was designed to operate with two engines but there was only one on the port side.

iii. The self-bailing devices at the stern of the vessel were not opened until just before capsize. The boat should not have been operated without lowering those. The boat will ship water as it is sailed unless those devices are lowered. The vessel did ship water once out in the open sea.

iv. As a result of the combination of the circumstances described above in i, ii, and iii there was a considerable quantity of water aboard the vessel. The engine choked. Finally the coxswain ordered the boat's occupants to move to the starboard side. The free-surface effect of the trapped water on the port side shifting to the starboard resulted in the craft being overwhelmed. An attempt to save the situation by instructing the boat's occupants to move to port failed and the vessel capsized.

v. After the capsize, most of the occupants were thrown out from the vessel. Three cadets, including the deceased and one instructor found themselves

under the upturned hull. Two of the cadets and the instructor managed to escape. The deceased did not escape.

(c) (i) That the following were reasonable precautions whereby the accident resulting in the death might have been avoided:

1. If the cadet instructor in charge of the voyage between Loch Carnan and Loch Skipport on 3 August 2007, namely Major George McCallum, had, on that date obtained an up-to-date weather forecast on weather and sea conditions in Loch Carnan, then it would have been apparent that the weather conditions were too severe for the Rigid Raider II to embark on the voyage at all.
2. The making of an advance reconnaissance voyage into the open sea at Loch Carnan before setting off on the voyage carrying the cadets and instructors.
3. The deployment of the self-baling equipment on board the vessel, the Rigid Raider Mark II, carrying the deceased as soon as the vessel was under way from the jetty at Loch Carnan.
4. Familiarisation of the coxswain of the Rigid Raider Mark II, namely Major George McCallum, with its operational limits as to weather, weight of crew, passengers and equipment and distribution thereof, deployment of the self-bailing equipment and handling qualities.
5. The appointment of a safety officer, separate from the operation of the voyage itself, with responsibility to check in advance the safety of the activity and with the power to order, on safety grounds, that the voyage not take place.
6. The devising of and adherence to a detailed risk assessment of the intended voyage from Loch Carnan to Loch Skipport

might have led to a decision being made on 3 August 2007 not to embark on the voyage at all.

(ii) That the following were reasonable precautions whereby the death might have been avoided:

1. A numerical head count of those ordered on board the Rigid Raider II before it set off from the jetty at Loch Carnan.
2. A nominal roll call those ordered on board the Rigid Raider II before it set off from the jetty at Loch Carnan, based on an accurate manifest held by the coxswain of the names of all on board that vessel.
3. The taking of copies of that manifest and passing those to a shore-based adult instructor.
4. While at sea and after the capsize a numerical head count and nominal roll call of all of those thrown from the Rigid Raider II, namely all the cadets and instructors who had been on board that vessel.
5. Having on the exercise a fourth vessel which could have been used as a designated safety boat. After the capsize, the rescue of those in the water could have been co-ordinated by another officer with responsibility only for safety of the voyage.
6. The issuing of appropriate life-saving equipment to the cadets, in particular, in the case of the deceased, of a lifejacket of appropriate buoyancy for a 14 year old female.
7. The possession by all adult instructors participating in the exercise on 3 August 2007 of detailed information as to the route to be followed by the three Rigid Raider craft between Loch Carnan and Loch Skipport, both South Uist.
8. Notification by the ACF in advance to HM Coastguard, in particular at their control room in Stornoway, Isle of Lewis,

of the intended route, date and intended time of the voyage between Loch Carnan and Loch Skipport on 3 August 2007.

(d) That the following defects in systems of working contributed to the death and the accident causing the death:

1. The leaving by the camp commandant of all aspects of the organisation of the voyage from Loch Carnan to Loch Skipport on 3 August 2007 to the Cadet Executive Officer, Major George McCallum, without having in place any safety check or risk assessment of the voyage by any other officer. This amounted to an exclusion of this voyage from the requirement of all activities during the camp to be assessed appropriately and competently for risks to the safety and wellbeing of the cadets, including the deceased. On the basis that the camp commandant and other senior officers organising and delivering the activities during the camp were aware of the intended voyage, it was a defect in the system of working, namely the organisation of the camp, to allow this voyage to be treated, so far as organisation and risk assessment were concerned, differently from all other activities during the camp.
2. The failure to have a training and safety adviser present throughout the duration of the camp. The training and safety adviser's time and attention were divided between two camps, hundreds of miles apart, running over overlapping periods. Had the training and safety adviser been present throughout the camp and able to concentrate on only one set of activities, he most likely would have detected the lack of a proper risk assessment of the voyage.
3. The failure of the system said to be in place to secure the issue of appropriate life-saving equipment for use by cadets in that it allowed the issue of a number of Assault Troop Lifejackets, of 498 Newton, to Major McCallum for use by cadets, when it was self-evident that those were unsuitable for use by any cadets.

4. The failure of the Battalion to have appointed a separate safety officer for the voyage with the responsibilities mentioned above. The system of working provided for the appointment of such a safety officer. The failure of the officers responsible for planning and organising of the camp to ensure compliance with Army and ACF regulations by the appointment of such a safety officer amounted to a failure in a system of working which contributed to the accident.

(e) That the following facts are relevant to the circumstances of Kaylee McIntosh's death:

1. The absence of reliable radios on board the Rigid Raider II or the other two Rigid Raider vessels, which together formed a flotilla. The absence of such equipment prevented those on board the vessels from effective communication with each other or with any shore-based officer.
2. The method of acquisition of the Rigid Raider II for the Battalion by Major McCallum was unconventional and unsatisfactory. An indication had been given to the supplier within the forces that its intended use was as a safety boat. That was not the use to which it was put during the 2007 camp. The system of gifting equipment such as boats appeared to be informal and carried out with little regard to the appropriateness of the equipment for the cadets for whom it was being requested.

NOTE

Introduction

[1] It may be helpful to make some introductory comments so that, on the one hand, the objectives and purpose and, on the other, the limitations of a fatal accident inquiry are understood. An essential feature of the procedure is that evidence is given in public so that the knowledge of those responsible for investigation of the death and the accident leading to the death is shared with the public and in particular with legitimately interested parties, including of course the relatives of the deceased. The inquiry therefore fulfils the important purpose of enlightening those with a legitimate interest as to the cause of the death. It also serves the purpose of ascertaining whether any reasonable steps could or should have been taken whereby the death or the accident might have been avoided, whether any defects in any system of work contributed to the death or the accident and allows the sheriff to describe any other facts relevant to the circumstances of the death.

[2] The responsibility and powers of the sheriff in respect of the determination following the inquiry are set out in section 6 of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 ('the Act' or 'the 1976 Act'). Section 6(1) is in the following terms:

> '**6**(1) At the conclusion of the evidence and any submissions thereon, or as soon as possible thereafter, the sheriff shall make a determination setting out the following circumstances of the death so far as they have been established to his satisfaction -
> (a) where and when the death and any accident resulting in the death took place;
> (b) the cause or causes of such death and any accident resulting in the death;
> (c) the reasonable precautions, if any, whereby the death and any accident resulting in the death might have been avoided;
> (d) the defects, if any, in any system of working which contributed to the death or any accident resulting in the death; and
> (e) any other facts which are relevant to the circumstances of the death.'

[3] However, the limitations of the fatal accident inquiry should also be noted. A fatal accident inquiry is an exercise in fact finding, not in fault finding, and it is not the function of the court to make findings or express opinions on questions of fault or liability, or to attempt to apportion blame. This does not mean, of course, that the evidence led at an inquiry may not disclose fault. In that event, a finding implying or imputing fault is competent. However, the whole object of impartial public inquiry is to get at the truth and to see to it so far as humanly possible that any mistakes discovered, whether they arise through fault or some other reason, are not made in the future.

[4] The very wide power given to a sheriff in a fatal accident inquiry must also be exercised with caution, bearing in mind the summary nature of the proceedings and the lack of formal written pleadings. It is no doubt partly at least for this reason that Section 6(3) of the Act provides that the sheriff's determination in a fatal accident inquiry may not be founded upon in any subsequent proceedings.

[5] It must be stressed that the findings made can only be based upon the evidence led at the inquiry. It is the duty of the Procurator Fiscal to lead evidence at the inquiry with regard to the circumstances of the death. The other parties who are present or represented at the inquiry are also entitled to lead evidence, if they so desire.

[6] This particular inquiry was held under section 1(1)(b) of the 1976 Act in that it appeared to the Lord Advocate that the death of Kaylee Susan McIntosh on 3 August 2007 had occurred in circumstances such as to give rise to serious public concern. The deceased was only fourteen years old when she lost her life. Throughout the inquiry she was mostly referred to by her first name and in this note I have taken the liberty of describing her in the same way.

[7] At the inquiry representation was as follows:

- The Crown by Mr. David Teale, Procurator Fiscal, Stornoway and Lochmaddy;
- The Ministry of Defence by Mr. Andrew Webster, Advocate and Messrs Morton Fraser LLP, Solicitors, Edinburgh;
- Mr. George McCallum, Major in the Territorial Army, represented himself. Given that the actions of Major McCallum (as he was referred to at the inquiry and in this determination) were the subject of much scrutiny, and criticism, during the inquiry, it was unfortunate that he was not legally represented. I had been told at a preliminary hearing that legal aid was unavailable to him, but that he could not afford to fund representation from his own resources. The Ministry of Defence decided not to fund separate legal representation for Major McCallum. That was a matter for them, but it could not be said that the Ministry's and Major McCallum's interests in this inquiry were identical.
- Derek and Lesley McIntosh, the parents of the deceased, by Mr. Simon Di Rollo Q.C. and Messrs Thompsons, solicitors, Edinburgh.

[8] Evidence was led by the Procurator Fiscal from the following witnesses:

Cadets

- L. N. (aged 14);
- Jake Watson;

Cadet instructors

- John Shaw, adult under officer;
- Craig Duncan, sergeant:
- Vicky Lorimer, sergeant;
- Calum Campbell, lieutenant;
- Scott Rose, company sergeant major;
- Mark McKee, sergeant;
- Charles Milne, lieutenant, now captain;
- Fergus Gatt, captain, now major;
- Douglas Rodger, sergeant;

- James Stewart, sergeant;
- David Adams, at the time of the accident major, now captain;
- Ian Hay, training safety adviser;
- Norman Donald, major, now Colonel Commandant 2nd Highlanders ACF;
- David Taylor, at time of accident, Colonel Commandant, now retired;
- George McCallum, Major, Cadet Executive Officer.

Coastguards employed by HM Coastguard

- Joseph Johnstone, station officer at Benbecula;
- Robert Currie, auxiliary coastguard;
- Brian Learmont, auxiliary coastguard;
- Andrew Mair, HM Coastguard watch officer, Stornoway;

Civilian witness

- Roderick Campbell, resident of the Uists and a fish farmer;

Pathologist

- James Grieve, consultant pathologist, Aberdeen;

Witnesses who carried out post-accident investigations:

- Paul Mara, chief power boat instructor, Royal Yachting Association**;**
- Charles Davey, marine surveyor, Marine and Coastguard Agency;
- John Adams, retired lieutenant colonel, Land Accident Investigation Team;

Witness as to weather conditions on 3 August 2007

- Donald Mackay, Air Traffic Controller, Balivanich Airport, Benbecula;

Police

- Detective Sergeant Ian Morrison.

[9] The only other party to lead evidence was the Ministry of Defence. They led the evidence of Colonel David Tobey, a senior Army officer in a supervisory role in respect of the ACF.

Findings in fact

[10] On the basis of the evidence led, I can summarise the background to and circumstances of the accident and the conclusions of the investigations made after the accident as follows.

1. Kaylee McIntosh, aged fourteen years, was a cadet within the 2nd Battalion The Highlanders Army Cadet Force.
2. The Army Cadet Force (ACF) is a national youth organisation which offers military style training and other activities to young people between the ages of 12 and 18. There are some 44,000 cadets nationally and about 8,000 instructors formed into about 1,700 detachments. The ACF is not part of the regular Army. However it is organised along military lines and has many, close links with the armed forces, in particular the army.
3. The Army Cadet Force Manual, Crown production number 2, records at paragraph 3.002 that the aim of ACF training is to 'produce a self-reliant, fit young cadet with an understanding of basic military subjects, initiated in the art of leadership, aware of his responsibilities as a citizen and with a well developed interest in the Army and the community.'
4. The military style activities undertaken by cadets are sponsored and funded by the Army. Non-military activities, such as participation in the Duke of Edinburgh's Award Scheme, are supported by the Army Cadet Force Association. Infrastructure matters, including the provision of administrative support, are provided by Reserve Forces and Cadets Associations, statutory bodies reporting to the Defence Council, of which there are thirteen in the country. RFCAs employ Cadet Executive Officers ('CEOs'), whose responsibilities include the management of property, equipment and funds at appropriate levels. Major George McCallum was the Cadet Executive Officer for the second Battalion of the ACF. Co-ordination of the ACF is provided through the Army's Commander Regional Forces. Within the Army, regional brigade commanders are responsible to the Commander Regional Forces for the safe conduct of ACF activities within his or her area. Brigade commanders have full time staff officers of captain rank to coordinate and oversee training support within ACF battalions. Army

battalions also have a Training Safety Adviser ('TSA'), with training in matters relating to health and safety, to give advice to cadet battalions on safe military training. The TSA at this camp was Mr Iain Hay. ACF battalions are headed by a Commandant who is a part time volunteer. Commandants and CEOs can call upon the resources of the relevant Army battalion, in the form of the Staff Officer Cadets and the TSA, for support in the provision of training. Each cadet battalion has a Training Officer or director who is a part time volunteer. This role was in fact filled both in preparation for and at this camp by the assistant Training Officer, Captain Fergus Gatt.

5. The Army has published guidance for the safe conduct of activities within the ACF, principally in the form of a publication entitled 'Cadet Training Safety Precautions (2006)', published with a reference number JSP 535. A copy of JSP 535 was lodged as Crown production number 14.
6. The 2nd Battalion of the Highlanders Army Cadet Force held an annual camp for cadets. In 2007 that camp took place at the Island of Benbecula, in the Western Isles, between 27 July and 10 August. Benbecula forms a part of an archipelago of islands, often referred to as the Uists, off the West Coast of Scotland. Most of those islands are connected permanently by causeways along which the arterial road leads from Lochmaddy in North Uist through Benbecula to South Uist and beyond that to Eriskay. Of relevance to this inquiry is that access to the training area at Loch Skipport, South Uist could have been gained from the cadets' accommodation at West Camp, Balivanich, Benbecula by road.
7. The Battalion was divided into four Companies. Within each company cadets had gained varying levels of proficiency in the various disciplines in which they participated and received training. The level of proficiency attained by a cadet was reflected by which 'cadre' he or she was placed into. All four Companies attended that annual camp so that all the cadets in each cadre could be together. A consequence of that was that many of the cadets did not know each other before this camp, coming as they did from different parts of the country.
8. At camp, the cadets were divided into their cadres depending on their experience ranging from Basic to four star. There were thirty four cadets, including Kaylee,

in two star cadre at Benbecula. Those cadets had previously achieved the proficiency level of one star.

9. The officer in charge of the two star cadre was Major David Adams.
10. The aim of the camp was to test the cadet's training which had taken place throughout the year and to assess their suitability to move to the next star level. Training and testing took place at the camp. Different cadres received separate training and the accident occurred during an activity on which only the two star cadre were engaged.
11. The instructors were all adults who had undergone training and assessment before becoming instructors. That training had followed interview as to suitability. Potential instructors trained for two or three weeks depending on their ability and previous experience. They all would have attended an Adult Instructors training course lasting for ten days following which they would be promoted to Sgt Instructor. Twelve or eighteen months later they could attend a further 10 day course leading to promotion to Staff Sergeant. Twelve or eighteen months after that a further course and practical experience in running courses could lead to a commission. Alternatively, direct entry on a commission is possible.
12. All cadet officers hold the rank of lieutenant but they act as other ranks.
13. At camp only Major George McCallum and Ian Hay were full time employees and salaried. Major McCallum was employed by as a full time Executive Officer of the Highland and Islands Reserve Force cadets. He held a Territorial Army commission at the rank of Major. Iain Hay was a full time Reserve Service Warrant Officer and was employed as the Training Safety Officer for two battalions and a battery of cadets in Shetland.
14. None of the other instructors was salaried. All those were volunteers.
15. The cadets were based at West Camp, Balivanich, Benbecula. Part of the training syllabus for the two star cadre was to be trained in army field craft. That was to take place on land around Loch Skipport, South Uist. The plan was to transport or 'insert' (to use an expression used by the military witnesses at the inquiry) the two star cadre from their base into that location on 3 August 2007, where they

were to undertake field activities, spend the night of 3/ 4 August under canvas at Loch Skipport and to return to base on 4 August.

16. The field craft formed part of the core syllabus of the camp. The insertion of the cadets into the training area was not itself a part of the core syllabus. That, however, did not excuse it from being mentioned in the plans for the camp or being subject to an appropriate level of assessment as to safety. Accordingly, whether or not the method of insertion formed part of the core activity was, in my view, irrelevant since it amounted to an activity during camp which, on any view according to ACF rules and practice, ought to have been assessed for risk.
17. As a matter of fact, although the training area at Loch Skipport was accessible by road, a decision was taken to insert the cadets into the training area by way of sea. The making of that decision and the assessment of risk, or lack thereof, of the insertion by sea were of significance.
18. The vessels used were three 'Rigid Raider' type landing craft, two Rigid Raiders Mark I and one Rigid Raider Mark II (referred to herein as the 'Rigid Raider II').
19. Those vessels had been acquired for use by the Battalion by the Cadet Executive Officer, Major George McCallum from a source within the armed forces which held and disposed of military equipment surplus to the requirements of the regular armed forces.
20. On the morning of 3 August after breakfast the cadets were transported from their accommodation by bus to the jetty at Loch Carnan, South Uist, arriving there at about 9am. There they were allocated by the officers into one of the three vessels. No account was taken of the individual cadets' age, weight or swimming ability. The cadets were each issued with an assault troop lifejacket (ATLJ) and were assisted in putting those on. Kaylee was allocated to the Rigid Raider Mark II. That vessel was under the command of Major McCallum.
21. Sergeant Mark McKee, an ACF adult instructor, checked the lifejackets. Before boarding the boats the cadets were instructed how to pull the life jacket cord in order to inflate them.
22. Kaylee boarded the Rigid Raider II along with seven other cadets, and four adult instructors, Major George McCallum, and Sergeants John Shaw, Craig Duncan

and Vicky Lorimer. Major McCallum was the coxswain of the boat, i.e. in charge of and the helmsman of the vessel. He took up position at the rear of the boat on the port side. Sgt Duncan took up position to his right, on the starboard side. Both were positioned behind the controls of the boat. Sgt Lorimer was positioned in front of Major McCallum and Sgt Duncan, in front of the controls, behind the cadets and approximately in the mid-line of the boat. The cadets were seated in two rows of four, one to port and one to starboard. Kaylee was positioned in the second place on the starboard side counting from the bow of the boat. Sgt Shaw was positioned in front of the cadets, to the port side. On the bow of the boat there was mounted a general purpose machine gun. One outboard motor was affixed to the stern of the boat, off-centre to the port side. A mounting bracket for the placing of a further outboard motor was present on the starboard side of the stern but no motor was affixed there.

23. Once on the vessel, the cadets were instructed that in the event of falling overboard they should push themselves away from the boat and pull their lifejacket cords. The instruction on the boat came from Major McCallum. That instruction together with the similar information given on the jetty was the extent of the safety instructions given to the cadets before embarking on the voyage.
24. The ATLJ supplied to the cadets had a buoyancy of 498N (N =Newton- a measure of buoyancy). It was designed, as its name tends to suggest, to support its wearer, an adult, male soldier plus 45 kgs of equipment. By way of comparison, lifejackets and buoyancy aids recommended for use by cadets in an Army and ACF instruction manual, JSP 535, ranged between 50N and 275N. The ATLJs were not designed to self-inflate on contact with water. They required manual activation. Some of the adults on the rigid raiding crafts were supplied with lifejackets which self-inflated on contact with water. All of those issued to the cadets required to be activated.
25. Other cadets in two star cadre were being transported in two other Rigid Raider vessels. Those were smaller craft and were coxed respectively by cadet instructors, Lt Calum Campbell and Lt Charles Milne.

26. Once the three Rigid Raiders set off from the jetty at Loch Carnan, the Rigid Raider II carrying Kaylee came to be behind the Rigid Raider coxed by Lieutenant Calum Campbell and ahead of the boat coxed by Lieutenant Charles Milne.
27. On 3 August 2007 the Met Office Inshore Waters forecast to twelve miles offshore issued at 0800 was as follows:

> 'Ardnamurchan Point to Cape Wrath, including the Outer Hebrides 24 hour forecast: South or Southwest 5 to 7, perhaps gale 8 (referring to the wind strength based on the Beaufort Scale);
>
> Rain;
>
> Moderate or good [visibility], becoming moderate or poor;
>
> [Sea] state slight or moderate, becoming moderate or rough, occasionally very rough in the west.'

28. Force 5 to 7 on the Beaufort Scale represents wind strength in the range of 31 to 61 kilometres per hour, referred to as a 'fresh breeze' to a 'near gale'. Force 8 represents wind strength of 63 to 74 kilometres per hour and is described as a gale.
29. As the Rigid Raider II left the sheltered waters at the jetty and travelled out into the Loch Carnan proper, the sea conditions deteriorated. Major McCallum sought, but failed to contact Lt Campbell by radio. Major McCallum instructed Sgt Shaw to fire the machine gun (with blank ammunition) to attract the attention of Lt Campbell with a view to instructing him to return to the jetty. The Rigid Raider II slowed down. Water was seen to be accumulating in the vessel. Water was entering the vessel over the sides.
30. The engine of the Rigid Raider II choked and ceased to operate. Forward motion then ceased.
31. Major McCallum instructed the occupants of the boat to move to starboard, i.e. to the right of the boat. They did so. The process of doing so also caused the water in the boat to move to the starboard side of the boat. Major McCallum then instructed the occupants to move to the port of the boat. However, the boat then capsized to starboard. This was at about 10.15am.

32. The capsize was caused by overloading and bad trim resulting in the initial swamping of the vessel which was compounded by the fact that the water freeing self-bailing equipment, the 'donkey tail', was not opened until just before the point of capsize.
33. The vessel was originally designed to carry a maximum of ten personnel, including two crew. On 3 August 2007 there were twelve persons on board plus a general purpose machine gun mounted on a tripod fixed to the bow.
34. Bad trim is caused by having the load to far forward or aft (towards the rear or stern of a boat). Too far forward and the boat will be difficult to steer and will ship water over the bow. The trim of the Rigid Raider II was affected by having a heavy load too far forward. As the weather and sea conditions deteriorated as the vessel entered the open waters of Loch Carnan, water was shipped over the bow into the boat. Had the self –bailers been open from the time of departure, it is possible that less water would have been trapped in the craft.
35. The Rigid Raider II, when in service with the Ministry of Defence was restricted to a maximum operating limit of Beaufort Force 5. Accordingly on 3 August 2007 this vessel was operating in conditions inappropriate to its design and with additional weight positioned on its bow.
36. It was the combination of those factors which led to the capsize. The final stage of the capsize was caused by a combination of:
    - Overloading,
    - Bad trim and sea conditions,
    - The movement of the crew to the starboard side,
    - The free surface effect of the trapped water on the port side now shifting to starboard resulting in the craft being overwhelmed.
37. Free surface effect is the rush of water from one side of a vessel to the other as the vessel heels (which happened in this case when those on board crossed together from port to starboard). That flow of water exaggerates the heel. In this cased the starboard quarter submerged causing the vessel to become swamped, i.e. filled with water from above. The attempted move of those on board back to their original positions was ineffective in preventing the swamping of the vessel.

38. After the capsize Kaylee found herself under the upturned hull of the Rigid Raider II. which was floating on the water. Also under the upturned hull were adult instructor, Sgt Vicky Lorimer, and cadets Kirsty Leask and Eilidh Slapp. Cadets Leask and Slapp escaped from under the upturned hull. Sgt Lorimer advised Kaylee that she would 'get back and get her' before attempting to escape from under the upturned hull. Sgt Lorimer managed to swim under the vessel and surfaced outside. Sgt Lorimer was in considerable distress. She began to float away from the upturned hull. She was rescued into the boat coxed by Lt Campbell who had by then returned to the upturned hull. Sgt Lorimer did not return for Kaylee. Sgt Lorimer did not alert others to the presence of Kaylee under the upturned boat whilst she (Sgt Lorimer) was in the water or once she was on board Lt Campbell's vessel.
39. Kaylee's lifejacket inflated whilst she was under the upturned hull. The excessive buoyancy provided by the inflated lifejacket would have prevented her from escaping from underneath the upturned hull were she otherwise capable of attempting so to do.
40. From about 10.15am Sergeant Mark McKee made several Mayday calls from the radio on board Lt Campbell's vessel, seeking urgent assistance. Those were received by the control room at HM Coastguard, Stornoway. on the instructions of Lieutenant Campbell, the coxswain of one of the Rigid Raider Mark I vessels, made Mayday calls by radio, seeking urgent assistance. That call was received by the Coastguard Control Room in Stornoway.
41. However, during those calls wrong information was given as to the location of the capsized vessel. The first received was indecipherable. Later messages within ten minutes of the first provided the location of the capsize as being one mile out to sea off North Uist and then, in further broadcasts, Loch Skipport. Both of those locations were wrong.
42. Mark McKee did not know how to describe the location of the capsize. He did not know the name of the loch from which they had come, namely Loch Carnan.
43. Stornoway Coastguard scrambled the Barra lifeboat, the Benbecula Auxiliary Coastguard team and the Search and Rescue (SAR) helicopter at Stornoway

Airport, on the island of Lewis. The helicopter was airborne at 10.26am from Stornoway airport en route to the Isle of North Uist.

44. The Auxiliary Coastguard were sent from Benbecula to Loch Skipport, Loch Eport and finally to Loch Carnan. They arrived there at 11.30 am.
45. At 10.53am Mark McKee broadcast a message to Stornoway Coastguard advising that 'all four cadets had been rescued'.
46. At 11.13 am Major McCallum telephoned the Marine and Coastguard Agency by land telephone line from the jetty at Loch Carnan and said that everyone was ashore, wet but unharmed. It was only during this telephone conversation that the Coastguard became aware of the exact location of the incident, namely Loch Carnan. The helicopter went there and received a thumbs up from one of the adults and returned towards Stornoway
47. The SAR helicopter, Barra lifeboat and Benbecula Auxiliary Coastguards were stood down.
48. At 11.32am the Benbecula Coastguard personnel, present at the jetty at Loch Carnan, were informed that a cadet was missing.
49. Thereupon they immediately contacted Stornoway Coastguard control room and advised that they were missing one female cadet and that she had been on the capsized craft.
50. The helicopter was again scrambled. At this time it was en route to Stornoway airport and required to refuel there before setting out again for Loch Carnan.
51. The inability of any ACF instructor to provide the Coastguard with a precise location hampered the Coastguards in arriving at the correct location.
52. Lt Campbell and the crew of his boat, which had returned to the site of the capsize, assisted in the recovery of individuals from the water. Major McCallum was seated on the upturned hull of the Rigid Raider II, directing operations. Some cadets were taken onto Lt Campbell's boat, some were assisted up on to the upturned hull and some were left holding on to the upturned boat. No list of names was read out to ascertain if all cadets and adults had been accounted for. No effective headcount of those who had been in the capsized vessel was carried out.

53. At about 10.40am Lt Campbell returned to shore, at the jetty at Loch Carnan, the occupants of his boat and those whom he had recovered on to it from the water, including Sgt Lorimer. He then returned to the site of the capsize. He recovered the remaining personnel sitting on top of the upturned hull and as could be seen in the water. He returned those personnel to the jetty at Loch Carnan.
54. Col. Adams, the cadet office in charge of the two star cadre was at the jetty. When Lt Campbell arrived with as many of the rescued cadets as could be carried on his rigid Raider, this was the first that Col. Adams knew that a mishap had occurred on the water.
55. At 10.41am Col Adams telephoned Fergus Gatt to inform him of what had happened, in order to bring into play efforts to look after and, if necessary, provide medical or nursing treatment to the rescued cadets and instructors.
56. Once on shore the first batch of rescued cadets and instructors and the other cadets in the two star cadre were taken by minibus to Rangehead, South Uist, an army establishment.
57. No numerical or named headcount was performed before the cadets were removed from the jetty at Loch Carnan to Rangehead. It was not known how may cadets and instructors had been brought ashore.
58. Once at Rangehead, the cadets who had been in the Rigid Raider II were separated from the remainder of their colleagues and they were appropriately dealt with to minimise the risk of hypothermia and other potentially harmful consequences of falling into the cold water.
59. At about the same time, at Rangehead, at least one of the rescued female cadets who realised that Kaylee was missing and brought their concern to the attention of an instructor, Scott Rose, and subsequently, Lt Fergus Gatt.
60. A search at Rangehead proved fruitless and at 11.32 am the Coastguard Unit at Benbecula was made aware that a female cadet was missing.
61. A nominal roll call was held of two star cadre and it was confirmed that Kaylee was missing. That headcount was carried out between 11.46 am and 11.51am.
62. At 12.06pm the lifeboat and helicopter, which by now was about to land at Stornoway, were again requested to go to Loch Carnan to search for Kaylee.

63. Adult instructors, assisted by local fish farm workers carried out a search and eventually at 12.51pm the upturned Rigid Raider II was located on the rocks on the southern shore of Steiseigh island in Loch Carnan but some distance away from the place of capsize. At 1.05pm an inflated lifejacket was spotted under the vessel.
64. After deflation of her lifejacket, Kaylee was removed from under the vessel by a member of the helicopter crew at 1.20pm. She was placed in the helicopter at 1.49pm and flown to Stornoway. During that flight a paramedic worked on Kaylee.
65. At 2.23pm she was handed over to hospital staff in Stornoway. Efforts were made to revive her. However those were ineffective and at 2.45pm on 3 August 2007 Kaylee's life was pronounced extinct.
66. An autopsy was performed by pathologists, Drs James Grieve and Susan Robinson, on 6 August 2007 in Aberdeen Royal Infirmary. Their conclusion was Miss McIntosh died as a result of immersion in water. That immersion had led either to drowning or reflex cardiac arrest. No exact time of death could be estimated.

Submissions

[11] After the evidence was led, all parties made submissions as to the findings which ought to be made. Those were all helpfully expressed in written form and are annexed to this determination.

Discussion

[12] Those submissions clearly identify the important issues which arose during the inquiry. They each highlight a number of factors said to have played a part in the causation of the accident and Kaylee's death. I will now discuss those factors and consider, firstly, whether steps to avoid those factors might be characterised as reasonable precautions which might have avoided the death or the accident.

[13] Secondly, I will discuss whether the evidence disclosed any defects in any system of working which contributed to Kaylee's death or the accident resulting in the death.

[14] Finally, I will discuss whether any factors which might not be characterised as reasonable precautions or defects in systems of working might nevertheless be reasonably considered to be facts relevant to the circumstances of the death.

[15] My observations and conclusions have been assisted by the results of three investigations made after the accident. The first of those was an inquiry led by John Adams, a retired army lieutenant-colonel on behalf of the Land Accident Prevention and Investigation Team (LAIT), a military organisation, which resulted in the preparation of a detailed report dated 4 September 2007, produced as Crown production number 31. The second was an examination of the Rigid Raider II by a maritime experts, namely Charles Davey, a marine surveyor employed by the Marine and Coastguard Agency, whose report is Crown production number 29 and Paul Mara, chief power boating instructor with the Royal Yachting Association, whose report formed Crown production number 28.

[16] The word 'accident' is not defined in the 1976 Act. Although other factors may have played their part in the chain of events leading to the death, I have decided that the capsize of the Rigid Raider Mark II at Loch Carnan on 3 August 2007 can fairly be described as the accident which resulted in the death. That event falls clearly within the normal, everyday use of the word 'accident'. Kaylee died as a result of her immersion in water. Her immersion in water was a direct consequence of the capsize. In my view it is reasonable and consistent with all of the evidence led to conclude that the accident which resulted in the death was that capsize.

[17] I have divided my observations on the factors leading to the accident and Kaylee's death into separate chapters as follows:

1. **Preparation**
2. **Vessel and equipment**

3. **Events on the jetty at Loch Carnan,**
4. **Events on the water**
5. **Events after return ashore**

1. Preparation

[18] The observations about to be made on the issue of preparation for the voyage from Loch Carnan to Loch Skipport on 3 August 2007 range over a number of facts and circumstances. What is of interest is their relevance to the accident and Kaylee's death. Inevitably, therefore, when discussing preparation I will also deal, sometimes in detail, with the events of 3 August 2007. Accordingly, when I later come to deal with those events, I do not propose to repeat the discussion of facts and circumstances already discussed under this heading of preparation. Similarly, some of that later discussion will raise issues arising out of the amount of preparation for the voyage.

1.1 Planning and risk assessment

[19] It was common ground between all witnesses asked about the subject, and self-evident, that the safe execution of any activity involving dozens of teenagers requires careful preparation and the assessment of any activity under consideration for potential risks.

[20] Ironically the written plan for the camp provided for the transportation of the cadets from their base to Loch Skiport by minibus and contained a risk assessment of that form of transport. Had the risks of transport by sea been assessed, then there would have been criteria available to the instructors on 3 August 2007 against which to measure the situation and circumstances actually faced on the ground and water, i.e. weather, equipment etc, on that date. That would have enabled decisions to be made which might have prevented the commencement of the voyage altogether or have altered the steps taken once at sea, and once the capsize had taken place.

[21] As already noticed, after the accident on 3 August 2007, a speedy and thorough investigation was carried out by the Land Accident Prevention and Investigation Team, an investigative department within HM Forces, led by Lt Col John Adams, who gave evidence. The report of that investigation, showing its conclusions, was produced by the Crown as production number 31. What was clear from that was that the Army Cadet Force already had in place an elaborate and well-developed set of procedures which could have been followed by the battalion when planning the 2007 camp. To some extent that had been followed, but crucially in respect of this particular water-borne activity, namely the insertion of the two star cadre into Loch Skipport by sea it was not.

[22] In particular, the Ministry of Defence had published a booklet, with a reference number JSP (standing for 'Joint Service Production') 535, entitled 'CADET TRAINING SAFETY PRECAUTIONS (2006)'. This booklet, known colloquially within the ACF as the red book, was well-known to cadet instructors including all who gave evidence at the inquiry. Its importance can be understood by its being referred to on occasion by witnesses as 'the Bible'. It was produced as Crown production number 14. It also refers to and incorporates safety rules detailed in a further document, called 'Army General and Administrative Instructions'. That document was commonly referred to at the Inquiry as 'AGAI' and was produced as Crown production 15.

[23] All witnesses recognised that cadet instructors were expected to carry JSP 535 while on duty and to be familiar with its contents. The Army Cadet Force Manual, which governs the activities of the ACF states at paragraph 3.009 that JSP 535, provides an 'on-the-spot reference to the "Rules of Safety" which are to be obeyed when training cadets. All ACF Adults must carry a copy at all times when on ACF Duty. It is a detailed reference on Training Safety designed for the cadet forces, and covers all major aspects of the subject'.

[24] Section 5 of JSP 535 is headed 'RISK ASSESSMENT'. It defines a risk assessment as

'the logical process of examining a proposed activity, estimating the likelihood of an accident or injury occurring or damage being caused, assessing possible effects and so developing safety measures within an overall safe system of training (SST), which may lead to changes to a planned activity or, in extremes, its cancellation.'

[25] Regard is to be had to four elements to ensure a safe system of training, namely the safety of persons, the use of safe equipment, the use of safe practices and the use of a safe place of training. Training on water is identified in paragraph 2003 as in many ways the most hazardous environment' and is dealt with by way of specific rules in section 21.

[26] Turning to section 21 of JSP 535, it is found to deal with the prevention of accidents during training on water. Among the rules in section 21 are the following:

'**Safety Policy**

2103. Principles – the main elements on which safety is based are:

a. The correct training and supervision of cadets by adults who have appropriate qualifications and expertise in the activity concerned.

b. The provision of a safety organisation, properly trained and correctly equipped, to help individuals who get into difficulty.

c. The use of properly maintained craft, with the appropriate seaworthiness certification and safety equipment for the category of water in which they are to be operated.

d. A properly conducted risk assessment for the activity, which includes the weather, sea and/or water conditions expected for the duration of the planned activity.

2104 – Personal Flotation Devices. All cadet personnel undertaking authorised training must wear the appropriate MOD issued personal flotation device when taking part in afloat training in accordance with DCI

Gen 10/05 dated 28 January 2005. The Matrix at Annex A to this Section shows the recommended lifejacket/buoyancy aid for different Cadet activities.

...

Non-swimmers and Swimming Tests

2109 – Non-swimmers should not be automatically debarred from activities on water. The qualified staff conducting the activity should use their discretion as to whether any individual should or should not participate. If non-swimmers do undertaken training on water they should be clearly and visibly identified, wear approved life preservers and be given additional supervision during periods in or on the water.

...

PART 2-MILITARY TRAINING EXERCISES

2111 – Training on water can take place under two different types of conditions, and the rules, which follow are written accordingly:

a. In shallow non-tidal inland waters which are not more than 3 feet deep with a firm weed-free bottom, when the rules for safety, although the minimum, are to be strictly obeyed.

b. In deeper non-tidal or tidal waters where conditions are potentially more dangerous because of wind, currents, rocks and other hazards, and distance from land when the rules for safety are more comprehensive and require greater emphasis.

Note: these definitions and the rules which follow do not apply to canoeing, which follows rules laid down in AGAI, Volume 1, Chapter 18, Annex D. See also paragraphs 2131 and 2137.

2112 – Good planning and sound preparation play a major part in achieving safety in any form of training, particularly when there is an element of danger. There is no alternative to a careful reconnaissance beforehand by the adult(s) responsible and, when training on water, the

appropriate authorities must be consulted about tides, depth of water, currents, hazards and weather.

2113 – Contingent/County Standing Safety Orders for Training on Water. Cadet Force Adult Volunteers (CFAV) responsible for exercises and expeditions involving a water hazard should prepare 'Safety Orders for Training on Water', to be issued by CCF Contingent Commanders and ACF County HQs. The order should be based on the checklist below:

a. Limits to the area in which the activity is to take place.

b. Details of the maximum numbers, which may be carried in boats or on rafts and the minimum crew requirements.

c. Requirements for safety boats.

d. Requirements for communications.

e. Qualifications required by instructors/leaders/helmsmen.

f. Requirements for pre-training.

g. Details of safety equipment to be worn or carried.

h. Details of safety drills to be followed and practice to be carried out.

I. identification of non-swimmers.

2114 – Safety Organisation. The essentials of any safety organisation are:

The Safety Officer

The Safety Boat

Safety Drills and Practices'

[27] There then follow a number of Safety Rules for training in shallow inland non-tidal water. It is worth noting these as it might safely be assumed that conditions likely to be encountered in such waters would be less hazardous than those encountered in open waters such as those experienced in the voyage from Loch Carnan to Loch Skipport.

'2115 – The following rules are the minimum required safety precautions to be taken.

2116 – Safety officer. A CFAV must be nominated as Safety Officer. The Safety officer must be suitably qualified (Annex C to AGAI Volume 1

Chapter 18) and should be experienced in training of this type. The Safety officer's duties are:

a. To be briefed on the form and scope of training to be undertaken.

b. To carry out a reconnaissance of the training area and to establish the extent of any local dangers, such as hazards to navigation, and where appropriate to consult the local authority. Where cadets are likely to be in the water, either intentionally or otherwise, the bottom must be checked for rocks and other projections which could cause injury.

c. To advise the Contingent Commander/Cadet Commandant on:

(1) the Safety organisation required.

(2) the content of Safety Orders.

d. To organise the safety arrangements for the exercise or expedition including the safety boat and crew, look-out(s), communications and medical cover.

e. To make sure that all adults and cadets taking part are thoroughly aware of the possible dangers and are practised in safety drills.

f. To establish the availability of resources which may be required and how to obtain assistance.

g. To be present throughout training and ensure that safety orders are obeyed by all concerned.

h. To command the safety organisation and to take charge in an emergency.

2117 – Safety Boat

a. The crew of the safety boat must consist of a minimum of two CFAV or senior cadets experienced in training on water, good swimmers and trained in emergency drills. At least one must be trained in First Aid, particularly the mouth-to-mouth method of resuscitation.

b. Two paddles (or a pair of oars) and two blankets are required in the boat together with other stores which may be considered necessary for an emergency.

d. The boat must be capable of rescuing the crew and passengers of the most heavily manned boat/raft.

2118 – Safety Drills. The following are examples of safety drills which should be carried out where applicable and cadets practised in them before training starts:

a. Fitting and use of life preservers or whatever personal safety equipment may be considered necessary, including the wearing of approved life-jackets/buoyancy aids when on the water.

b. The identification of non-swimmers so that they may be kept under constant supervision.

c. The identification of non-swimmers so that they may be kept under constant supervision

d. The removal of web equipment before going on the water and the securing of weapons to the boat/raft so that they are not carried by cadets.

e. Refusal to allow the following:

(1) Sitting on the gunwale or standing in a boat when afloat.

(2) Dangling legs over the gunwale.

(3) Any boat or raft to be out of sight of the safety boat.

f. Emergency action 'man overboard' drills.

g. Signals (hand, voice or flat) to be used in an emergency.'

[28] JSP 535 continues:

'**Safety Rules for Training on Deep Tidal or Non-Tidal Waters where Wind Currents, Hazards and Distance from Shore affect Safety**

2119 – These conditions, which include those encountered at sea, require a much greater emphasis to be given to safety, the detailed rules for which are in AGAI Volume 1, Chapter 18 which must be strictly obeyed, particularly paragraphs 18.031 – 18.045 and Annex C.'

[29] JSP 535 continues:

2135a – Personal Safety Equipment

a. Buoyancy aid – One for each person, to be worn at all times to enhance the individual's buoyancy and provide impact protection for the body. See paragraph 2014 and Annex A to this section."

[30] Annex A provides that on power boats the recommended life jackets have a buoyancy range of 150 to 275 N.

[31] Minimum qualifications for the supervision of cadet afloat training were detailed in paragraph 0217 of JSP 535. For powerboat activity, the highest specified qualification was a Royal Yachting Association (RYA) Safety Boat Certificate (Tidal).

[32] AGAI Chapter 18 provided at the time of the accident that the instructions contained therein applied to regular, reserve/volunteer and cadet forces. (para. 18.010). Safety Orders contained within AGAI Chapter 18 provide:

'18.033 – It is a chain of command responsibility to publish safety orders and to ensure that their contents are properly disseminated, for all forms of training or activity listed in this instruction which takes place in their area of responsibility. Safety orders are to be in accordance with the details set out in the relevant paragraphs and annexes in this instruction and take into account local conditions. Safety orders may be in the form of:

a. Standing orders for a type of training activity.

b. Standing orders for a particular location such as a permanent river-crossing site, water sports or sailing club.

c. Specific written orders for a particular exercise or adventurous training expedition.

d. A written safety brief given verbally to participants (normally delivered on site).

18.034 – Contents of Safety Orders – the contents of safety orders will vary according to activity and location but, as a minimum, should include:

a. Reference documents.

b. Limitations imposed by:

(1) Ground/water hazards.

(2) Weather

(3) Equipment

(4) Qualification/s

(5) Standing Orders

c. Composition of the safety organisation.

(1) Personnel, numbers, qualifications.

(2) Equipment.

d. Details of planned pre-training.

E. List of safety drills and immediate actions required in emergency (including contact details for the emergency services).

f. Location of risk assessment and who conducted it.

g. Details of safety briefings to be provided.

h. Communications plans.

18.035 – The requirements of the Safety Organisation will depend on the scope of the training and on local conditions. Two key elements are:

a. The Safety Officer.

B. The Safety Boat (for adventurous training, sport and recreation, safety boat operators must be a qualified Royal Yachting Association (RYA) Safety Boat Operator or recognised equivalent).

18.036 – Safety officer – A Safety Officer is to be nominated for and supervise all training in, on or over water....

a. Qualifications. For military training he/she must be sergeant or above and qualified on one of the courses listed below:

(1) Watermanship Safety Officer (Basic), Category A & B Waters.

(2) Watermanship Safety Officer (Advanced), Category C, D and Inshore waters

b. Duties of a Safety Officer. Safety Officers are not to carry out any additional duties concurrently. In adventurous training or sport the senior qualified instructor should be the safety officer where possible. Duties of a Safety Officer include:

(1) To be briefed on the form and scope of the proposed training.

(2) To carry out a safety reconnaissance of the training area to establish the extent of any local dangers such as current, tides, weirs or hazards to navigation. Where appropriate he/she is to consult with the local authority.

(3) To advise the commander on:

(a) The safety organisation required.

(b) The requirement for, and the contents of, safety orders, if none exist for the training being carried out.

(c) The need for briefing troops taking part and for practising safety and survival drills.

(4) To establish the availability of other resources, which may be required, for example, lifeboats or search and rescue helicopters and how to obtain assistance.

(5) To command the Safety Organisation, if necessary, from the safety boat.

(6) To take charge in an emergency until relieved by a suitably qualified superior officer.

(7) To control the VHF safety radio net.

(8) To be responsible to the commander of the training for the safety of personnel and equipment by ensuring that the safety orders are obeyed.

18.037. The main requirements for a safety boat area listed below. The requirement to provide safety boats is given in the relevant paragraph for each activity.

a. Suitability. The boat must be suitable for its task. Except where specifically stated, safety boats require a reliable and powerful enough means of propulsion capable of dealing with local water conditions. It must have the capacity to accommodate both the mandatory crew and the rescued personnel.

b. Service and Unit Boats. Details of Service boats and their suitability for use as safety boats are set out in Annex B to this Chapter. Boats provided from welfare or unit funds are to be checked by qualified personnel before being used for safety purposes.

c. Engines. The requirement for the inspection and maintenance of Service boat engines is laid down in the relevant user handbook. Engines obtained through welfare or unit funds are to be maintained to the same standard as laid down for Service engines of a similar nature and a record of maintenance kept. Unless specifically exempt by the National Governing Body (NGB) for that particular activity, all Outboard Motors (OBMs) are to be properly fitted with propeller guards designed for that OBM propeller.

d. Crew. The actual number of the crew is to be determined by the Safety officer but is never to be less than 2.

(1) Military training. For military training the helm must be a qualified safety boat operator and the crewman a basic boat operator. One of the crew is to be first aid trained with a particular knowledge of resuscitation.

(2) Adventurous Training or Off Duty Pursuit. Crew qualifications for safety boats used for AT or challenge pursuits may be found in the Annexes to this Chapter.

e. Communication. Suitable communication equipment must be carried within the boat as determined by the Safety officer's Risk Assessment; this will normally be by VHF radio. Careful consideration is to be given to the type of radios and the qualification of operators when working in Cat C&D waters.'

[33] Annex B identifies the Rigid Raider II as a suitable safety boat.

"18.039 – Number of Safety Boats. It is unlikely that all craft or vehicles will capsize or get into difficulty at the same time. The safety boat, or if necessary boats, are to be capable of rescuing the crew and passengers of the most heavily manned craft or vehicle on the water. On occasions more than one safety boat will be required; as a guide, a scale of one safety boat for every 6 vehicles or craft on the water is recommended by day and by night. One safety boat for every 15 M3 Rigs is acceptable on amphibious engineer training.

18.040 – Equipment on Safety Boats. Each safety boat should be scaled with the appropriate safety equipment that should include the following:

a. An anchor made fast to the boat by a cable of at least 3 times the maximum depth of the water (when anchoring is possible).

b. A boat hook.

c. A bailer (except Combat Support Boat (CSB)).

d. Powered boats are to carry a pair of oars or paddles (except CSB).

e. A lifebuoy or similar type of SSE system provided by the technical authority.

f. Suitable first aid kit, stretcher and sleeping bag (may be held on the bank when the size of boat precludes this).

g. A clearly visible buoy, line and sinker to mark obstacles and lost equipment.

h. A radio with spare batteries. VHF radio net is mandatory during all military training on water whether by day or night (para 18.044).

i. All boats used in inshore, coastal or tidal waters are to carry:

(1) At least 2 rocket parachute red flares, 2 orange smoke signals and 3 hand held red flares.

(2) At night, lights as dictated by the International Regulations for the Prevention of Collisions at Sea (IRPCS).

(3) Night vision equipment and a man overboard recovery system if issued and applicable.'

[34] Other requirements included:

'18.044 - Radio Net. A safety radio net is mandatory during all military training on water whether by day or night. Marine band VHF radios must be used when operating on Cat C, D and inshore waters as dictated by MCA regulations for direct communications with the coastguard and other emergency services. Operators of marine band radios are to be trained and licensed under current Radio Communications Agency regulations.

...

18.046 – Safety Drills. The following are examples of safety drills to be adopted where applicable and trainees practised in them before training starts:

a. SSE. The correct fitting and use SSE, or other personal safety equipment (breathing devices, lights etc).

b. Wearing Equipment. The method of wearing equipment under life preservers and the method of securing larger items of equipment such as bergans radios and platoon weapons.

c. Non-swimmers. The physical identification of non-swimmers by visible markings and the briefing of all concerned as to who they are.

d. Evacuation Drills. These will be different for each type of craft or vehicle.

e. Man Overboard Drills. Action to be taken by a safety boat to recover a man overboard.

f. Signals. Those to be used in an emergency.'

[35] The provisions of JSP 535 and AGAI Chapter 18 quoted above were in force on 3 August 2007. I accept the submission on behalf of the Ministry of Defence that they demonstrated the extent to which the Army recognised safety concerns arising from water based activities and sought to ensure that those with the responsibility of implementing and supervising such activity were aware of the issues arising and were required to ensure that the activity was conducted within defined parameters.

[36] It is clear from consideration of these documents that as a corporate body, the ACF had in place a system for the preparation of detailed assessment of risk of proposed activities for cadets, including water-borne activities. However, what was also clear was that in the preparation of this voyage no systematic regard was had to the detailed provisions of JSP 535 or AGAI.

[37] The officer in charge of the waterborne activity was Major McCallum. The document which he prepared produced as Crown production number 10 fell far short of the requirements of a risk assessment as required by the terms of JSP 535 and AGAI. In addition it was also clear that the risk, assessment, in proper form, ought to have been prepared in advance of the camp, seen and approved by the Training and Safety Adviser, acting on behalf of the Camp Commandant. The requirement for such procedure is self-evident- so that the camp organizers can be confident that every activity on which it is intended to send the cadets has been assessed as either safe or involving an acceptable degree of risk. The 'risk assessment' for the insertion of 2 star cadre into Loch Skipport on 3 August 2007 bore to have been prepared on 28 July 2007 by Major McCallum. It indicated that, contrary to the correct procedure it would be 'filed' at the 'end of camp. It was not date-stamped or countersigned by any other instructor.

[38] The only conclusion that can be reached is this: that no risk assessment in terms of the practice and rules of the ACF was carried out in respect of the voyage on which the capsize took place. The ACF practice envisaged that a proper risk assessment would deal with the equipment, swimming abilities of the cadets, training and qualification of the coxswains of the vessels, life-saving equipment, weather and sea conditions, all under the

heading of safe equipment, place, people and process. The difference between what should have been in a risk assessment and what happened on 3 August 2007 was that a proper risk assessment would have been available for a methodical check of the situation as found on 3 August against the requirements of the risk assessment.

[39] In my view, if a risk assessment, worthy of the name, had been carried out in advance of the camp (as it ought to have been done), then at least the following factors would have been identified in it as deserving attention in advance of the camp or on 3 August 2007:

- Suitability of the vessel for the intended voyage;
- Condition of the vessel;
- Major McCallum's qualification, in terms of Army and ACF rules, to command and helm the Rigid Raider II;
- Major McCallum's relative unfamiliarity with the craft;
- Suitability of lifesaving equipment for the age and weight of the cadets;
- The advisability of assessing the weather and sea conditions under reference to an up-to-date weather forecast and reconnaissance voyage;
- Preparation of a plan of action in the event of a major mishap, such as a capsize.
- The need for a separate safety boat.
- The need for a safety officer.

[40] To a greater or lesser extent, all of those factors went on to play their part in the accident and Kaylee's death.

[41] The question has to be asked: how did it come about that no proper risk assessment was carried out for this particular voyage? In November 2006, as part of the planning of the camp, a reconnaissance visit to the Uists took place. Present then were cadet instructors Gatt, Hay, Taylor, Donald and Major McCallum. There was some conflict of evidence as to whether any mention had then been made of the proposed insertion of the

two star cadre into Loch Skipport. In my view, the balance of the evidence was that it was mentioned.

[42] Planning for the camp however proceeded, with a block plan of activities for the cadets being prepared and where necessary a risk assessment being drawn up for particular activities.

[43] The planning documentation for the 2007 camp in its final form made no mention of the insertion of the 2 star cadre into Loch Skipport by sea. Indeed, it provided for their transport there being by minibus. That had the effect that no effective risk assessment of the proposed activity of transporting the cadets by sea from Loch Carnan to Loch Skipport was made in advance of the camp.

[44] The impression gained from the evidence of the senior officers, Adams and Taylor, was that they were content to leave all aspects of any water-borne activities during the camp to Major McCallum. Major McCallum had some qualification in boating, was experienced and interested in boating, while they had no knowledge at all of the subject. In fact in terms of regulations, Major McCallum as Cadet Executive Officer ought not to have had any involvement in the provision as such of training and activities for the cadets. However, one can understand how it might have come about that as a full time officer with an interest in boating, it might easily be left to him to develop and provide some sea-borne activities for the cadets during a camp when as a matter of fact he was to be present.

[45] However, a consequence of simply leaving such matters to Major McCallum in this case was that he was left unsupervised so far as the devising of a risk assessment for the water-borne activities which he was organising. In terms of ACF and Army rules and procedures, that ought not to have happened. That was confirmed by the witness led by the Ministry of Defence, Colonel Tobey.

[46] Although Col Taylor, the camp commandant, was higher up the chain of command than Major McCallum, Col Taylor did not seem to have expected to see a risk assessment for the water-borne activities. In my view, he ought to have had that expectation or at least to have been assured by his training and safety adviser that an acceptable risk assessment for the activity had been prepared and approved. The insertion of the two star cadre by sea into the training area at Loch Skipport formed a part of the activities of the camp, just as much as any other form of transporting the cadets from one location to another. It ought to have been assessed for risk and that assessment ought to have been checked for adequacy by the training and safety adviser on behalf of the camp commandant.

[47] Matters were not helped by the fact that the training and safety adviser for this camp, Ian Hay, had responsibility as a training and safety adviser for another battalion camp, taking place during the same period as far away as Weymouth in Dorset. Mr. Hay had been present at the reconnaissance visit to the Uists in November 2006, but had no recollection of this insertion by water being discussed then. I did not disbelieve Mr. Hay. Recollection of one such detail is unlikely to be retained, especially when the subsequent camp preparation documentation made no mention of the insertion being by water. It was also the case that he was not presented with a risk assessment for the activity for his perusal and approval in advance of the camp. Mr. Hay only arrived at Benbecula on 1 August 2007. His evidence was that he was unaware in advance of the intended voyage.

[48] In my view, all of that painted an unsatisfactory picture of the volunteer officers, one of whom was described as 'Camp Commandant' leaving the responsibility for an entire potentially dangerous activity to one individual simply because he had experience and qualification in boating without applying any cross-check of what was intended or even whether the activity had been assessed in terms of accepted Army and ACF procedures for risk. It is not adequate to answer that they had no expertise in boating: this was an activity like any other being designed for the cadets. So far as I could see, no other activity was being left to one individual without any cross checks being put in place as to what was planned and as to its safety.

[49] In a general sense, it seemed to me that if a proper risk assessment of this voyage had been made, then many of events on 3 August 2007, for example the issue of the wrong lifejackets and the inadequate appraisal of the weather, might have been identified as falling short of that risk assessment. That might well have led to a decision being made to abort the voyage before it even started. Accordingly, while consideration has to be given to the individual shortcomings, in deciding whether they indentify any reasonable precautions in terms of section 6(1) (c) of the Act, I have decided that it can fairly be said that the devising of a proper risk assessment of the voyage was itself a reasonable precaution which could have been taken whereby the accident and indeed the death might have been prevented.

[50] There was a system in place for the devising and application of a properly prepared risk assessment. However, the volunteer officers simply left all aspects of the water-borne activities, in particular this voyage, to Major McCallum. That led directly to the failure to prepare a proper risk assessment. In my view, that was a defect in a system of working which led to the accident.

1.2 Training and safety adviser

[51] Had Mr. Hay's attention not been divided between two separate ACF summer camps at different ends of the country, he might well have been alerted before the event to the intention to undertake this voyage. Having been so alerted, he would have been able to detect the lack of an acceptable risk assessment for the activity. Again in my view, it seemed that failing to have a training and safety adviser present throughout the camp was a failure in a system of working which contributed to this accident.

1.3 Life jackets

[52] There was no conflict of evidence regarding the type of lifejacket issued to Kaylee. It was an Assault Troop Lifejacket designed for use by an adult male soldier fully laden with equipment. It was of grossly excessive buoyancy for a 14 year old girl. The evidence indicated that a computer system ought to have prevented its automatic issue for use by the ACF.

[53] When her body was recovered, Kaylee was found to be wearing the lifejacket inflated. The accident reconstruction clearly demonstrated that in its inflated state, the lifejacket would have prevented her from managing to free herself from under the upturned Rigid Raider Mark II. It cannot be said when or how the lifejacket came to be inflated. When Vicky Lorimer left her under the vessel, Kaylee's lifejacket was not inflated. If Kaylee inflated it herself (which is the likeliest explanation), I can find no reason to criticise her for inflating her lifejacket after the departure of Vicky Lorimer from underneath the upturned vessel. It would be a natural human reaction to activate the lifesaving equipment with which she had been issued by her adult instructors.

[54] The obtaining of such clearly inappropriate equipment for the cadets, including Kaylee, and its subsequent issue to her might well have played a significant part in her death. The proper operation of a system of supply of only appropriate lifejackets to the ACF was a reasonable precaution which might have avoided the death.

[55] The army, it appeared, already had a system in place to prevent such an error being made. However the error was made. That was a defect in a system of working and requires urgent attention. In my view, some form of cross-checking in respect of the issue of lifesaving equipment would be appropriate to prevent the recurrence of the issue of the wrong equipment.

1.4 The obtaining of the vessel

[56] The evidence pointed towards Major McCallum having obtained the vessel and the other two Rigid Raiders from a source within the armed forces. The indication which he

gave in a letter (reproduced as page 18 of Crown production 31, the LAIT investigation report) requesting the vessels for the Battalion was that, if supplied, they would be used as safety boats to allow the conduct of adventurous training. There was conflict of evidence as to whether it was known that the boats were being permanently gifted to the Battalion or not. This was an example of Major McCallum being left in charge of the waterborne activity of the camp without thought being given by anyone else as to its planning, organisation or assessment for risk. I had no doubt that Major McCallum's intention was to retain the vessels for use by the Battalion. What thought was given to maintenance and repair of them was not clear.

[57] The unsatisfactory situation regarding the obtaining of the vessel and the lack of consideration for future maintenance can be categorised, in my view, as circumstances relevant to the circumstances of the death in terms of section 6(1)(e).

1.5 Weather forecast

[58] It is self evident that a decision whether or not to embark on a voyage across open waters, especially when carrying as passengers a number of teenage cadets, can only be made by having regard to the most accurate, recent, available prediction of the likely weather conditions. There was evidence that weather forecasts were available. Technical, detailed forecasts were available on the internet from the UK Meteorological Office, the BBC and other online weather information suppliers. General weather broadcasts, shipping and inshore forecasts were available on the radio. None of those was referred to by any of the instructors before setting out on 3 August.

[59] The evidence regarding the use of broadcast or internet-available weather forecasts actually referred to was as follows: Major McCallum said that he had relied on a forecast which had been issued three days before 3 August i.e. on Wed 1 August (Pro 25). The forecast then was for wind from south (180 - 200 degrees), wind speed 20 knots:

Moderate to rough sea conditions with rain and drizzle developing .The confidence in the forecast was marked as low. (20 knots equates, on the Beaufort scale, to Force 5).

[60] The 24 hour forecast from 0600 hours on Friday 3 August (Pro 24(1)) was for south to south west, wind force 5 to 7, perhaps gales 8: Sea state slight or moderate, becoming moderate or rough, occasionally very rough with rain. That forecast was available from the Met Office and could have been accessed via the internet. Force 5 - 7 on the Beaufort scale equates to 19 – 38 knots.

[61] A Strong Wind warning had been issued by Aberdeen Met Office for Benbecula Airport (Pro 26(1)) that 'Southerly winds will increase to mean speed 27kt, with gusts to 37kt. Winds will veer southwest and ease slightly by midday, but winds will increase again during the afternoon with mean speed 27 kt to 37 kt.'. Loch Carnan is between 7 and 8 miles as the crow flies from Benbecula airport. (Donald Mackay's evidence). 27 - 37 knots equates, on the Beaufort scale, to Force 6 -7.

[62] That forecast was available and could have been accessed via the internet by Major McCallum. Major McCallum was the sole person who took the decision to proceed with insertion by boat on 3 August. He said that he had the above 3 day forecast (Pro 25) but made no other attempts to obtain a weather forecast

[63] Major McCallum said that he would not have gone out if the wind was above Force 4. Had he checked the most recent, available forecast, he would have discovered that the flotilla would be facing winds of a speed of not less than Force 5.

[64] The weather conditions in Loch Carnan played a significant role in the causation of the capsize of the Rigid Raider Mark II. The weather forecast actually available was such that it is unlikely that the decision would have been made to take the cadets out to sea on 3 August. That being the case, the obtaining of an up-to date, detailed weather forecast for Loch Carnan, or at the very least the Western Isles, was a reasonable precaution whereby the accident might have been avoided.

1.6 Coastguard

[65] Evidence was led from witnesses employed full-time and part time by Her Majesty's Coastguard, a section of the Maritime and Coastguard Agency, namely Joseph Johnstone based at the Benbecula Station, two auxiliary coastguards Robert Currie and Brian Learmond, and Andrew Mair who had been the duty Watch Manager at the Stornoway Station on 3 August with responsibility to co-ordinate any search and rescue operations needed in a large geographical area, including Loch Carnan. It was clear from their evidence that communication from the ACF instructors responsible for this camp to HM Coastguard about their intended activities were not all that they might have been. Of particular relevance to this inquiry was their evidence that they received no advance intimation from the ACF of the plan to transport the cadets by three Rigid Raider craft from Loch Carnan to Loch Skiport on 3 August.

[66] As matters developed on 3 August, that lack of knowledge on the part of HM Coastguard of the voyage, its starting and finishing points or its intended route became critical. When the capsize occurred, Sergeant Mark McKee, one of the adult instructors, on the instructions of Lieutenant Campbell, the coxswain of one of the Rigid Raider Mark I vessels, made Mayday calls by radio, seeking urgent assistance. That call was received by the Coastguard Control Room in Stornoway. However, during those calls wrong information was given as to the location of the capsized vessel. The first received was timed at 10.15am and was indecipherable. Later messages within ten minutes of the first provided the location of the capsize as being one mile out to sea off North Uist and then, in further broadcasts, Loch Skipport. Mark McKee did not know how to describe the location of the capsize. He did not know the name of the loch from which they had come, namely Loch Carnan.

[67] Stornoway Coastguard scrambled the Barra lifeboat, the Benbecula Auxiliary Coastguard team and the Search and Rescue (SAR) helicopter at Stornoway airport. The

helicopter was airborne at 10.26am from Stornoway airport en route to the Isle of North Uist.

[68] At 10.53am Mark McKee broadcast a message to Stornoway Coastguard advising that 'all four cadets had been rescued'.

[69] At 11.13am, Major McCallum telephoned from a land line at Loch Carnan jetty and confirmed to the Coastguard that all had been rescued and that the incident had taken place in Loch Carnan. The helicopter went there and received a thumbs up from one of the adults and returned to Stornoway.

[70] The SAR helicopter, Barra lifeboat and Benbecula Auxiliary Coastguards were stood down. The SAR had not reached North Uist by that time and returned to Stornoway airport.

[71] At 11.52am, one of the Benbecula Auxiliary Coastguards at Loch Carnan contacted Stornoway Coastguard and advised that they were missing one female cadet and that she had been on the capsized craft.

[72] The helicopter was again scrambled. At this time it was en route to Stornoway airport and required to refuel there before setting out again for Loch Carnan.

[73] The inability of any ACF instructor to provide the Coastguard with a precise location hampered the Coastguards in arriving at the correct location. The Auxiliary Coastguard were sent from Benbecula to Loch Skipport, Loch Eport and finally to Loch Carnan. They arrived there at 11.30 am.

[74] Had the helicopter arrived at the correct location as soon as it could and had it been known then that a cadet was missing, its crew could have become involved in searching under the hull immediately. The exact time of death is not known. However, the

pathologist Dr Grieve's evidence on the issue of delay was that the sooner she had been found the better her chances of survival.

[75] All of that leads me to the conclusion that the advance notification to HM Coastguard of the voyage from Loch Carnan to Loch Skipport was a reasonable precaution which could have been taken by the ACF instructors whereby the death, although not the accident, might have been avoided.

2. Vessel and equipment

[76] Evidence was led about the handling of the Rigid Raider Mark II, the level of Major McCallum's familiarity with the vessel, the operation of the self-baling system installed to deal with the build-up of water inside the vessel, the engine set-up and the number and weight of people and equipment aboard it on 3 August. The craft itself seemed a relatively simple one. It was designed to be powered by two 140 horse power outboard motors. In fact on 3 August only one 200 hp engine was fitted on a mounting bracket on the port side of the stern. That single engine was connected to a helmsman's console near the stern, containing a power control and a ship's wheel or helm. In order to address any build-up of water within the vessel, the Rigid Raider Mark II was fitted with two self-bailing devices at the stern. Those did not operate automatically: to work, they had to be deployed by the personnel on board, although their deployment was an easy and quick exercise. The vessel was open to the elements and was fitted with eight pillion-style seats in two parallel rows of four forward of the helm.

[77] There was no evidence of any instructions having been obtained by the coxswain, namely Major McCallum, as to the safe limits of operation of the vessel, in particular in respect of the weight and distribution of its load (human and equipment), recommended maximum wind speed to which it could safely be exposed and the timing and method of deployment of the self-baling system.

[78] I will now deal with what part these factors, namely

- the late deployment of the self-bailing equipment,
- the weight and trim of the Rigid Raider II on 3 August 2007 and
- the unfamiliarity of the coxswain with the vessel,

played in the accident.

2.1 Self-bailing equipment

[79] The Rigid Raider II was fixed with two self-bailers at the stern. These were simple canvas tubes leading from the transom. They could be in one of two positions- raised or lowered. When lowered, by way of release from a jamb cleat of a draw-string, they led into the water itself. Their purpose was to allow for any water gathered within the vessel to drain away into the sea. If the vessel were moving forward, the water within it would inevitably flow out through these tubes. Because of their visual similarity to such natural objects, these tubes were commonly referred to by the witnesses and in documents as 'donkey tails', 'elephant trunks' and 'trouser legs'.

[80] The evidence of Paul Mara, of the RYA, was that it would have been prudent to bail out water from the vessel as it accumulated. The manual of the Rigid Raider Mark II, BR7887 entitled 'RIGID RAIDING CRAFT (MK 2) General Information' which in fact was not supplied to the Battalion along with the vessel, contained the following statement at Category 3 Technical Description paragraph 22

> '**Deck Drainage**
>
> Two large bore "Trouser leg" deck drains are fitted through the transom with a draw cord and jamb cleat to close. Drains should be open when underway.'

[81] 'Underway' describes a vessel that is moving under control, that is, neither at anchor, made fast to the shore, aground nor adrift.

[82] Major McCallum and Sergeant Duncan were unaware of that advice. In fact the self-bailers were not deployed by Major McCallum until the Rigid Raider Mark II was awash with water. The evidence of Mr. Mara was that if deployed, the self-bailers would have cleared the vessel of water within 38 seconds. Given the combination of the weather, sea state, the overloading of the vessel and the nature of the vessel itself, it was clear that some form of removal of water was necessary. The manufacturer's recommendation and prudence dictated that that should be by the deployment at all times when the vessel was underway of the self-bailers at the stern.

[83] The deployment of the self bailers as soon as the vessel was underway might well have prevented or substantially reduced the accumulation of water in the Rigid Raider Mark II. The presence of that water led to the movement of the passengers which led to the swamping and then capsize of the vessel. Clearly the deployment in good time of the self-bailers was a reasonable precaution which might have avoided the accident.

2.2 Weight and trim of the Rigid Raider Mark II

[84] The trim of a vessel refers to the relationship between its hull and the waterline. It is clearly affected by the weight of whatever is aboard the vessel (people, equipment, fuel etc.) and the distribution of that weight. The Rigid Raider Mark II contained ten seats- the two rows of four seats on which the cadets sat, and two seats behind the wheel, where Major McCallum and Mr. Duncan sat. However, on 3 August a further two passengers were aboard, namely Vicky Lorimer, who stood beside the two coxswains and at the bow John Shaw, who was manning the general Purpose Machine Gun which had been mounted on a tripod there. The presence of the two additional personnel and, in particular, of the machine gun affected the trim of the vessel. Paul Mara of the RYA was of the view that overloading and bad trim led to the initial swamping of the vessel with water. That was compounded by the failure to open the self-bailing equipment early

enough. The offset of the vessel, due to the presence of only one motor at the stern meant, according to Mr. Mara, that when turning to port, there was a tendency for the port quarter to sit lower than when turning to starboard. In the weather and sea conditions experienced, that would have led to more water entering the vessel than otherwise if two motors had been in place.

[85] The trim and weight of the vessel cannot be considered in isolation. It was also established that this vessel, the Rigid Raider II, when in service with the Ministry of Defence, was restricted to a maximum operating limit of Beaufort Force 5. Accordingly, it can be said that on 3 August 2007 the vessel was operating in weather conditions inappropriate to its design with additional weight positioned on the bow.

2.3 Lack of familiarity with the Rigid Raider II

[86] Flowing from the method of obtaining the vessel was the fact that Major McCallum had vey little experience of the Rigid Raider II. It was not a vessel with which he was familiar. It had been gifted to the Cadet Force only weeks before that camp and this occasion had been the third time Major McCallum had used it. The first had been in Benbecula to check that the engine started and the second was to see how the craft levelled with the single engine.

[87] An instruction manual was written for users of this vessel but no copy of that ever reached Major McCallum. While he was an experienced sailor, there were particular difficulties which arose on the voyage which familiarity with the vessel might have avoided or mitigated. In particular, Major McCallum's unfamiliarity with the Rigid Raider II led to his ignorance of the need to deploy the self-bailing equipment whenever the vessel was under way and the working of the free surface effect on the water trapped in the vessel.

[88] It must have been his ignorance of or unfamiliarity with the vessel which led to his presiding over its overloading with personnel and equipment.

[89] JSP 535 and AGAI provided for specific training and experience in respect of vessels before they can be coxed by an individual. That was apparently simply disregarded by Major McCallum.

[90] Had he received training or even information about the maximum weight and weather conditions which were suitable for this vessel, then he might have decided not to embark on the voyage at all. Had he known about the correct stage at which to deploy the self-bailers and the level of risk of the free surface effect in the event of sufficient water being shipped, then he could have taken the appropriate action at the correct stage of the voyage.

[91] Had he possessed sufficient instruction and information about the handling qualities of the Rigid Raider II and the appropriate stage at which to deploy the self-bailers, it is possible that the accident, i.e. the capsize, might not have occurred even in the rough water in Loch Carnan.

[92] In all those circumstances, it can, in my view, be said fairly that familiarisation with the handling qualities of the vessel on the part of the coxswain was a reasonable precaution which, if taken, might have avoided the accident.

2.4 Radios: communications between the three vessels

[93] The coxswains of each of the three Rigid Raider craft were equipped with hand-held marine VHF radios. Once out on the open sea, Major McCallum attempted to communicate by way of one of those with Lieutenant Campbell. That attempt failed. It was not clear as to why that happened. Examination of the radios after the accident

disclosed that one of them did not work: it could not be said on board which of the three Rigid Raiders that radio had been held.

[94] The failure to establish radio contact between Major McCallum and Lieutenant Campbell was significant. Notwithstanding the agreement that all three vessels would keep a watch on each other, Lieutenant Campbell had gone so far ahead that the decision to abort the voyage and return to the jetty at Loch Carnan could not be signaled to him by hand. On the failure of radio contact occurring, Major McCallum decided to accelerate in order to catch up with the first Rigid Raider to deliver the instruction to turn back. A direct consequence of that decision was that the Rigid Raider Mark II was exposed to a longer period in the heavy seas than it would have been otherwise. During that additional period on the heavy seas, it was inevitable that more sea water was shipped.

[95] It is not possible to conclude that the capsize would have been avoided if effective radio contact had been maintained between all three craft. The shipping of sea water was occurring anyway. However, in my view it is certainly a circumstance of some relevance to the accident.

2.5 Radios: ship to shore communication

[96] While the time of the capsize can be pinpointed, the time of Kaylee's death cannot. In that situation, the issue of radio communication between ship and shore must be considered. There was no provision made in the preparation, such as it was, or execution of this voyage for effective radio communication between the three Rigid Raider craft and any shore-based officer of the ACF. That begs the question as to what would have happened in the event of some calamity involving all three vessels. However, dealing with the actual events of 3 August, had there been an effective plan, then, according to established army procedures, the exercise would have involved a shore-based safety officer with the power to abort the voyage on safety grounds. That would have been

someone different from those actually undertaking the voyage. Common sense would dictate that such an individual would require to be in radio contact with those on board the three vessels.

[97] On 3 August 2007 there was no such land-based safety officer and so, by definition, there was no radio communication with him. However, there was no established arrangement for ship to shore communication with any officer of the ACF in place on 3 August. Had there been, and if a shore-based officer in possession of a manifest of those aboard the Rigid Raider II, then the possibility of detecting the error of calculation of the number of those rescued might have been increased. However, in my view, the absence of ship-to shore radio communication within the ACF is another example of the consequence of the lack of detailed preparation of the voyage. In itself it can be characterised as a fact relevant to the circumstances of the death.

2.6 Safety boat

[98] JSP 535 and AGAI, which ought to have been followed, provided for a voyage of this nature to be accompanied by a separate safety boat. That instruction was disregarded. In planning for this voyage, the cadet instructors ought to have allowed for a fourth boat to act as a safety boat. That could have been coxed by a designated safety officer, whose responsibilities could have included coordination of the rescue of the cadets and instructors from the Rigid Raider II.

[99] As a matter of fact, all those thrown into the water from the Rigid Raider II, with the exception of Kaylee, were rescued by those aboard Lt Campbell's Rigid Raider. To that situation, it might be said that the failure to have a safety boat there did not make any difference to the occurrence of the accident. Similarly, the failure to account accurately

for the numbers thrown from the vessel could have been made by an officer in a safety boat just as easily as it was by the officers there.

[100] However, that approach ignores the fact that an officer on board a safety boat would have had, as one of his duties, the specific responsibility to consider the safety of all those by now in the water. Having such a detached officer present on the scene, armed with a manifest of those on board the Rigid Raider II, would, in my view, have greatly increased the probability of the speedy detection of the fact that Kaylee was missing. Accordingly, I am satisfied that having a safety boat for the voyage was a reasonable precaution which, if taken, might have avoided the death.

[101] All of that leads me to find that the failure to have a separate safety boat can fairly be characterised as a fact relevant to the circumstances of the death.

2.7 Safety officer

[102] Section 21 of JSP 535, at paragraph 2114 narrated that the essentials of any safety organisation on water-borne activities, such as this voyage, were:

- the a safety officer;
- the safety boat and
- safety drills and practices.

[103] AGAI chapter 18 provided for the issue for such voyages of safety instructions and for the appointment of a safety officer. In particular it specified that safety officers were not to carry out any duties concurrently. The safety officer was responsible for assessment of the safety of the activity and to advise the commander on all aspects of the safety of the activity. Quite simply on this voyage there was no safety officer appointed in terms of JSP or AGAI. Had there been one, then he could have measured the

conditions found against the plan and proper risk assessment (had one existed) and would have had the opportunity and right to cancel the voyage. All of the evidence points to the probability that such a safety officer would have ordered that cancellation.

[104] In actual fact, Major McCallum assumed the role of safety officer as well as officer in charge of the exercise (the voyage). There accordingly was no cross-check in place to prevent or even warn against the voyage.

[105] Clearly, then, the appointment of a safety officer in terms of the ACF regulations was a reasonable precaution which, if taken, might have prevented the accident.

[106] However, a further question arises. How did it come about that the camp commandant was unaware of the failure to comply with such a simple requirement of the regulations? That occurred, in my view, because the officers in charge of the planning and operation of the camp simply left the entire water-borne activities, of which this voyage was only one, to Major McCallum. That should not have happened. In my view, that represented a defect in a system of working which contributed to the accident.

3. The events on the jetty at Loch Carnan

[107] It was clear that the number of cadets and instructors in the 2 Star Cadre party travelling to Loch Skipport, comprising thirty four cadets and nine adult instructors, was too large to be transported in a single voyage of the three Rigid Raider craft. Accordingly, on arrival at the jetty at Loch Carnan, the cadre was divided into two groups at random. The first group was to travel to Loch Skipport in the first flotilla of the three Rigid Raiders and the second in a second flotilla. No enquiry whatsoever was made as to the swimming ability of the individual cadets. I accepted that a safety briefing was given. However, that was limited to the following: the cadets were instructed how to don their

life jackets and shown how to inflate them. They were also told that if they fell overboard, they should inflate their lifejackets when they landed in the water, push themselves away from the vessel from which they had fallen, not to panic and that they would be lifted back into a vessel and taken to dry land.

[108] There was no instruction given to the cadets as to what might be expected or what they should do in the event of capsize.

[109] The lifejackets were simply issued at random to the cadets. As already commented on in this note, no regard was had to the excessive buoyancy of those lifejackets for the cadets actually present. In fact that critical matter was not even noticed.

[110] While it was known how many cadets and instructors were boarding the Rigid Raider Mark II, it seems that no formal headcount was carried out on the jetty. Bearing in mind that this voyage was being undertaken relatively early in the camp and that the cadet members of 2 Star Cadre did not know each other well by that time and that the adult instructors did not yet know the cadets well either, it might have been expected that the officer in charge, Major McCallum, would have devised some form of headcount of the cadets in the event of some calamity occurring on the water.

[111] No passenger and crew manifest was prepared. That could have been easily done. Had it been done, then a copy could have been taken on board and a copy left with an instructor or other officer ashore.

[112] As matters later developed, the lack of a numerical headcount or nominal roll call on the jetty assumed critical importance. Had all the instructors, or at least the three

coxswains known the exact numbers on board each of the three Rigid Raiders, then there would have been a smaller chance of miscounting those thrown from the Rigid Raider II at the capsize. Similarly, a manifest of names of those on board might have allowed for some sort of effective roll call to be made in the water, or at least for an attempt to be made to identify by name who was present and, by inference or even questioning of those present prompted by the list, if anyone was missing.

[113] The taking of a numerical head count and a nominal roll call on the jetty before or as the cadets boarded the Rigid Raider II would have been reasonable precautions which might have avoided the death. Similarly, the passing of a manifest or list of those aboard the Rigid Raider II to a shore-based officer would have assisted in the checking of names of those coming ashore after rescue. That would have quickly disclosed that a cadet was missing and that it was Kaylee who had not been brought ashore. In turn, that would have triggered a return to sea to search for her. Given the fact that Kaylee never emerged from underneath the upturned hull, there was certainly the possibility that such a search would have quickly found her. Given the lack of information as to the time of death, in my view it is at least possible that if found by such a search triggered by her name being missing from the checked list of those who had come ashore, Kaylee might then still have been alive. Accordingly, I am satisfied that the passing of a manifest of the names of all those who boarded the Rigid Raider II to a shore-based instructor or officer was a reasonable precaution whereby the death might have been avoided.

4. Events on the water

[114] The jetty at Loch Carnan was situated in relatively sheltered waters, when compared to the open waters which would have to be crossed in the course of the planned voyage. In my view the evidence supports a finding that the sea state at the jetty at Loch Carnan was considerably milder than that which was encountered once the vessels were on the open waters.

[115] Before the flotilla of the three Rigid Raider craft, with the cadets on board, set off there was no reconnaissance voyage undertaken out into the open waters by any of the cadet instructors. That could have been done quite easily and would not have taken more than a few minutes. Had it been done, then it is likely, on the balance of probabilities, that the difficult weather and conditions would have been seen. No matter what the weather forecast, out of date or up to date said, it would have been prudent to make a check of the actual sea and weather conditions before setting off on the voyage with a number of cadets on board. The fact that the actual weather forecast was for wind of Force 5 or higher should have been known and would have underlined the need to check the conditions actually prevailing.

[116] Had such a reconnaissance voyage been undertaken prior to 10am on 3 August 2009, in my view it is quite possible, if not likely, that a decision would have been taken to abort the voyage. Accordingly, to carry out such a reconnaissance voyage was a reasonable precaution which, if taken, might have avoided the accident.

[117] However what happened was that once the cadets and instructors were aboard all three Rigid Raider craft, they simply set off from the jetty at Loch Carnan with the intention of travelling to the training area at Loch Skipport, where the cadets would be dropped off. The vessels went in this order: the Rigid Raider Mark I commanded by Lieutenant Campbell went first, followed by the Rigid Raider Mark II commanded by Major McCallum with the rear being brought up by the other Rigid Raider Mark I commanded by Lt Milne.

[118] The vessels set a course from the jetty at Loch Carnan through a channel marked by buoys between two small islands, Taigh Iamian and Gassaidh. Once the craft left the protection afforded by the shelter of the southern shore they were exposed to the full

force of the south-westerly wind and consequent increased sea state. Very soon the Rigid Raider II began to take in water. Major McCallum quickly reached the decision to return to the jetty. At this point the failure of the radio communications became significant. His decision was to abort the entire voyage, so that all three vessels should return to the jetty. The attempt at radio communication with Lieutenant Campbell's vessel failed. Major McCallum accelerated his craft in order to catch up with the craft ahead. Eventually he ordered Sergeant Shaw to fire off bursts of blank ammunition from the machine gun in order to attract the attention of those aboard the other craft. That did not attract the attention of those on board the Rigid Raider coxed by Lt Campbell, which continued on its course. Major McCallum then seems to have decided to accelerate to catch up with the lead vessel. A considerable amount of water had now been taken on board the Rigid Raider II, to a depth between the ankles and knees of the cadets on the port side seats.

Major McCallum then gave two instructions:

- Those cadets were instructed to step over to starboard and
- one of the adults was instructed to open the donkey's tail (self-bailing device).

[119] As those instructions were being followed, the rear of the craft submerged. The cadets were told to move back to starboard. That move however was ineffective in preventing what was now inevitable, namely the capsize of the Rigid Raider II.

[120] Immediately on the capsize occurring, all the occupants of the vessel were thrown into the water. Four of them, namely cadet instructor, Vicky Lorimer, and cadets Kirsty Leask, Eilidh Slapp and Kaylee found themselves under the upturned hull.

[121] None of the life jackets on those persons inflated immediately. Given that they required manual activation, that was to be expected.

[122] Kirsty Leask and Eildih Slapp managed to feel their way under the side and surfaced. Vicky Lorimer spoke to Kaylee McIntosh and told her not to worry; that she would come back to get her once she had got out. It was possible that Vicky Lorimer

told Kaylee to duck under the side but Kaylee declined to do so. It has to be understood that this must have been an extremely frightening and alien environment for these young women. The sea conditions had been rough and according to Miss Lorimer, it was pitch black underneath the upturned hull.

[123] With the exception of Kaylee, all who had been in the Rigid Raider II were rescued in due course by those in the craft d coxed by Lt Campbell. Some of those eventually rescued had managed to get on to the upturned hull and others remained in the sea but holding onto the upturned hull. Major McCallum was one of those who clambered on to the upturned hull and directed rescue operations from there.

[124] Vicky Lorimer did not alert others to the presence of Kaylee under the hull whilst in the water or when on the upturned boat before her transfer back to shore. Vicky Lorimer was in a distressed state during and immediately after her rescue. She attributed her failure to tell anybody about Kaylee to her distress. In that connection, it must be remembered that although a cadet instructor, Vicky Lorimer had simply been a passenger in the Rigid Raider II, was herself only 21 years of age and was extremely frightened and distressed by the whole events of the morning of 3 August. Her distress and inability to talk about or even remember Kaylee was hardly surprising. In my view, the evidence from and about Miss Lorimer were a clear example of the reason for the need for the officer in charge, namely Major McCallum, having a list of names of those on board his vessel her experience: it was entirely unreasonable to expect any meaningful communication from the young people in the immediate aftermath of their being thrown into the water.

[125] In that situation, I consider it invidious to single out Miss Lorimer's conduct for any particular mention as a fact relevant to the circumstances of Kaylee's death.

[126] After the capsize, a headcount was attempted by Major McCallum. That was unsuccessful because some persons had been taken off back to the jetty by Lt Campbell's vessel, others were on the upturned hull of the Rigid Raider II and others were still in the

water. I recognised the difficulty of the situation. At least one cadet was floating away from the upturned vessel. The sea conditions were rough. The young people were distressed.

[127] However what happened was that Major McCallum shouted to those around him, 'Is everybody here?' Some of those in the water responded. In the event, no effective or accurate headcount was carried out by Major McCallum of those about to be rescued at that time.

[128] Lt Campbell said that he made a headcount of those in the water and those on the upturned hull and although he could not remember the number at the time of giving evidence, he said that it tallied with the number given by Major McCallum. It may be that some confusion was caused by Vicky Lorimer being mistakenly counted as a cadet. If that was so, then in that event there would have been thought to be an instructor missing. The only conclusion is that such head count as was carried out on the water reached the wrong total of cadets and instructors. However, the chaotic nature of events and the distress of some of those present cannot be ignored when considering that failure. Nevertheless the impression gained from the evidence was that a more serious effort to count those thrown from the vessel might have been made on the water.

[129] In my view, the devising of a plan to count and identify cadets after the occurrence of a catastrophic event could easily have been done. Cadets are exposed to risks during adventurous training, whether on the open sea, inland water, crossing bogs or climbing mountains. When dealing with numbers of young people in excess of a handful, whether in dangerous situations or not, it is perfectly obvious that some form of check that all are present should be devised and applied. That is particularly the case in the immediate aftermath of a catastrophic incident such as the capsize of a vessel. Major McCallum should have known the number of personnel aboard his vessel and should have had access to a list, or manifest, of their names, so that a numerical and nominal headcount could have been carried out on the water. There would have been no need to delay the transport back ashore of those cadets already rescued from the water: in the course of

their rescue their names could have been ascertained and checked off against the manifest. Had that been done, then in my view it would have become apparent very quickly that one of the party was unaccounted for and that that person was Kaylee. A search for her could have been made immediately. I had no doubt from the evidence that, had he known that a cadet was missing, Major McCallum would have gone to the lengths necessary to find and rescue her. However, the steps taken to count those who had fallen from the Rigid Raider II can only be described as haphazard and inadequate. There was no effort made to identify the rescued individuals by name.

[130] It was not possible to identify the time of Kaylee's death. However, it was clear from the evidence of the pathologist that the shorter the period of time between her immersion in the water and her discovery, the greater were her chances of being found alive. There was no indication in Vicky Lorimer's evidence of Kaylee being physically distressed at the time that she (Vicky Lorimer) left her underneath the upturned vessel. In that situation, I am able on the balance of probabilities to find that a head count and/or nominal roll call on the water as soon as practicable after the capsize was a reasonable precaution which might have avoided Kaylee's death.

5. Events after the return ashore

[131] Some cadets and Vicky Lorimer were picked up and taken back to shore in Lt Campbell's craft. After dropping them off at the jetty at Loch Carnan, Lt Campbell returned to the capsized vessel where he met up with Major McCallum and the remaining cadets and instructors. Major McCallum was satisfied that everybody who had been seen in the water following the capsize had been accounted for and accordingly everyone returned ashore.

[132] Already at the jetty were the remaining two star cadre cadets awaiting their transportation in the next flotilla. The focus of activity of the instructors present was on the welfare of the cadets recovered. The evidence pointed towards an assumption being

made that all those in the Rigid Raider II had been accounted for. In particular no head count or nominal roll call was made, even though the rescued individuals had not arrived in one batch. The names of the cadets who had been on board the Rigid Raider II were still not known to the senior instructors who had been afloat, namely Messrs Campbell, Shaw, McCallum or Milne.

[133] Had a manifest of the names of those aboard each of the three Rigid Raiders been made before they set off on their voyage and had a copy of that manifest been left with the officer in charge left on the jetty at Loch Carnan, then once the vessel engaged on the last rescue and recovery voyage had returned, it would have been apparent that Kaylee was missing. Using a manifest or list with names on it would still have allowed the cadets already ashore to be removed without delay to a warm environment where they could be attended to minimise the risks of falling into a hypothermic state. In my view the checking of the numbers and names of the cadets and instructors from the capsized vessel as they came ashore was a reasonable precaution which, if taken, might have avoided Kaylee's death, although not the accident.

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Conclusion

[134] A feature of this inquiry was that it disclosed a number of precautions which, had they been taken, might have avoided the accident or, the capsize having occurred, prevented the loss of Kaylee's life. Tragically, Kaylee's life might not have been lost had some of the precautions been taken singly, for example the headcount on the water or the issuing of the correct size of lifejacket. Given that unusual feature, I have thought it appropriate simply to identify firstly the failures in respect of which reasonable precautions could have been taken and secondly the factors which, in my view, amounted to a failure in systems of working which contributed to the accident or Kaylee's death.

[135] It was reassuring to hear from the witness led by the Ministry of Defence, Colonel Tobey that the Army and the ACF were not complacent about the circumstances leading to Kaylee's death and that changes in procedures highlighted by this accident have been or will be put in place. In particular I was told the following:

- In November 2007 the Army's Chief of Staff, Reserve Forces had issued instructions to the ACF requiring all ACF activity not identified in the APC syllabus, regardless of whether a risk assessment had been completed or not, to be reviewed by the relevant Brigade Training and Safety Adviser. The instructions required all training to be officially authorised by the relevant cadet commandant. The practical effect of that instruction was to require all ACF training not part of the ACF syllabus to be scrutinised by an Army officer with training in matters of health and safety to advise the relevant ACF Commandant if the requirements of JSP 535 and AGAI Chapter 18 have not been complied with. The instruction also reinforced the requirement to comply with the provisions of the JSP 535 and the need for carrying out headcounts at appropriate times when working with cadets.
- Cadet units now have to submit an audit of all boats held.
- The Army's Chief Environmental Safety Officer has conducted a review of training within the ACF. As a consequence the training provided to ACF officers in health and safety matters is being reviewed and, it was said, improved.
- The gifting of MOD boats to ACF units has ceased.
- There has been a return of lifejackets issued to ACF units which have not otherwise been authorised for use by them.
- An audit and listing of all water safety equipment held by cadets is to take place.
- The need for the computer system for the issue of water safety equipment, designed to prevent the issue of inappropriate equipment to ACF units, to effectively so do has been acknowledged.
- The Army's regulations affecting the safe conduct of activities by the ACF are to be centralised, codified and made available electronically.
- The ACF syllabus of activities is to be reviewed.

[136] Had this particular sea-borne activity been properly planned and executed, then there would have been nothing to prevent it, or something like it forming an exciting and adventurous activity for the young people attending the 2007 ACF summer camp. The responsibility on the organisers and instructors of a camp such as this is a heavy one, but no heavier than that of a responsible parent in whose shoes they stand for the duration of the camp. Inevitably a determination such as this deals with the circumstances leading to a death with the benefit of hindsight. However, it was reasonable for the young people and their parents to expect that the camp organisers would have safety of the cadets at the forefront of their minds at all times. The evidence disclosed that that expectation was not met.

[137] With the exception of a very short period, and for very good reason, Kaylee's parents attended court throughout the inquiry. Their quiet dignity and concentration when hearing about the final hours of their daughter was both impressive and, to quote a witness, humbling. I can only hope that the public exploration of the circumstances of Kaylee's death and this determination provide them with some explanation as to how their tragic loss occurred and might go some way to reduce the risk of any other parents finding themselves in such a situation in the future.

ANNEXATION

SUBMISSIONS BY THE PARTIES

1. Crown

Introduction

I offer the following submissions on behalf of the Crown.

In considering how best to assist the court, I have chosen to address the evidence which was led under the following heads:-

Firstly, the factual position in respect of:-

The organisation of the camp, instructors and exercise, and

the events of Friday, 3 August 2007.

My view is that the planning of this exercise was central to the eventual outcome and I will make submissions under that head.

I then consider the question of responsibility for the consideration of risks in undertaking this exercise.

Much of the above forms the Crown's proposed Findings in Fact but, where I've thought it might be helpful, I have provided comments on the evidence, for example, to highlight the importance where it might affect your Lordship's determination. Where the evidence is contradictory I have provided the various, differing witnesses evidence and have suggested, at the end, the Crown's preference as to what evidence should be accepted.

Finally, I offer submissions as to the Crown's proposed Determination in terms of Section 6 of the 1976 Act.

Organisation of camp and instructors

The Army Cadet Force (ACF) is a national youth organisation which offers military style training and other activities to young people between the ages of 12 – 18. It is not part of the Regular Army but is one of several cadet organisations sponsored by the Armed Forces. Its aims are to offer challenges and experiences for young persons that are unlikely to be experienced in a domestic environment and, as a result, to provide a sense of achievement and to develop their self confidence and team building skills. ACF aims to provide activities which are challenging but safe. ACF accepts that some degree of risk may be unavoidable if the sense of adventure and excitement is to be achieved.

The Army has a duty to oversee the management of the ACF and has to comply with all relevant Health and Safety legislation. It is a standard Army policy that all military training, including that involving cadets, is planned and organised in accordance with their Safe System of Training. This is based on four elements, namely, safe persons, safe equipment, safe practice and safe place. No cadet activity should ever be conducted without carrying out a risk assessment.

The 2nd Battalion of the Highlanders Army Cadet Force held an annual camp at Isle of Benbecula between 27July 2007 and 10 August 2007. The Battalion was divided into four Companies. All

four Companies attended that annual camp so that all the cadets in each cadre could be together. Many of the cadets did not know each other before this camp.

The cadets were divided into cadres depending on their experience ranging from Basic to 4 star. There were 34 cadets in 2 Star Cadre including the deceased.

The officer in charge of 2 star cadre was Major David Adams.

The aim of the camp was to test the cadet's training which had taken place throughout the year and to assess their suitability to move to the next star level. Training and testing took place at said camp.

The instructors were all adults who had undergone training and assessment before becoming instructors. The training followed interview as to suitability. Potential Instructors trained for 2 or 3 weeks depending on their ability and previous experience. They all would have had attended an Adult Instructors training course lasting for 10 days following which they would be promoted to Sgt Instructor. 12 or 18 months later they could attend a further 10 day course leading to promotion to Staff Sgt. 12 to 18 months after that a further course (King George VI course) and practical experience in running courses could lead to a commission. Alternatively, direct entry on a commission is possible.

All cadet officers hold the rank of lieutenant but they act as other ranks.

At camp only Major George McCallum and Ian Hay were full time employees and salaried. Major McCallum was employed by as a full time Executive Officer of the Highland and Islands Reserve Force cadets. He held a Territorial Army commission at the rank of Major. Iain Hay was a full time Reserve Service Warrant Officer and was employed as the Training Safety Officer for two battalions and a Battery of cadets in Shetland
None of the other instructors were salaried. All those were volunteers.

Particular Exercise

Part of the training syllabus for 2 star cadre was to be trained in army field craft. This training was to take place on the land around Loch Skipport, South Uist. The cadre was to be inserted into that area on Friday 3 Aug 07 and were to camp there, under canvas, overnight and return to base at West Camp Benbecula on Saturday, 4 Aug.

Means of getting to Loch Skipport

The evidence appears conflicting as to how much in advance of 3 August a decision had been taken as to the means of transporting the cadre there.

Ian Hay said that inserting the cadets by sea may have been discussed but he did not see anything on paper until he arrived at camp on Wed 1 Aug.

Norman Donald said that it was always in contemplation that there would be insertion by boat and "weather permitting, boats were going to be used".

David Taylor was aware that insertion by boat was going to take place but that the decision was one left to Major McCallum.

David Adams said that when he wrote the training programme the insertion was to be by minibus. That was how it was normally done. He first became aware that the insertion may be by boat on 1 Aug when Major McCallum asked him to "borrow" Lt Campbell to cox one of the boats. He

expected to have been told of any change to his training programme and spoke to Fergus Gatt, the Training Officer. Fergus Gatt confirmed that boats were to be used.

Fergus Gatt said that it had been decided in November that some groups would be inserted by boat and at beginning of camp it was decided that boats were being used for insertion but that their use would be weather dependent and the coxswains would have the final say as to their use.

Lt Campbell said in evidence, "We had known that boats were going to be used all week".

Major McCallum said that the possibility of insertion by boat was discussed after the first reconnaissance in November 06.The Training Safety Adviser was there, he said. Major McCallum said that he was left to get on with organising the boating aspect. He accepted that he was the senior officer in charge of boating activities (including insertion) – because of his rank rather than his qualifications. (Lt Campbell was equally qualified in boatmanship). Major McCallum intended to insert the 2 star cadre by boat.

My view of the apparent contradictions is that each view may very well be genuinely held and that the differences are simply a manifestation of the lack of communication by the organiser of the insertion and the lack of advance planning which went into this aspect.

Events of Friday, 3 August

The 2 star cadre, comprising 34 cadets and 9 adult instructors, were taken by minibus from West Camp, Benbecula to the jetty at Loch Carnan arriving there at round 9 am. Three craft had been brought from West Camp to the jetty and had each been lowered into the water. They were tied together in the water at the jetty. The MkII Rigid Raiding Craft (RRCII) had seats for 8 persons.

The cadre was divided into two at random – and the first of those chosen were given instruction on how to don lifejackets and donned them. The fitting of these was checked.

Safety Briefing

Some witnesses said that there had been a safety briefing delivered. Others said not. In any event, if there had been, it covered only how to don their lifejackets and man overboard. They were told to inflate their life jackets when they landed in the water, not to panic and they would be lifted and taken to dry land.
It did not cover capsize.

Numbers and equipment on board RRCII

Lt David Adams, the officer in charge of 2 Star Cadre, was asked by one of the three coxswains, Major McCallum or Campbell or Milne to provide half the cadre of cadets for embarkation on the three boats. He provided 16 cadets and one Instructor, Vicky Lorimer. These 17 persons were divided at random among the three boats. None of the instructors knew the names of all those 17 persons. No nominal roll call nor headcount was made.

On the RRCII there were 8 cadets and 4 adults. The cox was Major McCallum. The 2nd cox was Craig Duncan. That latter said that he had not been involved in organising the exercise. He was there, he said, to help with the equipment. John Shaw was at the bow, manning a General Purpose Machine Gun (GPMG) which was mounted on a tripod to the bow. Vicky Lorimer was standing to the side of the coxswains.

The RRCII was designed to have two out board engines mounted equidistantly on the stern. A single engine had been mounted on the port side of the transom.

Rifles issued to the cadets were taken from them, tied together and tied to the floor of the craft

Each of the coxswains of the three boats had hand held, waterproof VHF radios. These had been tested at the pier before embarking and worked. There was a fixed radio on Milne's boat

Manifest

The cadets chosen to board the craft was achieved randomly. Their names were not noted in writing by any instructor. The cadets were not necessarily known to each other, coming, as they did, from four companies. The cadets were not individually known to the instructors on board RRCII.

Setting off

The three boats set off line astern. RRCII was second in line. The boat in front was cox'd by Campbell and the one behind by Milne.

The craft cox'd by Callum Campbell reached the furthest sea buoy marked on Pro 1. At that point, the craft cox'd by McCallum and Milne could not be seen by Campbell. Campbell had last seen RRCII at a point marked "B" on Pro 1. (evidence of Callum Campbell).

Decision to turn back

The decision to turn back was made by Major McCallum and separately by Campbell. Major McCallum noted that the rain was falling more heavily and the sea was slightly rougher but nothing beyond their capability. He signalled to Milne who turned round. Major McCallum found that his radio did not communicate with Campbell. Major McCallum attempted to attract the attention of Campbell by instructing Shaw to fire the GPMG.

Campbell did not hear that but turned round because he could see the state of the sea at the headland and realised that the cadets would get wet. When C turned his craft neither of the other two craft were in sight.
Sgt Mark McKee was the second coxswain in Lt Campbell's craft.

Weather and sea state en route

Jake Watson said that the sea was quite rough with drizzle. It was not so bad at the pier but once they got out into the proper water, it was rougher.

Vicky Lorimer was a little concerned about the weather. The conditions worsened at about the time Shaw fired the GPMG.

Craig Duncan said that once they got into the open sea there was a change. The sea conditions looked a lot worse – the size of the waves - and Major McCallum decided to turn back.

Callum Campbell said that when they set off the sea conditions were moderate. Round the headland they were out of the shelter of the islands but he believed they could have got safely round there although the cadets would have got wet. He could see the state of the sea at the headland and that's why he turned round.

Charles Milne said that at the pier the loch was calm with light waves but further out he could see dark clouds. It became obvious later, once out, that the conditions were not safe.

Major McCallum said that at the Loch Carnan jetty and inshore, it was relatively calm but when he got out of the shelter of the islands, it became Force 3. He would not have gone out in anything above Force 4, he said.

A fish farmer, Roderick Campbell, said that the wind was from the south west and between Force 5 – 7. There was a large swell. At 9am the wind had been Force 5 – 6.

I submit that the evidence of Roderick Campbell is to be preferred. As I explain later, his evidence matches the weather readings taken at Benbecula airport during the course of that morning and matches the weather forecast for that area and time.

Water in the craft

On the issue of when and how much water came into the craft, the testimony of the cadets and instructors on RRCII who gave evidence was as follows:-

Vicky Lorimer said that immediately before the GPMG was fired, water was coming in but not a vast amount. Major McCallum turned his craft and a big wave hit the side and a lot of water came in.

Craig Duncan said that at the time when the GPMG had been fired he saw Campbell's boat turn and McCallum's craft had slowed down. At that point, he noticed water had got into the craft. He looked down and saw their feet in water. Major McCallum told him to lower the bailer and that he (Major McCallum) was going to do the manoeuvre to get the water out ie accelerate and turn.

Liam Neish said that Kirsty Leask had told Major McCallum that water was coming on board and that when the boat was turning it had slowed down and that was when the water began to come in seriously over the side, The boat looked as if it was listing to the left. Major McCallum instructed those on the right to move to the left and they did so. The boat levelled out but then turned over to the right. It then capsized to the right.
Liam Neish said that at the time after the GPMG had been fired, another cadet, Kirsty Leask, told Major McCallum that water was coming in. The craft then turned and slowed down as it was doing so. During that manoeuvre, the water started to come in over the side, really badly. The craft then listed.

Jake Watson said that Major McCallum had stopped the boat to allow the GPMG to be fired and then he started chasing after Lt Campbell. When they were turning, the boat began filling up with water; that waves were slopping over into the boat and the left side of the boat had water up to his knees which was the equivalent to 12 – 18 inches. Major McCallum instructed those on the right to move to the left and then to the middle and the boat capsized and every one was thrown into the water.

Major McCallum said that when he instructed Shaw to fire the GPMG he kept the boat into the face of the wind and was putting the throttle in neutral and forward. At that point there was half an inch of water. In re-examination, he said, "water came in over the rear of the boat from the sea". He saw Campbell's craft turn round. McCallum had stopped the RRCII to le the boat drift back round and at that point he was aware of water coming into the boat. The box containing the oil

tank and pump had come adrift and was floating. That was the first time he had noticed any significant water in the boat. He said there was 6 – 8 inches of water and that it was broadly similar to the amount of water shown in the reconstruction video. At that point both self bailers were closed. They had never been opened on that trip.

Capsize

When last seen by Callum Campbell, RRCII had reached a point marked "B" on Pro 1. When RRCII next came into the view of Campbell, it had overturned and he returned to it. That was at point "C" marked on Pro 1. (evidence of Callum Campbell). The craft, RRCII, had slowed down prior to turning back, (possibly to allow the GPMG to be fired).The throttle was being put between neutral and forward by Major McCallum ie ticking over.

The consensus of evidence was that the craft listed to port. M told everybody in the craft to move to the right. They did so and the boat then listed to starboard. M told them to go to the middle and the craft capsized to the starboard side.

Cause of capsize

Following the incident, on 22 August 2007 the RRCII was examined by Charles Davey, Marine Surveyor employed by the Marine Coastguard Agency (MCA) who found that the craft itself was seaworthy with no defects which would have contributed to the capsize. A static heel test was carried out and it was ascertained that heeling was not excessive and would have been accepted as a passenger vessel. A reconstruction was carried out at Faslane Naval Base on 22 and 23 August 2007. This involved the RRCII being loaded to the same weight and distribution as pertained immediately before the capsize and an amount of water being added to a level in the craft estimated from the witness statements available at that time There was no suggestion during the Inquiry that any of theses aspects were wrong. Paul Mara, the Chief Power boating instructor for the Royal Yachting Association, drove the craft in the reconstruction. His evidence was that the conclusion from the reconstruction was that the accident was caused by overloading and bad trim resulting in the initial swamping of the boat which was compounded by the self bailers not being opened until just before the point of capsize.

Overloading

The boat was designed to carry a maximum of 10 personnel – 8 passengers and 2 crew. During the incident, the craft was carrying 12 persons plus a Machine Gun mounted on a tripod fixed to the bow. The combined weight of the personnel, their equipment and machine gun did not exceed the weight limits of the craft (evidence of John Adams). The craft had been designed for 8 passengers because only that number could be in a secure position on the craft (evidence of John Adams).

Bad Trim

Paul Mara's opinion evidence was that bad trim was caused by having a heavy load, namely the GPMG, too far forward. The bow of the craft being lower in the water than otherwise, led to the craft shipping water as it left the shelter of the shore when conditions deteriorated.

The final stage of the capsize was caused by a combination of overloading, bad trim and sea conditions, the movement of the personnel to the starboard side, the free surface effect of the trapped water on the port side shifting to starboard resulting in the craft becoming overwhelmed.

Given the overloading, the bad trim and the sea conditions, the craft was being operated in conditions inappropriate to its design and with additional weight positioned on the bow

None of these factors, in isolation, would have resulted in capsize.

Deployment of self bailers

The craft was designed and manufactured with two bailing devices mounted on the transom of the craft. They were canvas tubes which when lowered allowed for the passage of water through them. When the craft accelerated, any water in the craft was forced back through the tubes. These are now referred to as self bailers.

The self bailers were not deployed until very shortly before the capsize and only once a significant amount of water was in the craft. Deploying the self bailers and accelerating cleared that water completely in 38 seconds. (Paul Mara's evidence)

Recovery of cadets from the water

The RRCII capsized and all the occupants of RRCII were put into the water. Four persons, namely Vicky Lorimer, Kirsty Leask, Eilidh Slapp and Kaylee McIntosh found themselves under the upturned hull.

None of the life jackets on those persons inflated immediately.

Kisty Leask and Eildih Slapp managed to feel their way under the side and surfaced. Vicky Lorimer spoke to Kaylee McIntosh and told her not to worry; that she would come back to get her once she had got out... It was possible that Vicky Lorimer told Kaylee to duck under the side but she wouldn't.

All but Kaylee McIntosh were rescued in due course by those in the craft d cox'd by Campbell. Some of those eventually rescued had managed to get on to the upturned hull and others remained in the sea but holding onto the upturned hull.

Vicky Lorimer did not alert others to the presence of Kaylee under the hull whilst in the water or when on the upturned boat. Vicky Lorimer was in a distressed state during and immediately after her rescue.

Ascertainment of those recovered

A headcount was attempted by Major McCallum, unsuccessfully because some persons had been taken off by Lt Campbells' boat, while others were on the upturned hull and others still in the water.

Major McCallum shouted to those around him, "Is everybody here?" Some of those in the water responded. In the event, no headcount was carried out by Major McCallum of those about to be rescued at that time.

Lt Campbell said that he made a headcount of those in the water and those on the upturned hull and although he could not remember the number at the time of giving evidence, he said that it tallied with the number given by Major McCallum.

Some cadets and Vicky Lorimer were picked up and taken back to shore in Lt Campbell's craft. The others were eventually taken on board Lt Campbells' boat when it later returned after having set down those first rescued at the pier. Major MacCallum was satisfied that everybody who had been seen in the water following the capsize had been rescued.

At Loch Carnan jetty neither a headcount nor a nominal roll call of those rescued was made.

The names of those who had been on board RRCII were known to Vicky Lorimer but not to Messrs Campbell, Shaw, McCallum or Milne.

Those rescued were taken by minibus to West Camp, Benbecula.

At West Camp, rescued female cadets realised that Kaylee was missing and brought their concern to the attention of Scott Rose and subsequently, LT Fergus Gatt. A nominal roll call was held of 2 Star Cadre and it was confirmed that Kaylee was missing. This headcount was carried out between 11 46 am and 11 51am.

Times of events

The cadets arrived at Loch Carnan jetty at 9am
Capsize occurred shortly before 10 15 am (time of first May day received although not necessarily the first broadcast)
Lt Campbell's boat landing those first rescued 10 41am (Lt Adams phoned Fergus Gatt at 10 41 to tell him of capsize and he (Adams) only knew about it when Lt Campbells' boat first arrived with the first party of those rescued).
Headcount at West Camp carried out between 11 46 and 11 51am
Positively known that Kaylee was missing, 11 51am
Recovery of body, 1. 20 pm

Communications

As earlier indicated, communications among the coxswains of the three craft failed once underway.
The three hand held marine VHF radios recovered were subsequently examined and one was found to be inoperative. (Paul Mara's evidence).It is not known whether the defect causing that was present on 3 August during the incident. It is not known who had that radio at that time. There had been a fourth radio but it was lost at sea. Each of the coxswains and Lt Milne had had a hand held radio.

One of these radios was used by Lt Campbell and Mark MacKee to contact the Marine Coastguard Agency (MCA) at Stornoway. Some of McKee's broadcasts were received. The first received was timed at 10 15 hours and was indecipherable. Later messages within ten minutes of the first provided the location of the capsize as being one mile out to sea off North Uist and then, in further broadcasts, Loch Skipport. Mark McKee did not know how to describe the location of the capsize. He did not know the name of the loch from which they had come ie Loch Carnan.

Stornoway Coastguard scrambled the Barra lifeboat, the Benbecula Auxiliary Coastguard team and the Search and Rescue (SAR) helicopter at Stornoway airport. The helicopter was airborne at 10 26 hours from Stornoway airport en route to the Isle of North Uist.

AT 10 53 Mark McKee broadcast a message to Stornoway Coastguard advising that "all four cadets had been rescued".

The SAR helicopter, Barra lifeboat and Benbecula Auxiliary Coastguards were stood down. The SAR had not reached North Uist by that time and returned to Stornoway airport.

At 11 52, one of the Benbecula Auxiliary Coastguards at Loch Carnan contacted Stornoway Coastguard and advised that they were missing one female cadet and that she had been on the capsized craft.

The helicopter was scrambled. At this time it was en route to Stornoway airport and required to refuel there before setting out again for Loch Carnan.

Search and recovery

A search for the RRCII was made by a fish farm vessel and at about 12 51 pm, fish farm operatives located the upturned craft on the rocks at Steiseigh island in Loch Carnan. Personnel were landed there. A search was made of the upturned craft and at 13 30 hours the body of Kaylee was found under the upturned hull. Her lifejacket was fully inflated.

She was taken by the SAR helicopter to Western Isles Hospital, Stornoway and arrived there at 14 20 hours. Resuscitation attempts had been commenced as soon as Kaylee had been found and were continued at Western Isles Hospital but to no avail. She was pronounced dead at 14 45 hours on 3 August 2007.

Cause of Death

On 6 August 2007 at Aberdeen Royal Infirmary, Dr James Grieve and Dr Susan Robinson conducted a post mortem examination and dissection on the body of the deceased and ascertained that Kaylee died as a result of immersion in water. Dr Grieve was not able to say precisely how Kaylee had died other than that there was no natural reason. He was of the opinion Kaylee may have inhaled water or sustained a reflex cardiac arrest. There were some features suggestive of drowning.

Dr Grieve was of the opinion that death occurred sometime between 10 15 hours and 13 00 hours on 3 August. It was not possible to be more precise as to the time of death. It is not known when Kaylee succumbed whilst under the upturned hull.

PLANNING OF INSERTION

There is conflicting evidence as to when it was decided to insert the cadets by boat. (see above under “Means of getting to Loch Skipport”). However, it is clear that Major McCallum took control of that aspect and organised it.

The RRCII was seaworthy. The offset single outboard engine did not in itself cause any adverse handling effects.

The army have a system of work which involves establishing that safe persons, equipment, practice, and places have been established before an activity such as this takes place.

Major McCallum was bound under military law to follow that system of work.

As a person, military or civilian, involved in planning an activity which involved transporting other persons safely by sea between two points, 5 or 6 land miles apart, Major McCallum had a responsibility to ensure that the exercise would be safe. A number of aspects of planning

impinged on the safety of others than the deceased but they are not the subject of this inquiry and I have not included them. (eg failure to provide admiralty charts. Undertaking a journey of 5 or 6 miles along a coast line which has points of shallow water, rocks and other hazards and parts of which are marked by buoys clearly requires the coxswain of each boat to have had sight of an admiralty chart in the event that they became separated from the others).

The death occurred not because army regulations went unobserved but because failings, initially at planning stage but consequently throughout the actual exercise, brought about a concatenation of events leading to Kaylee's death.

The lack of planning for this insertion involved many failings and these had serious safety implications. They are best identified under separate headings.

Lack of a safety boat

In planning this insertion by boat there was a failure to:-

Provide a means of rescue in the event of a capsize when all the occupants of a boat would be in the water. There was no safety boat of sufficient size to accommodate all the personnel from the most occupied boat in the event of a capsize and with sufficient crew to lift the persons from the sea. The other two boats, both RRCMkI, were each designed to carry 5 persons and were both fully occupied during the journey.There was nobody to properly co ordinate the rescue. That could have been one of the roles of the coxswain of the safety boat.

In his evidence Major McCallum said that he had not considered the possibility of a capsize at all. He was, he said, using the "Buddy Boat System", whereby another craft then engaged in the transportation of cadets would assume the role of rescue boat in the event of a single person in the water. He said that he had taken a conscious decision to use the Buddy Boat System rather than a safety boat.

Lack of a safety officer

It was necessary to have someone independent of the insertion to consider whether it was at all times safe to continue. Following army rules would have meant that the independent safety officer would have had the authority to decide whether or not to proceed at any point. It seems likely that the realisation by a Safety Officer as to any of the following, very patent deficiencies: - the lack of a safety boat, the lack of Admiralty charts, the adverse sea conditions would have resulted in the insertion by sea being aborted. Major McCallum in his evidence said that he did appreciate the need for a safety officer but not someone specifically on the shore nor for the need for it to be a dedicated job. He said that he had appointed himself as the safety officer on that occasion. At the time of giving evidence, however, he did appreciate those needs. "I couldn't possibly do the job when I was up to my neck in water".

Lack of the means for communication with the Coastguard

No attempts had been made to assess the viability of communication between the boats and Coastguard or using a mobile phone between the jetty at Loch Carnan and the Coastguard. Mobile phone signal is poor at that location. Major McCallum said in evidence that Major Adams had an airwave radio similar to that used by the police which would have allowed communication from one end of the country to the other. In the event, David Adams did not use it to contact the Coastguard.

Lack of advance notice being given to the Coastguard

There had been no communication with the Coastguard in advance of the insertion, advising them that three boats were to transfer cadets from Loch Carnan to Loch Skipport.

Lack of means of communication between the three craft, between the craft and a responsible person on land and between the craft and Coastguard.

There was not on board radio/ telephonic equipment sufficient to allow clear verbal communication between the craft operating then and between the craft and Coastguard. Hand held radios were of insufficient power to allow for any of that to happen. VHF uses a signal between the radio and the nearest visible mast. Being low in the water means that waves can come between the radio and the nearest mast.

There was no communication between any of the craft and any person on land. Until Lt Campbell returned to the jetty at Loch Carnan, nobody on land had any knowledge that the capsize had occurred. Earlier information would have allowed those on land to co ordinate the rescue operation so that it would have became apparent earlier that not all cadets were accounted for.

There was no plan in the event of a craft not being able to communicate with the other craft eg for any craft to keep within sight or within a maximum distance of each craft.

Lack of knowledge of the precise location of the route

The adults in charge of the insertion were not all aware of the precise location, at any given point, of the route between Loch Carnan and Loch Skipport such that they would have been able to provide that to the Coastguard. None of the coxswains, nor any other adult involved, had admiralty charts on their craft. At the very least, charts would have provided the reader of them with the name of the loch from which they set off.

The inability of any instructor connected with the rescue to provide the Coastguard with a precise location hampered the Coastguards in arriving at the correct location. The Auxiliary Coastguard were sent from Benbecula to Loch Skipport, Loch Eport and finally to Loch Carnan. They arrived there at 11 30 am (evidence of Robert Currie).

The SAR helicopter was airborne at Stornoway Airport at 10 26 hours and was sent to North Uist. It arrived at North Uist at 10 53 hours and was advised that “all four cadets” had been rescued.

At 11 13 hours, Major McCallum telephoned from a land line at Loch Carnan jetty and confirmed to the Coastguard that all had been rescued and that the incident had taken place in Loch Carnan. The helicopter went there and received a thumbs up from one of the adults and returned to Stornoway. It was only when the helicopter was about to land at Stornoway that they were told to return because a cadet was missing.

It is reasonable to suppose that had the helicopter arrived at the correct location as soon as they could ie around 11 53 hours, that had it been known then that a cadet was missing, they could have become involved in searching under the hull immediately. By that stage of course, Kaylee would have been under the hull for around one hour and forty minutes. ie from 10 15 to 11 53 (or just after) but the pathologist did give evidence that the sooner she had been found the better her chances of survival.

Lack of knowledge as to who and precisely what numbers were on the craft

No note was taken of the names of all those on board each craft upon embarkation. This would have provided the precise numbers on each craft in the event of a capsize such as this. It was suggested in evidence that it would have been of little value had such a note been kept on board a craft which capsized since the note would have been lost in the capsize. If the note had been taken and kept by the coordinator on land and had there been a means of communication between those in the craft and those on land, then such a note would have been of considerable use in ascertaining precisely who had been brought back to land and who had not.

No nominal roll call or headcount was made at the point of capsize and none made immediately upon landing at the jetty at Loch Carnan. Major MacCallum's evidence was that he attempted a headcount from his position on the top of the upturned hull but it was impossible to carry through because of the difficult conditions with some of the cadets and instructors still in the water with some trying to get onto the upturned hull and moving their position and some already on the upturned hull. As some cadets were rescued by Lt Campbell's boat, it became more difficult to assess precisely the numbers of those rescued, those still to be rescued and any potentially missing. Major McCallum's evidence was that he was aware of the numbers of those on his craft but not their names. He knew the normal complement was 10 and that he was carrying two extra passengers. He had felt no need to carry out a formal roll call as in calling out their names because he knew the total number of those he was carrying.

Major McCallum appears to have relied solely on the fact that there had been nobody apparent in the sea when he himself was rescued to be satisfied that all the occupants of the craft had been rescued. He failed to instruct anyone to carry out a head count upon the cadets and instructors from his vessel having landed at the jetty.
"When I got to the shore, I was told everybody was here. I was told that I was the last off the water. It was impossible to have that confirmed because the only person who had the nominal roll was Major David Adams. I assumed he (Major Adams) knew who was there."

Lt Callum Campbell said that when he arrived at the upturned craft, he made a headcount once cadets had got onto the upturned hull and no others were floating away from the hull. He asked Major McCallum what numbers he had counted and was given a number which he could not remember at the time of giving evidence. He (Campbell) then counted the number of people on his boat and the number in the water. Again, he could not remember the number. He asked Major McCallum how many he had had originally onboard. He could not remember the number but he was satisfied that it tallied with the number that he had calculated. On that basis, he was satisfied that everybody had been accounted for.

Fergus Gatt, the assistant Battalion Training Officer, said that when he was at the pier he spoke to Lt Campbell who had told him that they had carried out a headcount and had 8 cadets and 3 adults. Gatt corrected him and said that he had had on board, 8 cadets and 4 adults. Gatt assumed that the small stature of Vicky Lorimer and her being dressed as the cadets were, had led Lt Campbell into thinking that she was a cadet. He was sure of the numbers on RRCII because he had been at the pier when they set off.

This aspect is of vital importance because, had Kaylee been noticed as missing during the rescue and had been rescued at that time, then she would have stood a better chance of survival.

Sea conditions

The weather conditions at 10 15 am at Benbecula Airport, which is 7 miles from the site of the capsize, were wind from 190degrees (ie south) at 19 knots, (equating to Force 5 on the Beaufort scale).

Roderick Campbell, Fish Farmer in Loch Carnan, said that the weather conditions when he was conducting the search at around 11 50 hours were wind from the south west, force 5 to 7 with a large swell. He said that at about 9 am the wind force had been 5 to 6.

Major McCallum said in evidence that at the Wednesday evening meeting to discuss the following days' plans, the decision as to whether insertion was to take place by boat was still weather dependent. He said that the wind force on Friday, once out of the islands, was Force 3. He was not aware of the limit of the craft as being Force 5 but he wouldn't have gone out in anything above Force 4.

As it was, the boat cox'd by Lt Campbell was ahead and further out into the open sea, turned and came back to land all without mishap when the capsize of RRCII occurred.

I submit that the evidence of Roderick Campbell is to be preferred. It matches that of the weather readings taken at Benbecula airport during the course of that morning and the weather forecast.

The rough sea did contribute to the capsize in that the waves did come over the sides of the craft.

Furthermore, it became apparent to Lt Campbell that the sea conditions were sufficiently poor not to continue past the shelter of the land – although, he said, only because the cadets were becoming wet from the spray. If a reconnaissance had been carried out that morning by the instructors before deciding whether to insert by boat or sea and if that reconnaissance had involved them in reaching the open sea, then it may have been clear that sea conditions were not appropriate. If, as Major McCallum said in evidence, that using the boats was weather dependent, then a proper reconnaissance to the open sea would have shown that boats should not have been used.

Weather Forecast

Major McCallum relied on a forecast which had been issued three days before 3 August ie on Wed 1 Aug (Pro 25). The forecast then was for wind from south (180 - 200 degrees), wind speed 20 knots: Moderate to rough sea conditions with rain and drizzle developing .The confidence in the forecast was marked as low. (20 knots equates, on the Beaufort scale, to Force 5).

The 24 hour forecast from 0600 hours on Fri 3 August (Pro 24(1)) was for south to south west wind 5 to 7, perhaps gales 8: Sea state slight or moderate, becoming moderate or rough, occasionally very rough with rain. That forecast was available from the Met Office and could have been accessed via the internet. Force 5 - 7 on the Beaufort scale equates to 19 – 38 knots.

A Strong Wind warning had been issued by Aberdeen Met Office for Benbecula Airport (Pro 26(1)) that "Southerly winds will increase to mean speed 27kt, with gusts to 37kt. Winds will veer southwest and ease slightly by midday, but winds will increase again during the afternoon with mean speed 27 kt to 37 kt.. Loch Carnan is 7/8 miles as the crow flies from Benbecula airport. (Donald Mackay's evidence). 27 - 37 knots equates, on the Beaufort scale, to Force 6 -7.

That forecast was available and could have been accessed via the internet by Major McCallum. Major McCallum was the sole person who took the decision to proceed with insertion by boat on 3 August. He said that he had the above 3 day forecast (Pro 25) but made no other attempts to obtain a weather forecast

Major McCallum said that he would not have gone out if the wind was above Force 4.

Lack of experience of RRCII

The RRCII had been gifted to the Cadet Force only weeks before that camp and this occasion had been the third time Major McCallum had used it. The first had been in Benbecula was to check that the engine started and the second was to see how the craft levelled with the single engine

Deployment of Self Bailer

The self bailers had been in the closed position until shortly before the capsize. Major McCallum said that the self bailers were closed at the point when he first noticed significant water in the boat – about 6 - 8 inches of water. He said that he had not deployed them on that trip until this point. Major McCallum said that if he had opened them in the previous 6 or 7 minutes when they were stopped or ticking over, then sea water would have come in through the trunks. The gunwales would not have been below the water line but the trunks would have been. He said that at the same time as deploying the bailer, he tried to accelerate but found that the engine had stalled. He said the RYA technique was to open one bailer, move forward at force and put the boat into a circular motion to the right and then deploy the bailer on the inner side. Once the boat was emptied, to re secure the bailer and continue the voyage, but not to deploy the bailer when generally underway.

Craig Duncan said that he had been instructed to deploy them once water was in the craft. The craft had slowed down and he had noticed that their feet were in water. Major McCallum had instructed him to lower the funnels to drain the boat and the boat would accelerate and go in circle to get the water out.

Paul Mara gave evidence that during the reconstruction that deployment of the self bailers and acceleration completely cleared the water in the craft in 38 seconds.

Paul Mara said that it would have been prudent to have bailed out the water as it was accumulating. Self bailers exist on all power boats and that the RYA syllabus for any level covers the use of them. On an unfamiliar boat, you should check that you've got all the safety equipment.

It is submitted that had the craft been moving at normal speed, then the self bailers would have operated, since the boat's planing movement and wash created would have kept the level of the self bailers well above the water line. This effect was seen in the video of the reconstruction. (Label 9)

Life jackets

It was shown during reconstruction of an attempted escape from under a simulated upturned craft (Label 9 and Pro 30) the effects of different buoyancy levels on the ability to escape.

Kaylee was wearing an Assault Troop Lifejacket (ATLJ) with a buoyancy level of 498 Newtons (N).

When wearing a lifejacket of this buoyancy, the marine was wholly unable to lower his head under the water to allow him to escape under the side of the craft. With a Crewsaver 150 N lifejacket, the marine believed that although the buoyancy impaired his ability to get underneath the obstructions, one would not need to be a strong swimmer or even physically strong to escape from under the craft.

The evidence from Vicky Lorimer was that Kaylee's Lifejacket was not inflated when she last saw Kaylee under the upturned craft. The witnesses who found Kaylee's body were clear that her lifejacket was inflated

Assault Troop Life jackets are expressly not approved for use by cadets. The Crewsaver 150 Newton Life Jacket was so approved.

Accordingly, a conclusion can be drawn that the Assault Troop Lifejacket worn by Kaylee would have prevented her escape from under the upturned craft had she attempted one.

Supply of Life Jackets

Major McCallum indented for Life Jackets to army supplies. He said that it should have been obvious from the headed notepaper giving their Unit address and Unit Identification (ACF) that the lifejackets were for use by cadets. He was supplied with Assault Troop Lifejackets. He was unaware that they were not suitable for cadets. He believed that they were 275 Newtons which he understood to be the highest Newton level obtainable. He had arranged for three instructors to be trained in the maintenance and servicing of lifejackets. None of them raised any question as to their suitability.

Major McCallum understood that cadets could use 275N lifejackets and that is what he believed he had got. He made no further inquiry as to their buoyancy.

Nevertheless, the publication, JSP 535, "Cadet Training Safety Precautions (2006)" (Pro 14) at Section 21, Appendix A makes it quite clear that three lifejackets - 275N, 150N and Lifemaster Mk9 (178N) would have been suitable for use by cadets.

Further, the publication, Defence Instructions and Notices (DIN) (Pro 12 (6)), extant at the time, makes it clear that an ATLJ must never be worn by minors or those weighing les than 45 kgs. For light adults, guidance must be obtained from MWABSSET.

Kaylee weighed 70 kgs (Pro 34)

The label on Kaylee's lifejacket clearly shows that it is an Assault Troop Lifejacket (Pro 23).

The army issuing system should have prevented the supply of Assault Troop Life Jackets to cadets. Their computers have a function preventing the issue of these to cadets because of their unsuitability. However, the computers did not prevent their issue on this occasion. (Evidence of John Adams)

Risk Assessments

The purpose of a Risk Assessment is to focus the mind of its author on the potential hazards in any activity

No Risk Assessment for the insertion had been carried out. A Risk Assessment covering general boating activities had been prepared (Pro 10). It was dated by Major McCallum as 28 July 08. It is not clear when it was prepared. It did not specifically refer to that particular insertion and seems to have been prepared with general boating activities in mind such as the boats taking cadets around Loch Carnan on the fun day.

Major McCallum had had no training in carrying out Risk Assessments. He had followed a pro forma obtained by him from a training exercise with the Fire Service.

The Risk Assessment carried out by Major McCallum (Pro 10) is deficient in many respects.

Had a Risk Assessment been carried out for the particular activity of taking the cadets from Loch Carnan pier to Loch Skipport, then the following hazards could have been identified (restricted to those connected with the death of Kaylee):-

Lack of knowledge of weather forecast for the duration of the journey
Lack of knowledge of the conditions in the open sea
The effect of worsening weather conditions
Failure of radio contact among the three craft
Capsize of a craft, rather than simply man overboard.
All occupants of the craft in the water
No radio contact between each craft and an Instructor on land
Failure of radio contact between craft and Rescue Services
Lack of precise knowledge of numbers and names of those on board each craft
Identification of non swimmers
Lack of a protocol to ensure that all personnel can be accounted for at any given time
No independent safety officer
No safety boat

The absence of a proper Risk Assessment indicates a serious lack of consideration as to the risks involved in taking cadets and instructors on a journey of 5 or 6 miles in open sea in three open landing craft

RESPONSIBILITY FOR CONSIDERATION OF RISKS

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The **Training Safety Adviser, Ian Hay,** had responsibility for two full Battalions and a battery of cadets in Shetland. For the first week of the Benbecula camp he was involved with the Angus Battery camp in Weymouth and with the Shetland camp.

He arrived at the Benbecula camp on 1 August and attended the evening meeting for the planning of the next day's events on Thursday.

He was, he said, unaware that the insertion was going to be by boat until he heard about the capsize. He had understood that it was to be by minibus and sought support for this assertion from the Main Events List (Pro 8).

However, he said, had he known that boats were to be used, then he would have questioned the reason behind the change; satisfied himself as to the qualifications of others - he had already checked those of Major McCallum; and satisfied himself that a Safe System of Training (SST) was in place. The SST would have encompassed safe person, equipment, place and procedures.

However, for that he would have relied on the expertise of Major McCallum whose word he would have accepted.

Ian Hay did not have sight of the Risk Assessment (Pro 10) until Saturday 4 August when someone (unknown) gave him it saying he would need it.

Ian Hay said that Fergus Gatt who was the assistant Battalion Training Officer at the time would have been concerned with compliance as to Risk Assessments. He (Ian Hay) had only begun to get through paperwork connected to the Benbecula camp on Thursday 2 August when he had had to stop to go to the training area.

Had he seen the Risk Assessment (Pro 10) before the insertion on 3 August, then he would have considered it insufficient for the insertion of cadets and would have spoken to Major McCallum and the Commandant. Hay did not have the authority to stop an exercise unless there was an imminent risk of danger.

Fergus Gatt was the assistant Battalion Training Officer. It was among his responsibilities to ensure that a Risk Assessment was in place for this activity before it began. Such a risk assessment should have been site specific and should have been completed on the morning of the exercise to take into account the prevailing conditions at that time. He did not have sight of Pro 10 at all. He would have expected it to have been site specific and to have been given to him after the activity – before then it would have been of no use to him since he would not have understood it.

David Adams was the 2 star cadre commander. He had compiled the training programme with the cadets being taken to the training area by minibus. When he was told that had changed, he was a little concerned about the cadets becoming wet on the boats and then having to camp out overnight He had no concerns about their safety. He knew nothing about boats or their safety and relied entirely on the expertise of Major McCallum. As a cadre commander, he would not have expected to have seen a risk assessment for that activity. He had produced a risk assessment for field craft and had shown it to the Training Officer, Capt Gatt.

David Taylor, the camp Commandant, had overall responsibility for safety. He had been aware since the earliest planning meetings in November 06 that boats may be used for transferring the cadets from Loch Carnan to Loch Skipport. He classed it as an interest activity.

At camp, he had asked Major McCallum for confirmation of compliance with JSP 535 and the ACF Training Manual. He received that confirmation. He himself knew nothing about boating and relied entirely on Major McCallum. Major McCallum advised him that he had got appropriate lifejackets from the Royal Navy.

Col Taylor was concerned particularly about life jackets and the use of a safety boat. When he learned that all three boats were going to be used, he questioned how a safety boat would work in that arrangement. He was told that none of the boats would be fully occupied and that it was a safe arrangement. Col Taylor asked for full compliance with JSP 535. He assumed that someone would be acting as a Safety Officer on Friday, 3 Aug.

Col Taylor did not see any Risk Assessments. He said they would have gone to the Training Safety Adviser, Ian Hay, who had not been there during the first week of camp. In the absence of Ian Hay, Major McCallum was acting as TSA.

Col Taylor said that the role of the TSA was to advise him on training safety. He said that Ian Hay was shared and so his battalion only had him 50% of the time. He believed the TSA was aware of the boating activity that was going to take place.

Col Taylor put Major McCallum in charge of the watermanship event and fun day.

Col Taylor would not have expected to have seen Risk Assessments. The TSA was their custodien and would have shown him them later after the event. Had he known that no Risk Assessment existed then he would have required one to be produced. He saw the TSA's role as satisfying the CO that he is fulfilling all safety regulations and that safety practices are happening. The CEO, Major McCallum, is authorised to give him training safety advice in the absence of the TSA.

Norman Donald, the deputy camp commander, said that Major McCallum was the qualified person for boating activities and had been delegated the responsibility to organise that activity by the camp Commandant.

On the Wednesday evening, at the Planning meeting, the 2 star cadre's activities for Friday (3 Aug) were discussed. The Training Officer, Capt Gatt, asked the cadre Commander, Major David Adams about the day's events. No issues were raised. David Adams said he knew what he was doing and was happy. Insertion by boats was envisaged. Lt Col Donald had no concerns. He (Norman Donald) was responsible for delivering army proficiency training and had no further responsibilities for safety or risk assessments. He had no reason to be unhappy. He relied on Major McCallum as qualified and competent.

On the Thursday night, he spoke to Major McCallum and said that because the weather forecast was not good and the helicopters would not be flying, he took it that the boats would be off too. Major McCallum's response was, "Not necessarily. I'll go and have a look". He told Major McCallum to make sure he carried out a good risk assessment, meaning accurate and complete.

Major McCallum had been delegated and had accepted responsibility for organising all boating activities including the insertion of 2 star cadre. He was the senior officer in charge of boating activities because of his rank but not his qualifications. Lt Campbell was equally qualified in terms of boating qualifications. Major McCallum was sufficiently qualified on paper to carry out the activity. He obtained the craft and organised training for Lts Campbell and Milne to allow them to be coxswains. The Risk Assessment for the insertion should have been done, he said, by Lt Campbell but he (McCallum) did not ask to see it and blames lack of responsibility on his own (McCallum's) part. Pro 10 was a generic risk Assessment compiled by Major McCallum covering all the boating activities – the pleasure trips and this insertion. He did not follow the army format for a Risk Assessment. He considered it adequate at the time.

He had read and understood the "Red Book" (JSP 535) and "followed it mostly". At the time of giving evidence, he appreciated that a safety boat was required and understood that that would mean a separate safety boat. He never took into account the possibility that a boat would capsize and that all the occupants would require to be picked up. It was on that basis that he operated the "Buddy boat system". He had read para 2117 about safety boats before then but didn't follow it because he was using the "Buddy boat system".

He said that he wasn't informed as to non- swimmers but had not asked if there were any.

He nominated himself as safety supervisor. He said that he appreciated the need for a safety officer but not necessarily one on the shore nor the need for it to be a dedicated job. After the incident, he realised that he could not do the job "when he was up to his neck in water". At the time of giving evidence, he appreciated the need for a safety officer.

He had not telephoned the MCA to advise them of the intended insertion and the location because it had never occurred to him to do that. At the time of giving evidence, he appreciated that doing so "would have made things happen much quicker".

He had consulted an Admiralty chart before this incident but not at that camp. He and Lt Campbell had Landranger maps. He accepted that there were many obstacles along the intended route, but they were using the safe channel on the way out and were relying on their knowledge for the rest of the journey into to Loch Skipport. He accepted that Milne had never been along that route before. He had not appreciated that they may become separated.

He didn't feel the need for a formal roll call since he knew the numbers on his boat. He didn't know the names of those on his boat. He assumed that Major David Adams knew who had been rescued. He accepted that not having a roll call was exceptionally bad planning on his part.

In respect of communications, he said that the radios were of good quality but that he had never tried to contact the MCA using them before the incident. He said that there was someone on land with an airwave radio who was communicating with HQ but not the boat.

PROPOSED DETREMINATION IN TERMS OF SECTION 6 OF THE 1976 ACT

Section 6 (1) (a) - when and where the death and any accident resulting in the death took place.

The death of Kaylee McIntosh took place between the hours of 10 15 am and 2. 45 pm on Friday, 3 August, 2007 at Loch Carnan, South Uist.

These times refer to the time of the capsize and the time of life being pronounced extinct at Western Isles Hospital. If it is accepted that Kaylee was showing no vital signs from the time of recovery of her body from under the upturned hull, then that may be considered more appropriate, namely 1 30 pm.

Section 6(1) (b) - the cause or causes of death and any accident resulting in the death

Cause of death
Immersion in water when the boat in which she was a passenger capsized, trapping her underneath the upturned hull.

Cause of accident
The craft became overwhelmed by water and capsized.

The craft was designed as a planing craft whose bow would rise when at speed. From the outset of the journey the weight on the craft was inappropriately distributed with a machine gun mounted at the bow and an adult Instructor positioned there to man it. This adversely affected the trim of the craft, diminishing its ability to plane and reducing the freeboard so that it was more able to ship water.

The craft was being operated in conditions beyond the limits of its design. It is an open landing craft and was being used in conditions of a Force 5 wind. With this wind strength, the sea conditions, as a result, were that there was a large swell, waves with spray. The poor trim as described above led to reduced freeboard leading to the craft being more prone to shipping water. A significant amount of water was shipped in this way to the extent of between 12 and 18 inches lying on the floor of the craft.

The self bailers on the craft were not deployed until shortly before the capsize, thus allowing the water on the floor of the craft to remain or accumulate. The self bailers are deployed by lowering the canvas trunks to the open position and accelerating the craft forward to allow gravity to force any water in the craft through the open trunks. The craft had slowed or stopped and water was shipped to such an extent that the engine failed. The craft could not move forward at speed to allow the self bailers to operate.

The free surface effect of the water in the craft accentuated any list of the craft. The craft did list and the personnel on the port side were instructed and did move to the starboard. As the craft appeared to be listing excessively to the starboard they were instructed and did move to the middle of the craft. The free surface effect accentuated listing to such an extent that the craft capsized and all the occupants, including the deceased, were thrown into the sea.

The deceased was trapped under the upturned hull. The buoyancy of her life jacket was such that, once inflated, she could not have submerged herself under the side of the upturned hull to escape.

The deceased was not noted as missing for 1 hour 36 minutes after the capsize and not recovered until 3 hours 15 minutes after the capsize.

The accident and resulting death were not caused by any single aspect but by a concatenation of the above events.

Section 6(1) (c) - the reasonable precautions, if any, whereby the death and any accident resulting in the death might have been avoided

A reconnaisance of the sea state beyond the shelter of the islands into the open sea of the intended route so that the actual conditions pertaining could be accurately assessed without the cadets being put at risk.

Provision of a safety boat, empty and with sufficient capacity to collect survivors from the most occupied craft.

An accurate manifest of all those on each craft taken and copies kept by the coxswains of each craft and by a land based instructor so that in the event of a capsize, each of the coxswains would have known who was on board any of the craft. This would have allowed Lt Campbell to accurately confirm, or otherwise, whether all the occupants of the craft had been recovered. Similarly, if Major Adams, on shore, had such a manifest, then he could have similarly confirmed the identity of those returned to shore.

Provision of a dedicated Safety Officer, independent of the activity, to assess the safety considerations and with the authority to cancel the activity at any time.

Provision of appropriate training and experience for the coxswain of the craft in handling that particular type of craft. Had the coxswain of RRCII been trained in and had experience of that particular craft, he may not have chosen to carry more passengers than there were seats for, nor to have distributed the weight as he did. He may have deployed the self bailers earlier to have prevented the accumulation of water in the craft. He may not have embarked on the journey had he known of the operating limits of the craft.

Provision of reliable radios linking each of the craft with each other and each of the craft with a land based coordinator and with the local coast guard.

Prior contact with the local coastguard advising of the nature and location of the intended journey.

Provision of life jackets of a buoyancy appropriate to the size and weight of the wearer and suitable for the nature of the exercise.

Provision of marker buoys on each craft which would automatically signal their position to the emergency services upon contact with water.

(There are other precautions which could have been taken but which, in the circumstances, did not result in this accident or death e g provision of Admiralty Charts for each of the coxswains. I do not intend including them).

Section 6(1) (d) - the defect, if any, in any system of working which contributed to the death or any accident resulting in the death

The function of the Brigade Training Safety Advisor (TSA) as stated in the ACF Manual (Pro) is,"On behalf of the Regional Brigade Commander to assist the ACF Cadet Commandants to fulfil their responsibilities for the planning, management, coordination and delivery of cadet military and adventurous training in close liaison with the ACF County Training Officer and County AT/D of E Officer".

In this instant situation, the Training Safety Advisor was required to support two training camps at the same time each geographically far apart. He did not attend Benbecula camp until Wednesday 1 August, because he had been at Weymouth with the Angus and Dundee Battalion ACF whose annual camp had started a week before the Benbecula camp. He had intended to divide his time equally between the camps.

Accordingly, he was not present to carry out his functions as a TSA at Benbecula. He was not aware that boats were to be used for this insertion. He had not had sight of any risk Assessment pertaining thereto. He was not in a position to properly advise the Commandant as to safety issues nor to satisfy him that all safety procedures had been carried out.

The ACF have regulations in respect of safe training. These are issued in a number of documents It is standard ACF policy that all military training (and this was military training rather than a pleasure activity since it involved the transporting of personnel from one location to an area where military training was to take place) is planned and organised in accordance with the Safe System of Training (SST) which is based on four elements, viz safe persons, safe equipment, safe practice and safe place. No cadet activity should ever be conducted without going through the process of assessing the risks and, even then, the particular activity requires to be endorsed by the County Commandant. Before activities take place the cadet commandant must satisfy himself that proper consideration has been taken of the SST. He then has to be assured that all potential risks are reduced to an acceptable level.

In respect of safe equipment, inappropriately buoyant life jackets were issued to, inter alia, the deceased. The system for preventing the issue to cadets of adult life jackets failed.

In respect of safe practices, the insertion of cadets by boat took place without a full and proper Risk Assessment procedure being carried out. Cadet training rules required such a risk assessment to be carried out.

Insertion by boat was a water based activity and thus subject to particular cadet safety training rules. These rules, such as the provision of a safety boat, were not followed.

Section 6(1) (e) – any other facts which are relevant to the circumstances of the death

None.

2. Advocate General for Scotland as representing the Ministry of Defence

1. Factual Background: Proposed Findings in Fact

Much of the evidence lead at this inquiry has not been in dispute nor been the subject of disagreement amongst the witnesses. The immediate cause of Miss McIntosh's death has not been seriously chalenged. It is submitted that much of the background factual circumstances are not in dispute and the following narrative, based on the evidence lead, is offered as proposed findings in fact:

Background

1. **Kaylee McIntosh was a cadet within the 2nd Battalion The Highlanders Army Cadet Force.**
2. **The Army Cadet Force (ACF) is a national youth organisation which offers military style training and other activities to young people between the ages of 12 and 18. There are some 44 000 cadets nationally and 8 000 or thereby instructors formed into 1 700 or thereby detachments. The ACF is not part of the regular Army. There are three stakeholders in the ACF. Military style activities are sponsored and funded by the Army. Non-military activities, such as participation in the Duke of Edinburgh's Award Scheme, are supported by the Army Cadet Force Association. Infrastructure matters, including the provision of administrative support, is provided by Reserve Forces and Cadets Associations (RFCAs), statutory bodies reporting to the Defence Council, of which there are 13 in the country. RFCAs employ Cadet Executive Officers, whose responsibilities include the management of property, equipment and funds at appropriate levels. Co-ordination of the ACF is provided through the Army's Commander Regional Forces. Within the Army, regional brigade commanders are responsible to the Commander Regional Forces for the safe conduct of ACF activities within his or her area. Brigade commanders have full time staff officers of captain rank to coordinate and oversee training support within ACF battalions. Army battalions also have a Training Safety Adviser (TSA), with training in matters relating to health and safety, to give advice to cadet battalions on safe military training. ACF battalions are headed by a Commandant who is a part time volunteer. Commandants and CEOs can call upon the resources of the relevant Army battalion, in the form of the Staff Officer Cadets and the TSA, for support in the provision of training. Each cadet battalion has a Training Officer who would be a part time volunteer.**

3. **The Army has published guidance for the safe conduct of activities within the ACF, principally in the form of a publication entitled "Cadet Training Safety Precautions (2006)" (JSP 535).**

4. **To take part in the battalion's annual training camp Miss McIntosh deployed to Benbecula at the end of July 2007. She was part of the 2-star cadre of cadets at the camp. She was there to take part in a number of activities, the successful completion of which would have earned her a 2-star award.**

5. **On the morning of Friday 3 August the 2-star cadre, which included Miss McIntosh, was taken by minibus to the pier at Loch Carnan. There, the cadets were to embark on to three rigid raiding craft. Miss McIntosh, along with other cadets, was issued with an assault troop life jacket (ATLJ). The life jackets were put on by the cadets. Sergeant Mark McKee, an ACF adult instructor, checked the lifejackets. Before boarding the boats the cadets were instructed to pull the life jacket cord if they fell out of the boat.**

6. **Miss McIntosh boarded a rigid raiding craft along with seven other cadets, and 4 adults: Major George McCallum, and Sergeants John Shaw, Craig Duncan and Vicky Lorrimer. Major McCallum was the Cadet Executive Officer for the 2nd battalion. Sgts Shaw, Duncan and Lorrimer were Adult Instructors within the ACF. Major McCallum was the coxswain of the boat. He took up position at the rear of the boat on the port side. Sgt Duncan took up position to his right, on the starboard side. Both were positioned behind the controls of the boat. Sgt Lorrimer was positioned in front of Maj McCallum and Sgt Duncan, in front of the controls, behind the cadets and approximately in the mid-line of the boat. The cadets were positioned in two rows of four, one to port and one to starboard. Miss McIntosh was positioned in the second place on the starboard side counting from the bow of the boat. Sgt Shaw was positioned in front of the cadets, to the port side. On the bow of the boat there was mounted a general purpose machine gun. An outboard motor was affixed to the stern of the boat, off-centre to the port side.**

7. **Once on the boat, the cadets were instructed that in the event of falling overboard they should push themselves away from the boat and pull their lifejacket cords. The instruction on the boat came from Maj McCallum.**

Lifejacket provision

8. **The ATLJ supplied to the cadets had a buoyancy of 498N. It was designed, as its name tends to suggest, to support its wearer, a soldier plus 45 kgs of equipment. By way of comparison, lifejackets and buoyancy aids recommended for use by cadets in JSP535 ranged between 50N and 275N. The ATLJs were not designed to self-inflate on contact with water. They required manual activation. Some of the adults on the rigid raiding crafts were supplied with lifejackets which self-inflated on contact with water.**

The capsize

9. **Once the boats set off from the pier, the boat carrying Miss McIntosh came to be behind a boat coxed by Lieutenant Calum Campbell and ahead of the boat coxed by, then, Lieutenant Charles Milne.**

10. **As the boat carrying Miss McIntosh travelled out into the Loch the sea conditions deteriorated. Maj McCallum sought, but failed to contact Lt Campbell by radio. Maj McCallum instructed the machine gun to be fired (with blank ammunition) to attract the attention of Lt Campbell with a view to instructing him to return to the pier. The boat carrying Miss McIntosh slowed down. Water was seen to be accumulating in the boat.**

11. **Maj McCallum instructed the occupants of the boat to move to the right of the boat. They did so. The process of doing so also caused water in the boat to move to the starboard side of the boat. Maj McCallum then instructed the occupants to move to the left of the boat. However, the boat capsized to the starboard side.**

12. **Miss McIntosh found herself under the upturned hull of the boat. Also under the upturned hull was Sgt Lorrimer and cadets Kirsty Leask and Eilidh Slapp. Cadets Leask and Slapp escaped from under the upturned hull. Sgt Lorrimer advised Miss McIntosh that she would "get back and get her" before attempting to escape from under the upturned hull. Sgt Lorrimer swam under the boat and surfaced outside. Sgt Lorrimer was in considerable distress. She began to float away from the upturned hull. She was rescued into the boat coxed by Lt Campbell who had by then returned to the upturned hull. Sgt Lorrimer did not return for Miss McIntosh. Sgt Lorrimer did not alert others to the presence of Miss McIntosh under the upturned boat whilst she (Sgt Lorrimer) was in the water or whilst on Lt Campbell's boat.**

13. **Miss McIntosh's lifejacket inflated whilst she was under the upturned hull. The buoyancy provided by the inflated lifejacket would have prevented her from escaping from underneath the upturned hull were she otherwise capable of attempting so to do.**

Recovery of cadets from the water

14. **Lt Campbell and the crew of his boat which had returned to the site of the capsize assisted in the recovery of other individuals from the water. Some were taken onto Lt Campbell's boat, some were assisted up onto the upturned hull and some were left holding on to the upturned boat. No list of names was read out to ascertain if all cadets and adults had been accounted for.**

Return to shore

15. **Lt Campbell returned to shore the occupants of his boat and those whom he had recovered onto it from the water, including Sgt Lorrimer. He returned to the site of the capsize. He recovered the personnel sitting on top of the upturned hull and as could be seen in the water. He returned those personnel to shore. On shore the cadets and instructors were taken by minibus to West Camp, Benbecula. No numerical or named headcount was performed before the cadets were moved from the shore to West Camp.**

16. **Realisation that Miss McIntosh had not been accounted for occurred after the first tranche of cadets returned to West Camp.**

17. **A headcount was undertaken. That was followed by a named roll call.**

Recovery of the upturned boat and Miss McIntosh

18. The upturned hull was located at or about 12.51pm. Miss McIntosh's body was found underneath the upturned hull. A post-mortem was performed by Drs James Grieve and Susan Robinson on 6 August 2007 in Aberdeen. Their conclusion was Miss McIntosh died as a result of immersion in water.

2. Determination

Against the factual background I now turn to the matters which require determination in terms of the Act.

2.1 When and where the death and the accident resulting in death took place (section 6(1)(a))

Location is not in issue: Loch Carnan, South Uist.

Evidence as to the timing of the capsize can be drawn from the time of a mayday call spoken to by coastguard Andrew Mair, namely 10.15. It would, on that evidence, be appropriate to determine that the accident resulting in death, that is to say the capsize, occurred at or about 10.15am on 3 August 2007 at Loch Carnan, South Uist.

Evidence as to the time of death came from Dr Grant, but is appropriate to consider that matter in the context of the issue of cause of death.

2.2 The cause or causes of death and any accident resulting in death (section 6(1)(b))

The conclusion of Drs Grant and Robinson in their post-mortem report (Crown Production 34) was that Miss McIntosh died as a result of immersion in water.

In his evidence Dr Grant distinguished his conclusion from a finding of drowning. He acknowledged that there were signs which one could attribute to classic drowning, but they were not striking. He explained that Miss McIntosh might well have sustained a reflex cardiac arrest or "dry drowning" as a result of her immersion and the possible intake of water which, in turn, may have been contributed to by hypothermia and exhaustion as a consequence of her immersion and attempts at survival. Equally, however, he explained that reflex cardiac arrest might have occurred at any time after immersion in water as a consequence of inhalation at an inopportune time relative to wave motion. It could have occurred at any minute or indeed at any second.

Consequentially, Dr Grant found it impossible to be specific as to a time of death. He considered it more likely to have happened earlier on in the period between the capsize and Miss McIntosh

being recovered. However, even had she been recovered within a minute or two of when she was last noted alive there was no guarantee that she would have survived to then.

In the circumstances, it is impossible to be any more precise than to determine that Miss McIntosh died between 10.15am or thereby and 1.30 pm or thereby on 3 August 2007, when her body was recovered (the timing of the recovery can be taken from the evidence of Mr Mair and Coastguards Joseph Johnston and Robert Currie and Mr Roderick Campbell); and that the cause of her death was immersion in water in consequence of the accidental capsize of the boat.

As for the cause of *the accident* resulting in death there are two immediate potential causes which ought to be considered. (i) The use of the ATLJ and the difficulties it might have caused in permitting escape from under the upturned hull. (ii) The presence of water in the boat and its movement therein resulting in capsize.

2.2.1 The lifejacket

Miss McIntosh's body was found with the ATLJ inflated. Sgt Lorrimer's evidence was that Miss McIntosh's lifejacket was not inflated when she was under the upturned hull. The lifejacket required manual deployment. It is therefore a reasonable conclusion that at some point Miss McIntosh inflated her lifejacket.

Evidence was lead from Lt Col John Adams of the Army's Land Accident Prevention and Investigation Team (LAIT) as to a demonstration undertaken by the Royal Marines at Instow on 3 October 2007 as to the practical effect of the deployment of an ATLJ if the wearer was in circumstances similar to that experienced by Miss McIntosh. The report is Crown Production 30. The conclusion was that with an ATLJ inflated Miss McIntosh was unlikely to have been able to have got out from underneath the upturned hull.

However, because we know not precisely how or when Miss McIntosh died nor what attempts, if any, she made to escape after deploying her lifejacket we cannot say that the ATLJ, caused her death or that it restricted her egress to the point that that restriction amounted to a accident resulting in death. For aught known, Miss McIntosh may have died at any time after the deployment of the lifejacket but not in consequence of its deployment and before she had time to attempt what would have been a futile attempt to get out.

That is not to say that the issue of a less buoyant lifejacket might have meant that her death *might* have been avoided, but that is an issue relevant to section 6(1) (c) of the Act.

2.2.2 Water in the boat and its movement therein

In my submission, the immediate cause of the accident resulting in death was the instruction given by Maj McCallum for those within the boat to move to the right.

Here the Court has heard evidence from Lt Col Adams, speaking to the report already referred to from the LAIT and from Paul Mara, Chief Powerboat Instructor for the Royal Yachting Association and Charles Davey, a marine surveyor with the Maritime and Coastguard Agency.

Mr Davey examined the boat which had capsized. Whilst some minor damage to the hull was noted he did not consider that the buoyancy of the boat had been significantly compromised by the damage found. He undertook a static heel test to the boat, with marines in place of cadets. With one engine attached to the port side the boat heeled slightly but remained seaworthy. He then sought to perform a dynamic heel test *with water in the boat and* the marines moving across the boat, port to starboard. Whilst he was unable to take measurements he noted (and spoke to his report, Crown Production 29) and the Court has seen (Crown Label 9) a pronounced heel to starboard, aggravated by the free water movement within the craft, and the loss of freeboard at the aft end of the boat.

The LAIT performed a similar test with similar results (Crown Production 30 and Crown Label 10).

The evidence of the cadets and Adult Instructors on Maj McCallum's boat was that Maj McCallum gave an instruction to those on the boat to move the right. The effect of that movement was to cause water which had accumulated in the boat, which heeled slightly to port because of the presence of only one engine to the port side, to move to the starboard side.

What none of the experts did was to see whether the boat would have capsized on the instruction to move to the right if the boat did not have water within it.

Thus, whilst it may be concluded that with the combination of the water and personnel the boat capsized, it is not possible to say that but for the water's weight the boat would not have capsized nor that the water displacement caused or materially contributed to the capsize. For aught known the boat may have capsized as a result of the movement of personnel alone. However, the instruction to move to the right was given by Maj McCallum in consequence of him becoming aware of the presence of water in the boat. To that extent it is relevant to give consideration to the presence of water in the boat.

The evidence here did bear a thread of consistency. Liam Neish's evidence was that as the boat moved out into the Loch the water started to get choppier. Kirsty Leask said that water was coming on board; that they then slowed down and started to turn around at which point waves started to get in over the side. Jake Watson's evidence in chief was to the effect that Maj McCallum had sought to chase Lt Campbell's boat, then slowed down, turned and as it turned the boat began to fill with water. In cross examination by Mr Di Rollo however, under reference to his earlier police statement which he accepted was "closer to the truth", his evidence was that as the boat accelerated to catch Lt Campbell's boat there was a fair bit more sprayed water

coming into the boat, before the engine cut out. Sgt Shaw did not give evidence as to the introduction of water onto the boat. Sgt Duncan's evidence was that the boat was not moving fast when Maj McCallum gave him an instruction to lower one self-bailer and to accelerate the boat in a circle. He looked down and saw his feet were in water. Sgt Lorrimer's evidence in chief was that a wave hit the boat whilst it was turning after an attempt had been made to attract Lt Campbell's attention by firing the machine gun. In cross examination, however, under reference to her earlier police statement she stated that water had been coming into the boat from each side and that water had been coming into the boat before it came to a stop. Maj McCallum's evidence was that there was less than one half inch of water on board due to spray when he let the boat drift in advance of turning at which point he became aware of water coming into the boat. It is submitted that there is a common thread to the evidence that the boat had taken on water whilst the boat was moving out into Loch Carnan. At that time two self bailing devices at the rear of the boat, which required to be manually deployed, had not been deployed. Had they been deployed any water accumulating in the boat would have cleared the same whilst the boat was proceeding out into Loch Carnan. The purpose and effect of the self bailers was talked to by Lt Col Adams and Mr Mara. The accumulation of water in the boat was caused or at least materially contributed to by the failure to deploy the self bailers at the commencement of the journey.

It is submitted that in terms of a formal determination in terms of sections 6(1)(a) and (b), 1976 Act , the court might, against the following additional findings in fact:

<u>The cause of the capsize</u>

19. The boat carrying Miss McIntosh was seaworthy. However, the boat was designed to operate with two outboard motors. On the day of the accident the boat was operated with only one outboard motor located in an offset position to the port side. As already noted, Sgt. Shaw's was also positioned on the port side, although not occupying any seat on the boat. Further, as also already noted, a General Purpose Machine Gun was mounted to the front of the boat. As a consequence, the trim of the boat was affected with a lean to port and a lowered bow.

20. The boat was equipped with two self bailing devices to the rear. The self bailing devices consisted of a hose of canvas-like material which required to be manually unhooked from the stern of the boat and lowered into the water. The effect of forward movement of the boat would be to cause water accumulating in the boat to drain through the hose and out of the boat.

21. The self bailing devices were not deployed as the boat left Loch Carnan pier. The self bailing devices were deployed on the instruction of Maj McCallum immediately before the boat capsized.

22. As a consequence of the move of personnel on the boat to the right on Maj McCallum's instruction so to do the water which had accumulated in the boat, particularly to the port side in consequence of the list to port, moved to the starboard side.

23. But for the presence of water in the boat there would have been no need to give an instruction to those on the boat to move to the right.
24. Had the self bailing devices been deployed as the boat left Loch Carnan pier water would not have accumulated in the boat.
25. The capsize occurred at or about 10.15am.

Cause of death and the role of the ATLJ

24. The conclusion of the pathologists who carried out a post-mortem examination of Miss McIntosh that she died as a result of immersion in water reflects the fact that it is not known whether she died more specifically of drowning or of reflex cardiac arrest sometimes known as "dry drowning". Miss McIntosh's body showed signs of aspiration of water which were classically attributable to drowning, but these were not striking. Reflex cardiac arrest could have occurred at any time after immersion. A precise time of death cannot be determined.
27. Miss McIntosh's body was found at about 1.30 pm. The ATLJ she was wearing was inflated. Miss McIntosh inflated her own lifejacket whilst under the upturned hull. It is not known whether after the inflation of the lifejacket Miss McIntosh attempted or was able to attempt an escape.

make the following determination:

(a) That Kaylee McIntosh, born on 10 October 1992 of Roa Emah, Camalain, Fyvie, died between approximately 10.15 am and 1.30 pm on 3 August 2007 at Loch Carnan, South Uist following the accidental capsize at or about 10.15 am of a boat on which she was a passenger.

(b) That the cause of death was immersion in water in consequence of the accidental capsize of the boat. The cause of the accident resulting in death was the movement of passengers within the boat to one side, on the instruction of Maj George McCallum, resulting in the capsize.

2.3 Reasonable precautions, if any, whereby the death and any accident resulting in death might have been avoided (section 6(1) (c))

Looking firstly at the immediate cause of the capsize, it is evident that deployment of the self bailers when the boat first set out was a precaution which was both reasonable and which, had it been done, might have avoided the accumulation of water in the boat and its contribution to the capsize and thus, it is submitted, their deployment was a reasonable precaution which might have been taken.

Beyond the immediate cause of the capsize one can also consider whether the boat ought to have been on the water at all; and if so what precautions might have been taken.

It is a sad feature of this case that the Army had prescribed detailed rules which ought to have been followed and which, had they been followed in various respects, not being unreasonable precautions to take, might have avoided the accident and Miss McIntosh's death.

Those precautions were prescribed by the Army in JSP535, the Cadet Training Safety Precautions (2006) publication. In this regard, it is submitted that the following findings in fact might be made.

Safety system in place

28. The Army have in place a detailed system of regulation and instructions to prevent or at least minimise the risk of accidents occurring during Army Cadet Force activities. The Joint Service Publication 535, Cadet Training Safety Precautions (2006) (sometimes referred to as the "Red Book") is issued to all ACF Officers and Adult Instructors. Although described as "guide" or "aide memoire" it contains detailed provisions as to "Rules of Safety, which are to be obeyed when training cadets." (para. 0101). Cadet force members responsible for planning, organising and supervising potentially more dangerous forms of training, including training afloat are to be properly qualified so to do. (para. 0201). All cadet activities are to be conducted in accordance with a safe system of training which was to include a risk assessment where necessary or considered appropriate. (para. 0201). The particular requirements of any risk assessment are set out in Section 5 of the Red Book. Regard is to be had to four elements to ensure a safe system of training, namely the safety of persons, the use of safe equipment, the use of safe practices and the use of a safe place of training. Training on water is identified as "in many ways the most hazardous environment" and is dealt with by way of specific rules (para. 2003).

29. Section 21 of the Red Book –"Prevention of Accidents During Training on Water" - details those specific rules. They provide, amongst other things:

> **"Safety Policy**
>
> **2103. Principles – the main elements on which safety is based are:**
> **a. The correct training and supervision of cadets by adults who have appropriate qualifications and expertise in the activity concerned.**
> **b. The provision of a safety organisation, properly trained and correctly equipped, to help individuals who get into difficulty.**
> **c. The use of properly maintained craft, with the appropriate seaworthiness certification and safety equipment for the category of water in which they are to be operated.**
> **d. A properly conducted risk assessment for the activity, which includes the weather, sea and/or water conditions expected for the duration of the planned activity.**
> **2104 – Personal Flotation Devices. All cadet personnel undertaking authorised training must wear the appropriate MOD issued personal flotation device when taking part in afloat training in accordance with DCI Gen 10/05 dated 28 January**

2005. The Matrix at Annex A to this Section shows the recommended lifejacket/buoyancy aid for different Cadet activities.

...

Non-swimmers and Swimming Tests

2109 – Non-swimmers should not be automatically debarred from activities on water. The qualified staff conducting the activity should use their discretion as to whether any individual should or should not participate. If non-swimmers do undertaken training on water they should be clearly and visibly identified, wear approved life preservers and be given additional supervision during periods in or on the water.

...

PART 2-MILITARY TRAINING EXERCISES

2111 – Training on water can take place under two different types of conditions, and the rules, which follow are written accordingly:

a. In shallow non-tidal inland waters which are not more than 3 feet deep with a firm weed-free bottom, when the rules for safety, although the minimum, are to be strictly obeyed.

b. In deeper non-tidal or tidal waters where conditions are potentially more dangerous because of wind, currents, rocks and other hazards, and distance from land when the rules for safety are more comprehensive and require greater emphasis.

Note: these definitions and the rules which follow do not apply to canoeing, which follows rules laid down in AGAI, Volume 1, Chapter 18, Annex D. See also paragraphs 2131 and 2137.

2112 – Good planning and sound preparation play a major part in achieving safety in any form of training, particularly when there is an element of danger. There is no alternative to a careful reconnaissance beforehand by the adult(s) responsible and, when training on water, the appropriate authorities must be consulted about tides, depth of water, currents, hazards and weather.

2113 – Contingent/County Standing Safety Orders for Training on Water. Cadet Force Adult Volunteers (CFAV) responsible for exercises and expeditions involving a water hazard should prepare 'Safety Orders for Training on Water', to be issued by CCF Contingent Commanders and ACF County HQs. The order should be based on the checklist below:

a. Limits to the area in which the activity is to take place.

b. Details of the maximum numbers, which may be carried in boats or on rafts and the minimum crew requirements.

c. Requirements for safety boats.

d. Requirements for communications.

e. Qualifications required by instructors/leaders/helmsmen.

f. Requirements for pre-training.

g. Details of safety equipment to be worn or carried.

h. Details of safety drills to be followed and practice to be carried out.

i. Identification of non-swimmers.

2114 – Safety Organisation. The essentials of any safety organisation are:

The Safety Officer

The Safety Boat

Safety Drills and Practices"

There then follows a number of Safety Rules for training in shallow inland non-tidal water.

"2115 – The following rules are the minimum required safety precautions to be taken.

2116 – Safety officer. A CFAV must be nominated as Safety Officer. The Safety officer must be suitably qualified (Annex C to AGAI Volume 1 Chapter 18) and should be experienced in training of this type. The Safety officer's duties are:

a. To be briefed on the form and scope of training to be undertaken.

b. To carry out a reconnaissance of the training area and to establish the extent of any local dangers, such as hazards to navigation, and where appropriate to consult the local authority. Where cadets are likely to be in the water, either intentionally or otherwise, the bottom must be checked for rocks and other projections which could cause injury.

c. To advise the Contingent Commander/Cadet Commandant on:

(1) the Safety organisation required.

(2) the content of Safety Orders.

d. To organise the safety arrangements for the exercise or expedition including the safety boat and crew, look-out(s), communications and medical cover.

e. To make sure that all adults and cadets taking part are thoroughly aware of the possible dangers and are practised in safety drills.

f. To establish the availability of resources which may be required and how to obtain assistance.

g. To be present throughout training and ensure that safety orders are obeyed by all concerned.

h. To command the safety organisation and to take charge in an emergency.

2117 – Safety Boat

a. The crew of the safety boat must consist of a minimum of two CFAV or senior cadets experienced in training on water, good swimmers and trained in emergency drills. At least one must be trained in First Aid, particularly the mouth-to-mouth method of resuscitation.

b. Two paddles (or a pair of oars) and two blankets are required in the boat together with other stores which may be considered necessary for an emergency.

d. The boat must be capable of rescuing the crew and passengers of the most heavily manned boat/raft.

2118 – Safety Drills. The following are examples of safety drills which should be carried out where applicable and cadets practised in them before training starts:

a. Fitting and use of life preservers or whatever personal safety equipment may be considered necessary, including the wearing of approved life-jackets/buoyancy aids when on the water.

b. The identification of non-swimmers so that they may be kept under constant supervision.

c. The identification of non-swimmers so that they may be kept under constant supervision

d. The removal of web equipment before going on the water and the securing of weapons to the boat/raft so that they are not carried by cadets.

e. Refusal to allow the following:

(1) Sitting on the gunwale or standing in a boat when afloat.

(2) Dangling legs over the gunwale.

(3) Any boat or raft to be out of sight of the safety boat.

f. Emergency action 'man overboard' drills.

g. Signals (hand, voice or flat) to be used in an emergency."

The Red Book continues:

"Safety Rules for Training on Deep Tidal or Non-Tidal Waters where Wind Currents, Hazards and Distance from Shore affect Safety

2119 – These conditions, which include those encountered at sea, require a much greater emphasis to be given to safety, the detailed rules for which are in AGAI

Volume 1, Chapter 18 which must be strictly obeyed, particularly paragraphs 18.031 – 18.045 and Annex C. "

The reference to AGAI is a reference to a further Army publication, Army General and Administrative Instructions.

The Red Book also continues:

2135a – Personal Safety Equipment

a. Buoyancy aid – One for each person, to be worn at all times to enhance the individual's buoyancy and provide impact protection for the body. See paragraph 2014 and Annex A to this section."

Annex A provides that on power boats the recommended life jackets with buoyancy rage of 150 to 275 N.

30. Minimum qualifications for the supervision of cadet afloat training were detailed in the Red Book. (para. 0217). For powerboat activity, the highest specified qualification was a Royal Yachting Association (RYA) Safety Boat Certificate (Tidal).

31. AGAI Chapter 18 provides and did provide at the time of the accident that the instructions contained therein applied to regular, reserve/volunteer and cadet forces. (para. 18.010). Safety Orders contained within AGAI Chapter 18 provide:

"18.033 – It is a chain of command responsibility to publish safety orders and to ensure that their contents are properly disseminated, for all forms of training or activity listed in this instruction which takes place in their area of responsibility. Safety orders are to be in accordance with the details set out in the relevant paragraphs and annexes in this instruction and take into account local conditions. Safety orders may be in the form of:

a. Standing orders for a type of training activity.

b. Standing orders for a particular location such as a permanent river-crossing site, water sports or sailing club.

c. Specific written orders for a particular exercise or adventurous training expedition.

d. A written safety brief given verbally to participants (normally delivered on site).

18.034 – Contents of Safety Orders – the contents of safety orders will vary according to activity and location but, as a minimum, should include:

a. Reference documents.

b. Limitations imposed by:

(1) Ground/water hazards.

(2) Weather

(3) Equipment

(4) Qualification/s

(5) Standing Orders

c. Composition of the safety organisation.

(1) Personnel, numbers, qualifications.

(2) Equipment.

d. Details of planned pre-training.

e. List of safety drills and immediate actions required in emergency (including contact details for the emergency services).

f. Location of risk assessment and who conducted it.

g. Details of safety briefings to be provided.

h. Communications plans.

18.035 – The requirements of the Safety Organisation will depend on the scope of the training and on local conditions. Two key elements are:

a. The Safety Officer.
b. The Safety Boat (for adventurous training, sport and recreation, safety boat operators must be a qualified Royal Yachting Association (RYA) Safety Boat Operator or recognised equivalent).

18.036 – Safety officer – A Safety Officer is to be nominated for and supervise all training in, on or over water….

a. Qualifications. For military training he/she must be sergeant or above and qualified on one of the courses listed below:
(1) Watermanship Safety Officer (Basic), Category A & B Waters.
(2) Watermanship Safety Officer (Advanced), Category C, D and Inshore waters
b. Duties of a Safety Officer. Safety Officers are not to carry out any additional duties concurrently. In adventurous training or sport the senior qualified instructor should be the safety officer where possible. Duties of a Safety Officer include:
(1) To be briefed on the form and scope of the proposed training.
(2) To carry out a safety reconnaissance of the training area to establish the extent of any local dangers such as current, tides, weirs or hazards to navigation. Where appropriate he/she is to consult with the local authority.
(3) To advise the commander on:
(a) The safety organisation required.
(b) The requirement for, and the contents of, safety orders, if none exist for the training being carried out.
(c) The need for briefing troops taking part and for practising safety and survival drills.
(4) To establish the availability of other resources, which may be required, for example, lifeboats or search and rescue helicopters and how to obtain assistance.
(5) To command the Safety Organisation, if necessary, from the safety boat.
(6) To take charge I an emergency until relieved by a suitably qualified superior officer.
(7) To control the VHF safety radio net.
(8) To be responsible to the commander of the training for the safety of personnel and equipment by ensuring that the safety orders are obeyed.

18.037. The main requirements for a safety boat area listed below. The requirement to provide safety boats is given in the relevant paragraph for each activity.

a. Suitability. The boat must be suitable for its task. Except where specifically stated, safety boats require a reliable and powerful enough means of propulsion capable of dealing with local water conditions. It must have the capacity to accommodate both the mandatory crew and the rescued personnel.

b. Service and Unit Boats. Details of Service boats and their suitability for use as safety boats are set out in Annex B to this Chapter. Boats provided from welfare or unit funds are to be checked by qualified personnel before being used for safety purposes.

c. Engines. The requirement for the inspection and maintenance of Service boat engines is laid down in the relevant user handbook. Engines obtained through welfare or unit funds are to be maintained to the same standard as laid down for Service engines of a similar nature and a record of maintenance kept. Unless specifically exempt by the National Governing Body (NGB) for that particular activity, all Outboard Motors (OBMs) are to be properly fitted with propeller guards designed for that OBM propeller.

d. Crew. The actual number of the crew is to be determined by the Safety officer but is never to be less than 2.

(1) Military training. For military training the helm must be a qualified safety boat operator and the crewman a basic boat operator. One of the crew is to be first aid trained with a particular knowledge of resuscitation.

(2) Adventurous Training or Off Duty Pursuit. Crew qualifications for safety boats used for AT or challenge pursuits may be found in the Annexes to this Chapter.

e. Communication. Suitable communication equipment must be carried within the boat as determined by the Safety officer's Risk Assessment; this will normally be by VHF radio. Careful consideration is to be given to the type of radios and the qualification of operators when working in Cat C&D waters."

Annex B identifies the rigid raiding boat on which Miss McIntosh was a passenger as a suitable safety boat.

"18.039 – Number of Safety Boats. It is unlikely that all craft or vehicles will capsize or get into difficulty at the same time. The safety boat, or if necessary boats, are to be capable of rescuing the crew and passengers of the most heavily manned craft or vehicle on the water. On occasions more than one safety boat will be required; as a guide, a scale of one safety boat for every 6 vehicles or craft on the water is recommended by day and by night. One safety boat for every 15 M3 Rigs is acceptable on amphibious engineer training.

18.040 – Equipment on Safety Boats. Each safety boat should be scaled with the appropriate safety equipment that should include the following:

a. An anchor made fast to the boat by a cable of at least 3 times the maximum depth of the water (when anchoring is possible).

b. A boat hook.

c. A bailer (except Combat Support Boat (CSB)).

d. Powered boats are to carry a pair of oars or paddles (except CSB).

e. A lifebuoy or similar type of SSE system provided by the technical authority.

f. Suitable first aid kit, stretcher and sleeping bag (may be held on the bank when the size of boat precludes this).

g. A clearly visible buoy, line and sinker to mark obstacles and lost equipment.

h. A radio with spare batteries. VHF radio net is mandatory during all military training on water whether by day or night (Para 18.044).

i. All boats used in inshore, coastal or tidal waters are to carry:

(1) At least 2 rocket parachute red flares, 2 orange smoke signals and 3 hand held red flares.

(2) At night, lights as dictated by the International Regulations for the Prevention of Collisions at Sea (IRPCS).

(3) Night vision equipment and a man overboard recovery system if issued and applicable."

Other general principles identified included:

> **"18.044 - Radio Net. A safety radio net is mandatory during all military training on water whether by day or night. Marine band VHF radios must be used when operating on Cat C, D and inshore waters as dictated by MCA regulations for direct communications with the coastguard and other emergency services. Operators of marine band radios are to be trained and licensed under current Radio Communications Agency regulations.**
> **...**
> **18.046 – Safety Drills. The following are examples of safety drills to be adopted where applicable and trainees practised in them before training starts:**
> **a. SSE. The correct fitting and use SSE, or other personal safety equipment (breathing devices, lights etc).**
> **b. Wearing Equipment. The method of wearing equipment under life preservers and the method of securing larger items of equipment such as bergans radios and platoon weapons.**
> **c. Non-swimmers. The physical identification of non-swimmers by visible markings and the briefing of all concerned as to who they are.**
> **d. Evacuation Drills. These will be different for each type of craft or vehicle.**
> **e. Man Overboard Drills. Action to be taken by a safety boat to recover a man overboard.**
> **f. Signals. Those to be used in an emergency."**

The provisions of the Red Book and AGAI Chapter 18 referred to were in force at the time of the accident which resulted in the death of Miss McIntosh. These provisions are set out at length as they palpably demonstrate the extent to which the Army recognised safety concerns arising from water based activities and sought to ensure that those with the responsibility of implementing and supervising such activity were aware of the issues arising and were required to ensure that the activity was conducted within defined parameters.

2.3.1 Discussion

Whilst it is appropriate to identify steps which might have been taken which might have avoided the accident, it is also appropriate to consider the extent to which they were not complied with. There has been evidence of a risk assessment purportedly prepared by Maj McCallum in respect of the use of boats at the annual camp. The Army has not sought to defend the inadequacy of the risk assessment of Maj McCallum, whenever it was prepared. It has not sought to suggest that the activity on which the cadets were embarked was other than of the nature of a military training exercise in deep tidal waters to which, by virtue of para. 2119 of the Red Book, the provisions of AGAI 18 applied. The Army has not sought to deflect criticism that there were no safety orders, no proper safety officer, nor safety boat. Against that, it would be appropriate to find in fact:

32. These provisions of the Red Book and AGAI Chapter 18 were all reasonable precautions which, if adhered to, *might* have avoided the capsize and Miss McIntosh's death. The activity on which the cadets were embarked was of the nature of military training. It was to take place in deeper tidal waters. The requirements of AGAI 18 applied in addition to the general provisions on risk assessment in the Red Book. An adequate risk assessment ought to have been carried out. That ought to have been dynamic in nature, assessing conditions as they appeared on the morning. An appropriate risk assessment might have concluded against the carrying out of the exercise. Standing orders ought to have been developed in line with the requirements of para. 18.034 of AGAI 18. A safety officer, not charged with other duties, ought to have been appointed with the qualifications and duties listed in para. 18.036 of AGAI 18. A safety boat of the suitability detailed in para. 18.037 of AGAI 18 ought to have been provided. Standing Orders, if promulgated, might have either precluded the activity, set constraints on its conduct which if not met would have precluded the activity or determined safety drills and procedures to be carried out which if implemented might have prevented the capsize, facilitated Miss McIntosh's escape in the event of a capsize or provided a co-ordinated rescue plan. A designated distinct safety officer might have prevented or put a halt to the activity in good time if the risk assessment did not otherwise preclude it. Failing which, a safety officer might have facilitated a coordinated and comprehensive successful rescue. A safety boat might have provided a central point of rescue and co-ordination. Safety drills and practices might have been developed to deal with the risk of capsize and practiced beforehand. The provision of a lifejacket within the range identified in Annex A might have permitted Miss McIntosh to escape had she able so to do. In these respects the system in place was not complied with. Had it been complied with the capsize and Miss McIntosh's death might have been avoided.

It is submitted that the following determination can be made under s.6 (1) (c), 1976 Act:

(c) That (i) the deployment of the self bailers on the boat as it set off from the pier at Loch Carnan; and (ii) compliance with the provisions of the Army's prescriptive Cadet Training Safety Precautions (2006) as contained in JSP 535 and, as applicable, AGAI Chapter 18, were reasonable precautions which, if taken, might have avoided the capsize of the boat and Miss McIntosh's death.

2.4 Defective system (Section 6((1) (d))

The Court is then required to consider whether there was any defect in any system of working which contributed to the death or the accident resulting in death (section 6(1) (d), 1976 Act.)

It is submitted that in so far as JSP 535 (and by reference AGAI Chapter 18) prescribes a detailed system of working which might have avoided the accident and Miss McIntosh's death had it

been properly implemented, there was no defect in the system laid down. That is not to say that implementation of that system was properly carried out, nor for that matter that implementation of the system was properly supervised. But that is not what is required to be assessed under section 6(1) (d), 1976 Act. There is no determination to be made in terms of section 6(1) (d), 1976 Act.

2.5 Other facts relevant to the inquiry (section 6(1) (e)

What would be appropriate to record, in light of the public interest and the size of the ACF, are the steps taken by the Army after this tragic accident to deal with immediate and long term risk of re-occurrence.
The Court has heard evidence from Lt Col John Adams and Col David Tobey as to the immediate and other steps taken by the Army. Their evidence was not disputed and so it is suggested that the following determination and findings in fact might be made.
Determination:
(e) That the Findings in Fact 31 to 35 are facts relevant to the circumstances of the death.
Findings in Fact:
33. Following the accident the Army's Land Accident Prevention and Investigation Team investigated the accident and reported on 4 September 2007.
34. By 12 November 2007 the Army's Chief of Staff, Reserve Forces had issued instructions, in the form of a Memorandum dated 12 November 2007, to the ACF requiring all ACF activity not identified in the APC syllabus, regardless of whether a risk assessment had been completed or not, to be reviewed by the relevant Brigade Training and Safety Adviser (TSA). The instructions required all training to be officially authorised by the relevant cadet commandant. The practical effect of that instruction is to require all ACF training not part of the ACF syllabus to be scrutinised by an Army officer with training in matters of health and safety and obliged in terms of military law, and subject to military discipline in the event of failure so to do, to advise the relevant ACF Commandant if the requirements of the Red Book and AGAI Chapter 18 have not been complied with. The TSA can call on the Staff Officer Cadets for assistance, if required, in the consideration of any proposal. If unhappy with what is proposed he can report the matter to the relevant Army brigade commander to whom the ACF Commandant is under the command.
35. The 12 November 2007 instruction also reinforced the requirement to comply with the provisions of the Red Book and the need for carrying out headcounts at appropriate times when working with cadets.
36. The 12 November 2007 instruction also required cadet units to submit an audit of all boats held. That has since been done.
37. The Army's Chief Environmental Safety Officer has conducted a review of training within the ACF. As a consequence the training provided to ACF officers in health and safety matters is being reviewed and improved. The gifting of MOD boats to ACF units has ceased. There has been a return of lifejackets issued to ACF units which have not otherwise been authorised for use by them. An audit and listing of all water safety equipment held by cadets is to take place. The need for the computer system for the issue of water safety equipment, designed to prevent the issue of inappropriate equipment to ACF units, to effectively so do has been acknowledged. The Army's regulations affecting the safe conduct of activities by the ACF are to be centralised, codified and made available electronically. The ACF syllabus of activities is to be reviewed. These are all parts of an ongoing review of training within the ACF.

3. George McCallum

May I start this submission by thanking your Lordship for the consideration that you have shown to me during this Inquiry. I am very grateful that you treated me as an Interested Party and, although I did often not take up your invitation to put questions to the witnesses, I appreciated being offered that opportunity.

I am very conscious of the devastating impact that the dreadful tragedy that occurred on 3rd August 2007 has had on Kaylee McIntosh's parents, wider family and friends. This accident has also had a huge impact on my family and myself (although I appreciate in a much different way from the McIntosh family who have lost a loved one). Barely a day has passed since the accident that I have not gone over the events in my mind and considered how I might have done things differently. There is perhaps a natural tendency to blame oneself for everything that went wrong on that day. I am therefore grateful to your Lordship for the fair and thorough manner in which this Inquiry has been conducted as it has helped me to realize that I may not be the only person who bears responsibility for the events of that day. I do, however, acknowledge, as I did in Court, that I do bear certain responsibility for my own actions and I do not seek to abrogate that responsibility.

I have set out my submission against the four categories which make up the safe system of training. In doing so, I seek to draw to your Lordship's notice to my perception on a number of important issues tempered by the evidence which has been presented to the Inquiry.

Safe Person

There was much discussion on whether or not I was a suitable person to conduct the watermanship activity. I had no doubt in my own mind that I was fully competent to do so. I was a properly qualified coxswain and had recently passed my instructor's course with the Royal Yachting Association. Lieutenant Colonel Adams questioned in his evidence whether or not I was sufficiently experienced – particularly on this type of craft? I believe that I was sufficiently experienced but I readily concede that I did not receive the operating manual with the Rigid Raider Mark 2 and that I was not aware that the recommended practice by the Royal Marines was to deploy the self bailing trunks on departing from the quayside. However, in my opinion, this did not contribute to the accident. Liam Neish testified that very little water had come into the boat before I decided to slow down and wait for the lead boat to turn round. It was only while moving at low speed, at which time the self bailers would not have been effective, that a wave came over the stern and entered the boat. As I stated in evidence I then deployed one of the bailers and tried to accelerate. Unfortunately the engine had stalled and the capsize occurred shortly afterwards.

There is one aspect in which I now think that I was not qualified to conduct training. I had not received any instruction on the ACF approach to risk assessments and was relying on the information I had acquired from the Strathclyde Fire and Rescue Service while preparing for adventurous training. I did not have the correct proforma; nor did I realize that the proforma needed to be passed to the Training Officer well in advance of the activity. Furthermore, I was not aware that this type of activity required authorization from the Brigade Headquarters. I was very pleased to learn from Colonel Tobey's evidence that, in the future, Cadet Executive Officers will receive this training.

Safe Equipment

I believe that there was general agreement that the boats were properly serviceable and that the engines were appropriate for the proposed use with cadets. I took the trouble to consult experts on the best type of engine and was assured that a single 200HP engine would be perfectly suitable for our activities. The engine and steering were professionally fitted. Much was made of the fact that the cadets were provided with the Assault Troop Life Jacket (ATLJ) and that there was a directive that specifically stated that these life jackets were not to be used by cadets. Unfortunately, this direction was not made available to any of the cadet Battalions under Highland Reserve Forces and Cadet Associations command. I acknowledge that in the Joint Service Publication 535 (the Red Book) there is a table that identifies suitable life jackets for different types of activities. However, this only provided a newton level and not specific life jacket types. Also, prior to this inquiry, I was of the impression that the highest level of newtons available in a life jacket was 275 newtons and this is the acceptable level shown within JSP535 (Red Book). I thought that it was the best life jacket for use with this craft. All boating carries a slight risk of man overboard and I wanted to be sure that the cadets were equipped with the safest life jackets. In my evidence, I described the lengths that I had to go to in order to acquire these life jackets. I do feel bitterly let down that through the entire process none of the experts thought fit to mention to either myself or the **three instructors that I sent on the sea survival equipment and Life Jacket, Maintenance and Supervisor's Course** that the ATLJ was not suitable for cadets. Indeed you heard from Lieutenant Colonel Adams that there should have been a 'computer block' on issuing them to cadet organizations which

unfortunately failed on three separate occasions over a period of 18 months. I am pleased to learn that this has been rectified and is now properly in place.

Safe Place

I had taken part in an exercise previously with the Territorial Army on which we had traveled by boat between Loch Carnon and Loch Skipport. I was familiar with the area, as was Lieutenant Campbell, my more experienced coxswain. I acknowledge that I did not obtain the latest weather forecast on the morning of 3 August 2007and was using a three day forecast. However, I do have experience of operating in this area and was aware that the weather was likely to change during the day. On my arrival at the jetty my assessment (along with that of the other coxswains) was that the conditions were good enough to set out and I informed the other coxswains that continual assessments would be made en route. It became apparent to me that the conditions were not good enough to make the journey without the cadets becoming extremely wet as a result of the rain becoming heavier and so I made the decision to turn round. Lieutenant Milne saw my hand signal and headed straight back to the jetty. Lieutenant Campbell continued on ahead at a pace. I tried to contact him by radio and by firing the machine gun but without success. I know that the radios were working properly because they were checked prior to leaving the jetty; however Lieutenant Campbell said in his evidence that he may not have heard my call over the noise of the engine. In hindsight it would have been better had I (or one of the other coxswains) conducted a reconnaissance as part of the dynamic risk assessment process before embarking the cadets by boat to their destination and I bitterly regret not doing so. I believe that at no stage were the boats operating in conditions beyond their capabilities.

Safe Process

In my evidence I acknowledged failings in the planning that I carried out for the activity, in particular the lack of detail in my risk assessment and not having produced a specific set of safety orders. I also accept that I could have contacted the Coastguard and provided them with the details of the planned activity.

There were, however, a number of shortcomings by other individuals and more generally by the Ministry of Defence that undoubtedly played a part. The Ministry of Defence has provided you with a table showing the measures that they have either taken or are about to take. The fact that the Ministry of Defence is prepared to implement a number of very expensive measures represents an acknowledgement on their part that the system was not wholly fit for purpose. In particular I am very pleased to note that additional training on Health and Safety will be given to permanent staff such as the Cadet Executive Officer. The proposed annual road show by the Cadet Training Centre will also play an important role in ensuring that Cadet Battalions are kept up-to-date on key changes to policy and safety issues which were not in place at the time of the accident; this will also ensure that all qualifications are kept up-to-date and current. I also note that the Chain of Command is reminding Commanders at all levels of their responsibilities with regard to the safe system for training.

The evidence given during the inquiry made it apparent that neither Colonel Taylor, Captain Gatt or Mr Hay appeared to understand the requirements for them to seek authorization from the Brigade Headquarters for activities out with the authorized list. I was good to hear of the options for improving the level of support from Training Safety Advisors. The importance of this support cannot be overstated and I feel that if the correct support and advice had been available then this tragedy may have been prevented. Evidence was given by Colonel Taylor, Lt Colonel Donald and Captain Gatt to the effect that the Brigade Training Safety Adviser was present on the reconnaissance in November 2006 and did know about the proposed boating activity. I do feel let down that he did not provide the appropriate advice to me, the Training Officer or the Commandant regarding the requirement for external authorization.

The Army cadet movement provides fantastic opportunities for young people to develop their self-confidence, self-discipline and team working. Although many of the activities are military in nature the lessons that they learn will stand them in good stead throughout life. This is made possible by the efforts of a large number of volunteer instructors who do an outstanding job. Naturally an accident of this nature comes as a tremendous shock to them and you may feel that the evidence from many of the instructors was defensive in nature and that they were reluctant to accept

responsibility for any part of the accident. I have already indicated my own readiness to take responsibilities for the actions that lay within my control.

Whilst I appreciate that Vicky Lorimer was in a state of shock following the boat capsize, I have to commend her that she managed to help two other cadets escape from under the boat. However, it is regretful that she did not mention or indicate to me, whilst I assisted to inflate her life jacket that Kaylee was still under the boat. Major Adams, the officer in charge of the two star cadre, was at the jetty at the time of the accident. He would have had a nominal roll of his cadets and was ideally placed to ensure that all the cadets were properly accounted for. Quite fairly, he stated that he was not responsible for the cadets during the boating phase; however once he was aware of the accident, he should perhaps have taken control of the shore based part of the rescue operation by virtue of his rank and position.

At the time of the annual camp in the summer of 2007, I had worked with Colonel Taylor as his Cadet Executive Officer for two years and believe that we had developed a good working relationship. I know that he appreciated my efforts on his behalf and that I had earned his respect and trust. In his evidence, Colonel Taylor stated that he accepted my word when I told him that the planning for the boating activity was under control. However, as a result of evidence given during the inquiry, I believe that both the Training Officer and Training Safety Adviser should have also alerted Colonel Taylor to the requirement for external authorization for this activity; however, the fact that this did not happen seems to suggest that perhaps neither Colonel Taylor nor his training advisors had a clear understanding of what was required regarding their responsibilities.

ADDITIONAL INFORMATION

Availability of Reference Material

Colonel Tobey states that the Army have agreed to put in place a computer based website enabling Cadet Battalions easy access to all documentation and training reference material which they may require. This in itself demonstrates the Army's acceptance that Cadet Battalions previously had difficulty in obtaining such information.

Colonel Tobey also made reference to a new system by which Army Cadet Force Battalions who previously did not have access to the Army Defence Information Notice System or DINS (as was the case with 2 Highlanders Battalion) would now receive relevant information from any issued DIN directly from the Cadet Branch at the local Brigade.

Use of Boats

All boats issued or gifted to Cadets by the Military are not only used as safety boats but are also used to undertake all boating activities, e.g. Mark 1 Rigid Raiders issued to the Sea Cadets as fast response safety boats are also used as training vessels which I can confirm having been trained on the said vessels during my own training. This is not an uncommon practice as resources and funds do not allow for boats to be used for such a finite requirement as a safety boat only. I also believe that this is the understanding which Ian Clark had when I made my request to him.

Capsize Drills

As given in evidence by the Senior Powerboat Instructor from the RYA, capsize drills are not taught as part of their powerboat syllabus. I feel that should this have been taught to me in the course of my training with the RYA. I would have ensured that I conducted this type of drill prior to undertaking any boating activities and feel that this could possibly be something which could enhance the RYA instruction on the grounds of safety.

FURTHER INFORMATION AFTER READING OTHER PARTIES SUBMISSIONS

Boat Capacities

Sir, I have noticed in the Submission's from Mr Teale and on behalf of Mr and Mrs McIntosh, that there is some confusion over the carrying capacity of the Mk. 1 Rigid Raider Craft.

Crown publication number 15.Army General Instruction Vol. 1 Ch 18 Appendix 1 to Annex B page 18B1-1 Army Craft Technical Information Matrix

Mark 1 Rigid Raiding Craft – 2 Crew and 8 Passengers

CONCLUSION

You remarked in Stornoway at the conclusion of the evidence on the complexity of the Inquiry. I have tried to set out the position from my perspective in as logical a manner as I can. There is no intention on my part to duck responsibilities that were fairly mine: they will stay with me for the rest of my life regardless of the outcome of this Inquiry. Nevertheless, I do feel that I did not receive the level of support that I could reasonably have expected from the Ministry of Defence in the way that the system of safe training was being applied at that time or from certain individuals who could have done more either prior to the accident or in its immediate aftermath. May I finish by once again thanking you for the courteous manner in which you treated me during the Inquiry and for allowing me to make this submission for your consideration.

4. Derek and Lesley McIntosh, parents of the deceased.

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SUMMARY

The evidence led in this inquiry discloses that Kaylee McIntosh died as a result of numerous failures by those responsible for her care. It has been shown that the planning, preparation and execution of the exercise that resulted in her death completely ignored the written guidance laid down for such an activity in the "Cadet Training Safety Precautions" book and Safety Precautions in Training: The Hazards of Water"[1]. This guidance repeatedly states in clear terms that training involving water is in many ways the most hazardous outdoor environment and therefore the prevention of accidents on water is to be paid particular attention. The evidence discloses an utter disregard for basic precautions necessary to prevent an accident of the type that occurred. Those who had responsibility for ensuring that such guidance was understood failed to do so. Those who had responsibility for ensuring adherence to the guidance failed to do so. Those who had responsibility for following the guidance failed to do so. The failures identified in the evidence are systemic failures as well as individual failures. Any recommendations designed to prevent a similar tragedy in the future must identify and address these systemic failures as well as the failures by individuals. In the aftermath of the emergency created by the capsize of the Rigid Raiding Craft Mark II, there were opportunities to react in such a way as might have allowed a successful rescue. Because of failures by those responsible for the safety of the cadets those opportunities were missed. Finally, much of went wrong occurred because of a failure to exercise basic common sense. The disregard for the written guidance and the manifest lack of common sense raises serious questions about the fitness of the adult instructors at 2nd Battalion Highlanders Army Cadet Force to carry out their duties.

[1] SEE APPENDIX 2 FOR SPECIFICATION OF FAILURE TO FOLLOW JSP 535 AND AGAI VOL1 CHAPTER 18. AGAI stands for Army General Administrative Instructions

6. — Sheriff's **determination etc.**

(1) At the conclusion of the evidence and any submissions thereon, or as soon as possible thereafter, the sheriff shall make a determination setting out the following circumstances of the death so far as they have been established to his satisfaction—

(a) where and when the death and any accident resulting in the death took place;

(b) the cause or causes of such death and any accident resulting in the death;

(c) the reasonable precautions, if any, whereby the death and any accident resulting in the death might have been avoided;

(d) the defects, if any, in any system of working which contributed to the death or any accident resulting in the death; and

(e) any other facts which are relevant to the circumstances of the death

Description of Events

The Exercise

The tragedy occurred while Kaylee was taking part in the 2 Star Cadre exercise scheduled for 3 and 4 August 2007. Despite the fact that the Training Officer (Captain Gatt since promoted to Major), his superior Major Donald (since promoted to Colonel and appointed Commandant of 2nd Battalion), the Commandant (Colonel Taylor),the Chief Executive Officer (Major McCallum) and on the balance of the evidence the Training Safety Advisor (Ian Hay) knew as early as November 2006 that boats would be involved in the exercise there is no mention of the use of boats relative to this exercise in any of the planning documents or risk assessments (productions 5, 8, 9, 10 and 13). There is reference to the use of boats in a document described as a boat plan (appended to the Report by the Land Investigation Team (Crown Production 31). That document illustrates that extensive use which was to be made of these craft in the activities at the two week annual camp. It is also clear on the evidence that the commander of the 2 star Cadre (Major Adams) knew before the camp that the boats were to be used in the exercise.

The exercise was a compulsory training exercise which the cadets required to complete successfully in order to pass the camp to the next level to become three star cadets. While the exercise was part of the APC syllabus, the use of the boats as an integral part of it was not. It was decided that transportation would be by sea by means of three Rigid Raiding Craft from Loch Carnan Jetty, South Uist to the ACF training areas at Loch Skiport. The three boats consisted of two mark 1 and one mark II rigid raiders. The mark I has six seats and the mark II had ten seats. There were 34 cadets in the 2 star cadre. In the first journey the two rigid raiders mark I's each contained six persons (one instructor and five cadets and one instructor and four cadets respectively) and the mark II had eight cadets with four instructors. Two of the adult instructors were not allocated seats. There is no evidence that any systematic attempt was made to keep count of the numbers boarding the three vessels. In terms of the categorization set out in the relevant guidance (JSP 535 and AGAI Chapter 18) this part of the exercise involved travelling over Deep Tidal Waters[2] as opposed to shallow non-tidal inland waters. The activity was extremely ambitious involving as

[2] See JSP 535 Para.2119 and in terms of AGAI Chapter 18 Para. 18.027 Inshore Waters

it did transporting large numbers over the open sea in the Outer Hebrides a distance of between five and six nautical miles.
It is obvious that the transportation of the cadets by sea was an integral part of the field craft exercise to be carried out on 3 and 4 August 2007. Despite being given an opportunity to do so, none of the main witnesses who had a role in the planning, preparation and execution of the exercise (Gatt, Campbell, Adams, Taylor, Donald, McCallum or Hay) offered a satisfactory explanation as to why each ignored the rudimentary requirements of JSP 535 in relation to the boating element of the exercise. The proposition (put forward by Taylor and Donald) that the movement of the cadets from Loch Carnan to Skiport was in some way a discrete enterprise separate from the field training exercise is demonstrably untenable. A risk assessment was prepared as part of the programme on the hypothesis that the cadets were transported by minibus. Why should it be any different if transport was by sea rather than on land? Further, the boat plan referred to above makes it clear that the exercise (as well as other exercises) involved the use of boats. In any event, the activity, however defined, is within the scope of the required cadet safety training safety guidance and the associated written requirements[3]. Of particular concern is that Gatt who was acting as Training Officer has subsequently been promoted to Training Officer and Donald (who was the person to whom Gatt was to report in relation to the safety aspects of the exercise) has been promoted to Camp Commandant.

The Capsize of the Rigid Raiding Craft Mark II
The circumstances leading up to the capsize are set out in the Land Investigation and Investigation Team Report (Crown Production 31) paragraphs 7 to 24. The factual account contained there is broadly speaking consistent with the evidence led in this inquiry.

Acquisition of Equipment

The Rigid Raiding Craft were to play a significant part in the activities at the camp that year. On the invitation of the Commandant, Scottish Television filmed cadets using the boats on the day before tragedy. The boat plan illustrates that there was to be extensive use of boats in a number of exercises at the annual camp.
There was a conflict in the evidence as to whether the boats were to be acquired on a permanent basis. Taylor said that he did not appreciate that all

[3] See JSP 535 at and AGAI Chapter 18 at para.18.006 to 18.008

of the boats were to be owned whereas McCallum said that it was always the intention to hold on to the boats. The request for the Rigid Raiding Craft Mark II is set out in the letter from Major McCallum to Ian Clark (Crown Production 17). Its terms are highly unsatisfactory but somewhat revealing. The purpose specified was that "The boats are to be used as safety boats allowing us to conduct our adventurous trg, in accordance to regulations (sic)". McCallum knew that the boats were to be used for a purpose other than as safety boats. There was of course no safety boat on the day of the accident. McCallum felt it necessary to specify in writing the use for which the boats were to be used. His explanation was that Ian Clark (the MOD official responsible) told him to put that purpose down. There seems to have been some process by which when the boat was gifted a purpose has to be specified. No explanation has been offered as to how that process operates and the inquiry did not hear from Mr. Clark. Anyone relying on the document alone would be misled as to the actual purpose of the boats. Further the reference to the regulations suggests some awareness on the part McCallum of the need for safety boats in training exercises. This serves to heighten the level of his disregard for the rules in this case. Added to this is the acquisition of inappropriate life jackets. McCallum's said in evidence that he thought that the capacity of the ATLJ was 275. He did not explain how he reached that understanding. The fact is that he requested Assault Troop Lifejackets without checking the level of their buoyancy and he disregarded the maximum limit in the matrix in JSP 535. The fact that he sourced a general purpose machine gun and tripod, which is not appropriate for cadet training is also demonstrative of a disregard for control measures enshrined in official publications. Plainly a blind eye has been turned to this by his superiors in the chain of command.

Proposed findings

Section 1 (a)

"*Where and when the death and any accident [the capsize of the boat] resulting in the death took place*"

Kaylee McIntosh died[4] on 3 August 2007 at some time between 1015 and 1305. The precise location and time of her death cannot be specified. The boat she had been travelling in capsized in Loch Carnan at some time between 1000 and 1015. She was found just after 1300 under the capsized boat which had drifted to the shores of Steisay Island.

[4] The death certificate specifies the time of death as 1015 and the location as in the Little Minch about one mile North East of Loch Carnan Pier Isle of South Uist, Western Isles

section 1 (b)
"*Cause or causes of death*"
Kaylee's death was as a result of immersion in water when the boat in which she was travelling capsized trapping her beneath the upturned hull. It is impossible to specify the precise mechanism causing death. It could be drowning, hypothermia or exhaustion. The evidence is that the temperature of the water was such that she could have survived in the water for some time. Once her lifejacket inflated she would have been unable to escape from under the upturned boat. The chances of survival diminished as time went on.

"*Cause or causes of accident [capsize] resulting in the death*"

The rigid raiding craft mark II capsized because of the following or a combination thereof

vi. It was being operated in weather conditions at or beyond its design capacity. The forecast issued at 0700 for the morning of 3 August 2007 indicated that the wind was South or southwest 5 to 7, perhaps gale 8; the sea state slight o moderate, becoming moderate or rough, occasionally very rough in west. Eye witness evidence confirms that there was a significant swell beyond the shelter of the area at the pier at Loch Carnan. The operating limit of the vessel was Beaufort force 5.

vii. The boat was overloaded and was subject to bad trim. There were 10 seats but 12 passengers. The General Purpose Machine Gun and its tripod, which were heavy, together with an instructor were positioned at the bow of the vessel. The boat was obviously designed to operate with two engines but there was only one on the port side.

viii. The donkey tails were not opened until just before capsize. The boat should not be operated without lowering the donkey tails[5].

[5] BR7887 ENTITLED RIGID RAIDING CRAFT (MK 2) General Information states at Category 3 Technical Description paragraph 22 "Deck Drainage" "Two large bore "Trouser leg" deck drains are fitted through the transom with a draw cord and jamb cleat to close. **Drains should be open when underway.** (emphasis added).

The boat will ship water as it is sailed unless the donkey tails are lowered. The coxswain (McCallum) and his fellow instructor (Duncan) appeared to be ignorant of this fact. The boat's manual would have revealed this but this document was not handed over to the Battalion when the boat was gifted.

ix. An emergency was created by i, ii, and iii above with the result that there was a considerable quantity of water aboard the vessel. The engine choked as a result. Finally the coxswain ordered the boat's occupants to move to the starboard side. The free-surface effect of the trapped water on the port side shifting to the starboard resulted in the craft being overwhelmed.

Section 1 (c)

"the reasonable precautions, if any, whereby the death and any accident [the capsize] resulting in the death might have been avoided;

IT IS SUBMITTED THAT IF ANY OR ALL OF THE FOLLOWING PRECAUTIONS HAD BEEN TAKEN THE DEATH AND THE CAPSIZE MIGHT HAVE BEEN AVOIDED. THEY ARE NOT LISTED IN ANY PARTICULAR ORDER OF PRIORITY

I. Writing and publication of safety orders relevant to the activity concerned. JSP535 Para. 2113 provides that "Cadet Force Adult Volunteers (CFAV) responsible for exercises and expeditions involving a water hazard should prepare" Safety Orders for Training on Water", to be issued by CCF Contingent Commanders and ACF County HQs. It was the Commandant's (i.e. Colonel Taylor's) responsibility to see that safety orders were devised;

II. Appointment of suitably qualified and experienced instructors for the activity concerned;

III. A clear chain of command in relation to the two day exercise understood by all concerned. The person who was responsible for the exercise was Major Adams but because transportation involved the use of boats he left it to McCallum to take responsibility for that element. There was confusion as to who was actually in charge of the exercise;

IV. Appointment of a suitably qualified safety officer who was not involved in the activity itself;

V. The provision of a safety boat. There was some attempt in some of the evidence to suggest that each of the boats was to act as a safety boat for the other boats. This is inconsistent with the craft all being separated from the beginning of the journey. Campbell's craft went out well in advance and none of the boats could at any stage be said to have been acting as a safety boat for any of the others. In any event, the Rigid Raider Mark I's were fully loaded and the Mark II was overloaded;

VI. Carrying out emergency drills including a capsize drill. No warnings were issued on clearing an obstacle before activating the lifejacket. Kaylee's lifejacket had not been inflated when she was last seen Vikki Lorimer, but it had inflated when she was discovered just after 1300 hours;

VII. A head count before the training exercise and after it. The boats were boarded without anyone having a clear idea of how many were aboard. Following the capsize there was no one with responsibility to take a head count to ensure that all of the cadets were recovered from the water. It is noteworthy that coastguard officers arriving on the scene (albeit later than they should have done see (XV below) immediately appreciated that there was confusion in relation to numbers and requested that a headcount be undertaken;

VIII. Ensuring that every cadet was accounted for before calling off the rescue. The evidence discloses that after he came ashore McCallum assured the coastguard in clear terms that all of the cadets had been recovered. As a result, the helicopter which was at the scene was sent back to Stornoway. By the time the helicopter returned vital time had been lost. Consequently an opportunity to bring about a successful rescue may well have been lost. McCallum was in no position and ought to have appreciated that he was in no position to give such an assurance that everyone had been recovered. If McCallum had indicated that he could not personally be sure that all of the cadets had been recovered then the search and rescue would not have been stood down at around 1100 and Kaylee might well have been rescued.

IX. The provision of communications which would allow the three boats to communicate with each other and with the safety officer. The absence of radio communication meant that Campbell's boat which had gone out to sea far in advance of the two other boats. McCallum made increasingly desperate attempts to call him back. These included attempting to catch him up and firing the machine gun. In the course of attempting to catch up more water was shipped on to the Rigid Raider Mark II. Further, following the capsize, effective radio communication would have assisted with a successful rescue.

X. The production of a specific risk assessment devised according to the required method[6]and relevant to the particular activity concerned and capable of being modified in the light of local conditions including the weather. Crown Production 10 purports to be a risk assessment but does not comply with any of the requirements in that regard. It is a worthless document. It purports to be dated 28 July 2007. No one explained what the entry under "filed at end of camp" meant.

XI. Understanding how to operate the Rigid Raider Mark II safely. This required knowledge of the safe operating conditions and safe method of handling the craft. The operators should not have operated beyond the operating limit of the craft (i.e. beyond 5 on the Beaufort scale). They should not have operated it without lowering the donkey tails. They should have ensured that the loading, weight distribution and mounting of the engines was such as would allow the craft to be stable. It is clear on the evidence that McCallum was incompetent;

XII. Consultation of a detailed local up to the hour weather report as shown in Crown Production 24, page 2. It is axiomatic that those engaged in sailing activities obtain forecasts, understand what they contain and act according to the information provided;

XIII. A short reconnaissance journey beyond the shelter of Loch Carnan in one of the boats might have revealed that the sea conditions were such that the journey was unsafe.

XIV. The provision of lifejackets with maximum buoyancy suitable for cadets. The buoyancy of the assault troop lifejacket issued to Kaylee was such that once inflated she would not have been unable to escape from underneath the boat;

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[6] A detailed description of the Safe System of Training and Risk Assessments is to be found in Annex A to Chapter 3 of the Army Cadet Force Manual (Crown Production 2) Paragraph 22 states "RA is largely a matter of common sense, but the important point is that a record of the assessment is made before embarking on the activity. The record must be retained so that if an incident occurs, the supervisor can show that a proper assessment was made and that all reasonable precautions were in place. Commanders and supervisors must get into the habit of making RAs and recording them, for example making a file and referring to it each time an activity is planned

XV. A proper briefing of all of the adult instructors relative to the location, route and length of the journey. This would have meant that any of the instructors would have known where he was and could inform search and rescue of his whereabouts.

XVI. Consultation with the relevant authorities in relation to the journey. If the coastguard had been informed in advance then its officers would have arrived on the scene at a significantly earlier stage. It that had occurred there might well have been a different outcome.

Section 1 (d)

"the defects, if any, in any system of working which contributed to the death or any accident resulting in the death;"

1. The authorisation by the chain of command of an activity without satisfying itself that it was being carried out safely. Leaflet 11 which is designed for line managers (see MOD Production 2) entitled "Safety in Military Training and Exercises" outlines the need for the Commanders at all levels to ensure that training is being carried out in accordance instructions, regulations and directives. Taylor and Donald failed in this respect.

2. The use of the Chief Executive Officer to take effective charge of a training exercise without any supervision. It is not part of the CEO's role to conduct training. It does not form part of his job description. There is no formal process of qualifying. He may well not be qualified to conduct training. The CEO in this case was in fact unqualified and incompetent to undertake the training exercise. He did not know how to produce a risk assessment or what to do with it. The problem is that a strong minded CEO who is a full time employee may lull part time adult volunteers (although more senior and very experienced) into a false sense of security in relation to his qualifications and abilities.

3. The TSA was not utilised as he should have been. If he had been then it is possible greater care may have been taken during the planning process. The evidence discloses that he seems to have deferred to the CEO because "he (the TSA) didn't know anything about boats". The TSA must be of sufficient status in the organisation to give proper direction in relation to safe training. Allocating one TSA per battalion instead of dividing time between two may assist.

4. The training in methods of risk assessment was ineffective. Those responsible did not seem to understand that a risk assessment needs to be checked in advance rather than afterwards. The LAIT report makes it clear that the risk assessment process is poorly understood. It is submitted that external assistance is required from, for example the Health and Safety Executive, in relation to the proper management

of health and safety issues and effective compliance with risk assessment procedures.

5. There is no independent scrutiny in relation to the safety of activities carried out by cadets. The ACF is in effect run by part time adult volunteers with varying degrees of experience and expertise. In this case the experience and expertise has been found to be inadequate. The input of the regular Armed Forces in the day to day activities of the Battalion in this case was minimal. In essence a volunteer organisation was permitted to organise a very sophisticated activity. Where adventure activities involving risk of serious injury or death to young persons are concerned there is a need for independent scrutiny (an example of this can be found in the Adventure Activities Licensing Regulations 2004 – the HSE now has responsibility for licensing activities as the Adventure Activities Licensing Authority). A similar type of regime should apply to the ACF and its activities.

6. There is no requirement to have a Sea Survival Equipment qualification to hold lifejackets. Such a qualification should be required to help to ensure that such equipment is serviceable, fit for purpose, and maintained in accordance with laid down procedures.

7. The acquisition of equipment without appropriate checks as to (1) its safe intended use and (2) the provision of relevant information relative to the equipment. The MOD should not release inappropriate lifejackets to cadet units. Further the MOD should not gift boats without the accompanying manual and without satisfying itself with the Commandant of the Cadet Battalion as to the intended use to which the equipment is to be put. The MOD should satisfy itself that the persons responsible for the management of training in terms of its regulations are competent to use the equipment safely.

Section 1 (e)

"any other facts which are relevant to the circumstances of the death".

Vikki Lorimer is an adult cadet instructor in 2 star cadre immediately responsible for Kaylee McIntosh. She knew her personally as well as the other cadets present on the Rigid Raiding Craft Mark II. Lorimer gave evidence that she was trapped under boat when it capsized. She said that she spoke to Kaylee who was also trapped. She must have been aware that Kaylee was having difficulty in getting from underneath the boat. Lorimer said that she told Kaylee that she would come back to get her. Lorimer managed to make her way under the capsized boat. At no point did she mention having seen Kaylee until asked about her whereabouts some time after being taken to Rangehead. She indicated in her evidence (although this is inconsistent with what she said to the police[7] as she did not mention this) that she had the presence of mind to assist two other cadets who were also trapped under the boat. It is submitted that as the qualified adult instructor responsible for Kaylee the evidence discloses that she made no attempt (1) to alert anyone that she had seen Kaylee under the boat (2) to make sure that Kaylee had come ashore with the other cadets and (3) to see that Kaylee arrived at Rangehead in one of the two minibuses containing the cadets brought ashore.

Having regard to these failures there is no room for confidence that Lorimer could be relied upon as a responsible adult cadet instructor should she be involved in a similar emergency in the future.

[7] She told the police that "she did not know Kirsty (Leask) and Eildh (Slapp) had gotten out until I myself had got out." She did not mention helping the other two in her statement to the Police.

APPENDIX 1

(1) The Guidance that should have been followed that was not followed.

JSP 535 – This is the "red book" reproduced as Crown Production 14 entitled "Cadet Training Safety Precautions" and described as "the Bible" by various instructors. The Cadet Force Manual at paragraph 3.009 states that "the Red Book", provides an on-the-spot reference to the "Rules of Safety" which are to be obeyed when training cadets. All ACF Adults must carry a copy at all times when on ACF Duty. It is a detailed reference on Training Safety designed for the cadet forces, and covers all major aspects of the subject"

FAILURE	SECTION	Requirement	SPECIFICATION OF FAILURE
Failure to compile a risk assessment	Section 5	Prepare a risk assessment in accordance with the seven steps outlined	THERE WAS NO RISK ASSESSMENT FOR THE ACTIVITY CONCERNED
Training and supervision	Section 21 Para. 2103 (a)	**The correct training and supervision of cadets by adults who have appropriate qualifications and expertise in the activity concerned**	McCallum, Milne and Campbell did not have appropriate qualifications or expertise. Although McCallum had obtained RYA qualifications these certificates are not designed to qualify a person to train and supervise for this type of activity. Manifestly McCallum did not have expertise.
Safety Organisation	Section 21 Para. 2103 (b)	**The provision of a safety organisation, properly trained and correctly equipped, to help individuals who get into difficulty**	There was no safety organisation
Craft and safety equipment	Section 21 Para. 2103 (c)	**The use of properly maintained craft with the appropriate seaworthiness certification and safety equipment for the category of water in which they are t be operated**	The craft was provided without a manual. This meant that it was being operated in ignorance of the requirement to lower the self bailing mechanism. Operation of the vessel in such circumstances rendered it liable to sink.
Specific Risk Assessment	Section 2103 Para (d)	**A properly conducted risk assessment for the activity, which includes the weather sea and/or water conditions expected for the duration of the planned activity**	Since there was no risk assessment this elementary element was omitted
Life Jackets	Section 21 Para. 2104	**Personal Flotation Devices. All cadet personnel undertaking authorised training**	The lifejackets issued were unsuitable

		must wear the appropriate MOD issued personal flotation device when taking part in afloat training in accordance with DCI Gen 10/05 dated 28 January 2005. Reference is made to the Matrix at Annex A	
Identification of non-swimmers	Section 21 Para. 2109	If non-swimmers do undertake training on water they should be clearly and visibly identified, wear approved life -preservers and be given additional supervision during periods in o on the water	Non swimmers were not identified and did not wear approved life preservers.
Planning, reconnaissance and consultation with authorities	Section 21 Para. 2112	Good planning and sound preparation play a major part in achieving safety in any form of water training, particularly where there is an element of danger. There is no alternative to careful reconnaissance beforehand by the adult(s) responsible and, when training on water, the appropriate authorities must be consulted about tides, depth of water, currents, hazards and weather	There was little or no reconnaissance and no consultation with the appropriate authorities. An up to date weather forecast was not obtained, there was no consultation concerning the tide, currents or hazards. The coastguard was not informed or consulted
Contingent/County Standing Safety Orders for Training on Water	Section 21 Para.2113.	Cadet Force Adult Volunteers (CFAV) responsible for exercises and expeditions involving a water hazard should prepare ”Safety Orders for Training on Water”, to be issued by CCF Contingent Commanders and ACF County HQs. (requirements (a) to (i)	Not carried out Checklist ignored 1. Area 2. Numbers 3. Safety boats 4. Communications 5. Qualifications of instructors/leaders/helmsmen 6. Pre-training 7. Safety equipment 8. Safety drills and practice 9. Identification of non-swimmers
SAFETY ORGANISATION	Section 21 Para. 2114	Safety Officer Safety Boat	THE SHALLOW NON-TIDAL WATERS REQUIREMENTS

	REFERENCE TO AGAI VOLUME 1 CHAPTER 18	See also Para.2130 Safety Drills and Practices	WERE NOT COMPLIED WITH. THERE WAS NO SAFETY OFFICER; NO ONE WAS SUITABLY QUALIFIED OR EXPERIENCED IN TRAINING OF THIS TYPE. THEREE WAS NO SAFETY BOAT [a. b.f. and g. not complied with]
SAFETY RULES FOR TRAINING ON DEEP TIDAL WATERS	Section 21 Para.2119	These conditions which include those encountered at sea **require a much greater emphasis to be given to safety**, the detailed rules for which are in AGAI Volume 1 Chapter 18 **which must be strictly obeyed**, particularly paragraphs 18.031 – 18045 and Annex C.	not complied with (see below)

AGAI CHAPTER 18 – SAFETY PRECAUTIONS IN TRAINING: THE HAZARDS OF WATER (REPRODUCED AS CROWN PRODUCTION 15)

FAILURES OUTLINED IN RED

"18.002 The mandatory application of the risk assessment process prior to the conduct of any training will highlight potential risks to the chain of command and allow measures to be taken to maintain challenge whilst also improving training safety"

The failure to ensure that the risk assessment process was performed meant that risks were not highlighted

"General Principles of Water Safety

18.031. Main Elements of Safety. The 3 elements on which all water safety is based are:

a. The employment of instructors qualified in the use of safety and SSE in individual and collective safety precautions when training in, on or over water.

No one was qualified in this respect.

b. The provision of a properly trained and correctly equipped safety organisation to help individuals who might get into difficulty. This provision is to be based on the results of a formal training risk assessment, which is to be lodged with the commanding HQ prior to training taking place. A modified risk assessment is required whenever changes to training are planned or enforced because of circumstances.

There was no safety organisation, no risk assessment and no modification

c. The provision of properly designed and tested SSE. For authorised activities such equipment should be authorised by the relevant technical authority

There was no provision of properly designed and tested SSE and there was no authorisation by the relevant technical authority

Safety Orders

18.032 The requirements of these 3 safety principles must be clearly laid down in safety orders so that all concerned in organising, supervising and taking part in training and activities involving the hazard of water are easily able to identify and implement those which are applicable

18.033 It is a chain of command responsibility to publish safety orders and to ensure that their contents are properly disseminated, for all forms of training or activity listed in this instruction which takes place in their area of responsibility....

18.034 Contents of Safety Orders. The contents of safety orders will vary according to activity and location but, as a minimum, should include:

a. Reference documents
b. Limitations imposed by:
(1) Ground/water hazards.
(2) Weather
(3) Equipment
(4) Qualifications
(5) Standing Orders
c. Composition of the safety organisation.
(1) Personnel, numbers, qualifications.
(2) Equipment.
d. Details of planned pre-training.
e. List of safety drills and immediate actions required in emergency (including details for the emergency services).
f. Location of risk assessment and who conducted it.
g. Details of safety briefings to be provided
h. Communications plan

There were no safety orders

18 The Safety Organisation

18.035 The requirements of the Safety Organisation will depend on the scope of the training and on local conditions. Two key elements are:
a. The Safety Officer
b. The Safety Boat

18.036. Safety Officer. A safety officer is to be nominated for and supervise all training in, on or over water....
a. Qualifications For military training he/she must be sergeant or above and qualified on one of the courses listed below
(2) Watermanship Safety Officer (Advanced), Category C, D and Inshore Waters

Although it was stated in evidence that McCallum was the nominated safety officer it is plain that he was not qualified to perform such a role. Further he was not in a position to perform the duties of a safety officer (see below) as he was coxswain of one of the craft. To all intents and purposes there was no nominated safety officer.

b. Duties of a Safety Officer. **Safety officers are not to carry out any additional duties concurrently**....Duties of a Safety Officer Include
(1) To be briefed on the form and scope of the proposed training.

(2) To carry out a safety reconnaissance of the training area to establish the extent of any local dangers such as current, tides weirs or hazards to navigation. Where appropriate he/she is to consult with the local authority.
(3) To advise the commander on:
(a) The safety organisation required.
(b) The requirement for, and the contents of, safety orders, if none exist for the training being carried out.
(c) The need for briefing troops taking part and for practising safety and survival drills.
(4) To establish the availability of other resources, which may be required, for example, lifeboats or search and rescue helicopters and how to obtain assistance
(5) To command the Safety Organisation, if necessary, from the safety boat.
(6) To take charge in an emergency until relieved by a suitably qualified superior officer.
(7) To control the VHF safety radio net.
(8) To be responsible to the commander of the training for the safety of personnel and equipment by ensuring that the safety orders are obeyed

These duties were not performed

Safety Boats
18.037 - 18040. [The requirements are listed]

There was no safety boat provided

Other General Principles
18.042. Planning and Preparation. In any form of activity involving water there is no replacement for careful reconnaissance. Local authorities are to be consulted over tides, depths, currents, hazards and weather conditions

There was no consultation in relation to any of these matters

18.044 Radio Net. A safety radio net is mandatory during all military training on water whether by day or night. Marine band VHF radios must be used when operating on ...inshore waters as dictated by MCA regulations for direct communications with the coastguard and other emergency services. Operators of marine band radios are to be trained and licensed under current Radio Communications Agency regulations

Although the coxswains had radios the evidence discloses that the requirements of this paragraph were not complied with in respect that (1) radio communication between the boats did not function and (2) there was no evidence that the operators of the marine band radios were trained and licensed under current Radio Communications Agency regulations. Failure in communication was an important element in the events leading up to the capsize and in the failures to mount an effective rescue.

18.045 Safety Drills. The following are examples 0f safety drills to be adopted where applicable and trainees practised in them before training starts
a. SSE. The correct fitting and use SSE, or other personal safety equipment (breathing devices, lights etc.)
c. Non swimmers. The physical identification of non-swimmers by visible markings and the briefing of all concerned as to who they are.
d. Evacuation Drills. These will be different for each type of craft or vehicle
e. Man Overboard Drills. Action to be taken by a safety boat to recover a man overboard

There was some evidence that some of the cadets may have received a man overboard drill. The rest of this paragraph was not followed. Most importantly there was no capsize drill

Swimming Tests
18.047 [Non- swimmers are to be identified and issued with automatic self-inflating life-jackets]

The rules in relation to non-swimmers and issuing of appropriate life-jackets were not complied with. No thought was given as to which life-jackets were issued to which cadet.

Annex A to Chapter 18
Personal Sea Survival Equipment
[This section gives makes detailed provision in relation to sea survival equipment. There are detailed requirements in relation to holding and maintaining such equipment] and detailed descriptions of various types of life-jackets including the Life-master MK 9 and Assault Troop lifejackets. The buoyancy of these pieces of equipment is specified.
There is no evidence that anyone within 52nd Highland 2nd Battalion Highlanders Army Cadet Force was qualified to hold and maintain sea survival equipment including lifejackets. Further, if regard had been had to this section then it would have been appreciated that (1) the remarks column of Annex A to AGAI 18 clearly states in relation to the ATLJ "not to be issued to Cadets …." Even assuming that there was access to JSP535 (even though there is a cross reference to AGAI 18 the limitations set out and the relative buoyancy of the assault troop lifejacket [498N] issued to Kaylee and the inconsistency with the buoyancies specified at Annex A to section 21 to JSP 535 would have been readily apparent

ANNEX C TO CHAPTER 18 MILITARY TRAINING

Individual Safety

1. All individuals taking part in or supervising training on, in or over water are to wear the appropriate type of SSE, as laid down annually by the technical authority in the current DCI General (Water Safety – Matrix for Selection of Life Jackets and Buoyancy Aids)

This was ignored

2. Non – swimmers are to be identified. Their names are to be known to the helm of their craft, other members of the group, and the safety officer.

This was ignored

3. All troops are to be briefed on safety and where necessary are to have practised man overboard, capsize and abandon ship drills dryshod.

There was no systematic safety drill and no one was instructed as to what was to happen in the event of a capsize

4. A roll call is to be taken before and after training.

This most simple, elementary and essential precaution was not performed. There can be no doubt that if a roll call had been performed before the exercise and then again following the capsize then Kaylee's absence would have been discovered and the death might have been avoided

....

Safety Organisation

6 A qualified safety officer is to be on site for all training on, in or over water. He must be able to communicate with the safety organisation and exercise commander when not co-located with them. He is to be given authority to suspend all training immediately....

There was no safety officer as such. McCallum was not qualified.

7. A radio safety net is mandatory for all training in or over water by day or night. Marine band radio is only to be used by qualified and licensed operators...

This was not complied with (see above at comment to 18.044)

APPENDIX 2

INDEX OF WITNESSES CALLED AND SUMMARY OF EVIDENCE

1. Liam Neish - Army Cadet – passenger on Rigid raiding Craft Mark II – could not swim – not identified as non-swimmer – no capsize drill- no one took his name – describes capsize - had to be helped to inflate life-jacket in water - no roll call after capsize

2. Jake Watson – Army Cadet – passenger on Rigid Raiding Craft Mark II- accepted that told the Police truth that "At this point Major MCCallum stopped the boat and told Mr. Shaw to fire a couple of shots from the machine gun. I think this was to attract Lieutenant Campbell but then Major McCallum said "fuck it lets go after him". By this time our boat was facing the wrong way and Major McCallum turned it and followed the first boat. I'm not sure what happened to the third boat. Major McCallum was going faster than he had being going, the boat was skipping over the waves. There was more water coming in, I think due to the spray and the waves were coming in because they were high. At this point we had gone another half mile or so and I heard Major McCallum saying "shit, shit, shit" and slowed to a stop and the engine stopped. I heard it choke. At this point the water was half way up to my knee and it was all on the left side"- While counting following capsize heard McCallum say 10 under his breath

3. John Edward Shaw – Cadet Instructor (Adult Under Officer) present on Rigid Raiding Craft Mark II – there to operate machine gun – was not assigned any role in relation to safety – did not think there was anything amiss with the exercise – accepted that machine gun not used by cadets – describes capsize – in the aftermath on pier McCallum said "I'll get my knuckles wrapped for this, but at least all the cadets are safe"

4. Craig Duncan – Cadet Instructor (Sergeant) Instructor on board Rigid Raiding Craft Mark II – No Capsize drill- headcount before or after – Donkey's tail lowered immediately before capsize – boat had been running for 10 minutes or so before it lowered – Unable to explain why not lowered- he did not give any instructions to cadets and does not know what instructions were given – did not know length of journey or destination – had nothing to do with life-jackets.

5. Vicki Lorimer – Cadet Instructor (Sergeant)– She was in charge of the section of 2 star cadre which included Kaylee –on board Rigid Raiding Craft Mark II - was under the boat after capsize along with three cadets – Eilidh Slapp, Kirsty Leask and Kaylee McIntosh – Vicki Lorimer did not know how to inflate her own lifejacket- Kaylee's lifejacket had not inflated – Eilidh and Kirsty got out as did she – Kaylee would not move – told her I would come back and get her –despite this she did not mention Kaylee's presence under the boat to anyone and did not mention having seen her to anyone until after she returned to Rangehead

6. Calum Campbell – Cadet Instructor-(Lieutenant) – second in command of 2 star Cadre – Coxswain of RR Mark I – went off ahead of the RR Mark II - had level 2 Intermediate qualification – Always the plan to insert the cadets by boat – Indicated that he went to office the night before the exercise to "create a safety letter" but that Gatt had done it – referred to Crown Production 13 Exercise and Safety Plan which makes no reference to the boat trip from Loch Carnan to Loch Skiport – says he saw three day weather forecast on morning of 3 August (Crown Production 24 page 2) [contrast McCallum's evidence] – accepted that weather forecast as per Crown Production 24 page 1 could have been obtained and that it discloses weather conditions that would make it inappropriate to make the journey [did not mention conversations with Rodger and Adams concerning their concerns about the weather] – Accepted that should not have undertaken exercise – no admiralty chart – suggested that between him and McCallum a head count was carried out but unable to give details and unclear as to the numbers involved - examined on JSP535 by open book test – never heard of anyone failing

7. Scott Rose – Cadet Instructor – (Company Sergeant Major) – He was at Rangehead when first minibus returned – containing wet cadets and Major Adams – he divided cadets into male and female and arranged for them to get out of wet clothing – cadets said Kaylee missing – she should have been on first bus - Found Captain Gatt and told him was a cadet missing – Gatt said all cadets accounted for – Gatt then asked female cadets and established that Kaylee not at Rangehead – Gatt departed for pier – Lorimer said nothing to him about Kaylee –

received phone call from Gatt at pier at 1134 – headcount performed and confirmed Kaylee missing

8. Joseph Johnstone – Coastguard- Benbecula (Station Officer) – received call between 1000 and 1030- first told to go to North Uist (Loch Eiport) – reached Gramsdale – received instruction to go to Loch Skiport - reached Craigorrie when told to go to Loch Carnan – arrived there at after 1100 – when arrived at pier two boats out of the water- told cadets all safe – told there were 4 kids in the water – then asked about numbers – told there were 10 kids and three adults on board (confirmed by CP22 log entry 10:52:42) - [in fact there were 8 cadets and 4 adults]- did not receive a reply to question as to why there were only 4 in the water – heard instructor on phone – asked for a headcount – instructor unsure as to whether missing person had been on boat – helicopter and lifeboat had been called earlier but had been stood down – Coastguard not told about the exercise – obvious precaution to inform Coastguard about this type of exercise – time wasted in repeatedly being sent to the wrong place

9. Robert Currie - Auxiliary Coastguard –Benbecula - confirms evidence of Johnstone - weather deteriorating

10. Brian Learmond – Auxiliary Coastguard – Benbecula – confusion by instructors as to the number of persons on capsized boat

11. Roderick Campbell – Fish Farmer – Marine Harvest - Loch Carnan- pin-points where upturned boat and body found – "time about 1 ish" confirms weather conditions as per forecast CP24 page 2 – says pier sheltered wind south westerly – temperature 14.2 C

12. Andrew Mair - Coastguard - Watch Manager – Stornoway – coordination of search and rescue – refers to Coastguard Incident log (Crown Production 22) and transcript of radio communication (Crown Production 35) – explains that times on the log are GMT and that witnesses speaking about times 1 hour later – also times on log are not exactly contemporaneous with events – call received 1014 (0914 GMT) – plain that those communicating with the Coastguard had no idea where they were – coastguard not informed about exercise – McCallum taken to task over confusion in relation to whereabouts of cadets and lack of information - at 1113 (1013 GMT) McCallum

confirms that all kids ashore – Helicopter sent back to Stornoway - 1152 (1052GMT) informed that cadet missing – Helicopter re-activated – helicopter had to re-fuel – 1332 (12:32:40GMT) Kaylee taken from under boat to hospital.

13. Mark McKee – Cadet Instructor – (Sergeant) – No experience of boats and no involvement in planning – instructor in Rigid Raider Mark I with Campbell – had no information on details of the journey – did not know how many in Rigid Raider MK II - made mayday call on basis of what told by Campbell – assisted in rescue of children and instructors from water – described panic and difficulty in pull cadets into the boat - this not easy – had to deflate lifejackets – McCallum who was upturned hull said "have we got everyone? - this said generally and o no one in particular – I said "yes" – as we had picked up all those that could be seen

14. Charles Milne – Cadet Instructor – (Lieutenant as at 03/08/07 now Captain) – RYA qualification – in house training – taught by McCallum and Campbell - was shown the route in the operations room two days before the accident – says route was marked on a map on wall – but does not know where that map is now [no recovery of the map by investigators] - knew plan was to drop off cadets at Loch Skipport – He Coxswain of Rigid Raider MKI – set off last – only drill mentioned was man-overboard drill – did not use radio- saw McCallum's boat turn round he turned round – went back to pier and tied up – Campbell's boat arrived with wet cadets and he told what had happened – went back out to upturned hull – all by one on top of hull - does not recall how many persons there were and does not recall conversations about how many there were – assumed a head count had been carried out – did not see a forecast that day – says understood weather to be light breezy winds – that understanding came from the radio – but unable to recall what the weather forecast was when suggested that "light breezy winds" was not the forecast that day – not concerned in relation to safety – not sure if he saw risk assessment – was not concerned there was no safety boat when set off – came into head after set off – thought it was covered – thought because he had less cadets in his boat that would be used [witness required to be told by PF what the purpose of a safety boat was] – did not have map – did not have admiralty chart - had not made the

journey before – accepted [but only after Police Statement to him that there was going to have to be a return journey] - accepted did not know how many cadets there were [again only after confronted with police statement – did not satisfy himself that risk assessment had been carried out – laid out lifejackets but could not recall how many – obtained them from the store – thought all of the life- jackets were self-inflating – agreed supposed to have a safety officer – the regulations are contained in the red book – the red book is "our bible" – red book test – last time Col Donald (this year) and Major Gatt before the camp – unable t say who the safety officer was – or whether anyone had been appointed – unable to say whether regs. applied

15. James Grieve – Pathologist – Crown Production 34 – death as a result of immersion in water when the boat in which she travelling capsized trapping her beneath the upturned hull - occurred at some time between 1015 and 1300 – impossible to say when – precise mechanism not possible to say – drowning/hypothermia/ exhaustion – temperature of the water such that could survive for some time – chances of survival diminished as time went on

16. Fergus Gatt – Cadet Instructor – (Captain as at 03/08/07 since promoted to Major and senior officer) – Prepared Crown Production 13 Action and Safety Plan (EASP) - He was the Assistant Battalion Officer but the Battalion Officer was not to attend camp so he was the appointed Training Director – in terms of the regulations it was his job to prepare the risk assessment for the exercise being carried out on 3/08/07 – went to Benbecula - December 2006 to check facilities – had been decided November 2006 to insert the cadets by boat – Taylor, McCallum and Hay all knew boats were to be used for transporting on the exercise – claimed to be familiar with JSP535 – that a risk assessment was required in respect of all activities - he did not prepare a risk assessment for the exercise – did not know that a risk assessment had not been carried out – did not check that it had been carried out – says he delegated the responsibility for this to McCallum but does not say when – when pressed said that did not ask McCallum to perform a risk assessment – accepted not just down to McCallum to prepare risk assessment it was up to others including himself as planner – concern about the weather on the day because

helicopter pilots told him they were not going to fly – but was present at pier delivering ammunition – unaware of safety brief – present after capsize – did not ask for head count says he asked if everyone was ok and reassured by McCallum that he had not got out of the water until all the cadets were out - not know McCallum's qualifications – accepted that he should have been in possession of risk assessment before activity took place – unclear why he did not insist that specific risk assessment drawn up

17. Douglas Rodger – Cadet Instructor – (Sergeant) – 2 star cadre- at the start of the camp told the exercise was going to involve the use of boats – on the morning of 3 August 2007 at 0700 – told Campbell who told him weather was calm saw severe weather warning on TV – took roll call at Rangehead after one of cadets told him someone missing – spoke to Vikki Lorimer who indicated that she had been under the boat with Kaylee

18. James Stewart – Cadet Instructor (Staff Sergeant) – had concerns about cadets getting wet – no real concern re safety – had discussion with Lorimer

19. David Adams – Cadet Instructor (Major now Captain as a result of voluntary downgrading) – Commander of 2 stat cadre – initial understanding – had been severe weather warning – asked McCallum if everyone was there and he said yes was going to Skiport by road found out on 1st August going by boat – McCallum asked for Campbell for boats – would have expected to have been told by the Training Officer (Gatt) – "kicked it around for 5 or 10 minutes - told by Gatt that was the way it was going to be done - Only involvement in the exercise was to deliver the cadets to the boats –l spoke to Campbell about severe weather warning – Campbell said West side affected not the East [N.B. CONTRAST CAMPBELL'S EVIDENCE RE WEATHER FORECAST] – Only concern was about the weather – submitted Risk assessment for field craft exercise to Training Office (Gatt) – his job to check and if necessary to involve Training Safety Advisor (Ian Hay) – He in minibus waiting with remainder of his cadre of cadets – decided to drive mini bus including Lorimer back to Rangehead – no headcount – impression from Shaw that it was alright –told Gatt what was happening and told him that cadets were still in

the water – he said another bus was on its way – went to Rangehead then to Skiport where dry clothing was then to pier – coastguard arrived I had concerns – he took McCallum to be in charge of boats – accepted Cadre II his responsibility - knew rigid raider mark II had capsized and that several cadets still in the water but did not know where – did not know how many cadets were on the boats – gave risk assessment (for field craft exercise) in advance to Gatt – I assisted with lifejackets – demonstrated putting them on – not know whether self-inflating – conceded that was aware before the camp boats to be used in extraction on the Saturday – expected to wait one and a half hours for boats to return to pick up next batch of cadets – when wet cadets returned ashore he was the senior officer – did not carry out headcount – went off with a batch of cadets without carrying out headcount - if had waited until all were back then would have realised Kaylee was missing – never contacted Loch Carnan to see how many cadets had come ashore – if he had it would have been noted that Kaylee was missing at an earlier stage – accepted it was his exercise but no alarm bells ringing from health and safety point of view – did not apply his mind to requirements of red book (JSP 535) – did not carry out headcount – impression from Shaw was that there had been a headcount – assumed the rest

20. Paul Mara – Chief Power Boat Instructor – Royal Yachting Association – Crown Production 28 – Conclusion at Para. 7.1 Engines – craft should have two engines but only operating with Port side engine – this cause it to be lopsided - capsize caused by overloading and bad trim resulting in the initial swamping of the boat which was compounded by the fact that the water freeing "elephant trunks" were not opened until just before the point of capsize and in inappropriate weather conditions. Boat operating in conditions inappropriate to its design – not lowering elephant trunks will cause the boat to ship water - the bad trim was caused by uneven loading – too heavy a load too far forward (GPMG and tripod) – prevailing weather conditions at paragraph 6 see also Crown Production 24 page 2 – these available – Loch Carnan sheltered from south or south westerly wind – as boat travelled east would become increasingly more exposed - no manual with boat – have to lower the donkey's tail to operate boat safely – the safe weather conditions (not above 5 on beaufort scale) is contained in

manual – RYA is a qualification for leisure activities – specific up to date weather forecast is available and those who undertake qualification are told of the need to obtain it – following the accident the radios were examined. One of them was found not to be in operating condition

21. Charles Davey – Marine Surveyor – crown production 29 – damage could have been caused post capsize and would not affect stability – reconstruction of movement of passengers instructed by McCallum immediately before capsize shows boat would tip over

22. Ian Hay – Training Safety Advisor – His responsibilities outlined in Crown Production 11 – "to ensure effective implementation of "The Safe System of Training (SST) and Risk Assessments throughout the Battalion, in accordance with Reference B Annex G pamphlet 21 and JSP 535" – Commandant retains final responsibility – Unable to explain why he did not know in advance of the plan to use the boats in the training exercise – his evidence is inconsistent with evidence of Gatt, MCallum, Donald, Taylor on this point – (they say Hay knew of boats for months) - If he not told then should have been –says plan to use boat was not discussed at planning meeting the night before - if was told then his position is wholly unsatisfactory – says McCallum a strong personality – would not question his integrity - Crown Production 10 was thrust into his hand on the Saturday following the accident – cannot say by whom – cannot explain the document – Captain Gatt's job to make sure Risk Assessment prepared for the activity if he know of the activity – confronted with Gatt's evidence re previous discussions "were discussions about boating but unaware of specifics" – says horrified he not told

23. Norman Donald – Cadet Instructor – (Major – now promoted to Colonel Commandant 2nd Highlanders Army Cadet Force) – went on reconnaissance trip to Benbecula in late November 2006 – His role was to put together the block programme with the Training Officer (Gatt was standing in for Ramsay who was not attending the annual camp that year) - went with Gatt, Hay, McCallum and Taylor – looked at jetty – spoke about insertion at Skiport of 2 star and extraction of 4 star the following day – Already had one rigid raider and McCallum indicated wanted to get two additional boats for the purpose of the

exercise – by April had acquired boats (this wrong as mark II acquired later) on – Training meeting on the first Tuesday of every month. At that point we got in the Training Safety Advisor (Hay) – absolutely clear in his evidence that always (i.e. from November 2006) in contemplation to insert cadets by boat – accepts that Crown Production 8 does not mention the use of boats - says the Boat Plan (produced at Crown Production 31 page 20 shows insertion of 2 star cadre on that morning [*it shows nothing of the sort – what it shows is that boats are to be used in the 2 star cadre exercise – the boat plan also mentions the use of boats in other exercises*] – Would take advice from McCallum – McCallum was responsible for the activity – had been delegated responsibility by the commandant [*does not say when and by what means delegated responsibility*] – if boats were not to be used the plan was to deploy by minibus – the 2 star activities were discussed on the Wednesday – Cadre commander (Adams) said knew what he was doing and was happy – claims no responsibility because he only responsible for APC (Army Proficiency Certificate) – Accepted he responsible for APC training – accepted that the exercise was part of the APC training but would not accept that he had any responsibility for transport element of the 2 star exercise – says not for me to know what red book says about boats – [*nowhere is there any justification for that*] - told McCallum on the accident "make sure you carry out a good risk assessment" – McCallum is full time and it his responsibility to advise the commandant – if he informs the commandant it is ok we trust him – we listen to him – we are volunteers and rely on full time executive officer and training safety advisors – clear that Training Safety Advisor knew intention to insert the Cadets at Skiport – McCallum trained three personnel – TSA must have known boats to be used – accepted his place in chain of command and responsibility for ensuring training complied with guidance

24. Donald McKay – Air Traffic Controller Benbecula – Crown Production 26 – strong wind warnings – in accordance with what occurred

25. David Taylor – (Cadet Instructor- Colonel and Commandant now retired) – present on reconnaissance in November 2006 – McCallum said had experience from previous year – Loch Carnan to Loch

Skipport – had no concerns in relation to safety – satisfied in relation to McCallum's qualifications – Planning meetings first Tuesday in every month chaired by Donald – would insert by boats as an interest activity [*this evidence is incomprehensible*]- said had sourced boats and told he had another two for camp – understood boats to be loaned otherwise not afford to maintain – referred to Crown Production 17 – letter requesting of boats – only aware of it when LAIT report (Crown Production 31) – shown letter re maintenance and Invoice for engine (Crown Production 18) – says boats were to be used for fun days and watermanship (c.f. boat plan Crown Production 31 page 20) – says saw boats in use on Thursday said cadets said knew how o use them and had been shown man-overboard drills – vague as to discussions a camp concerning this activity – says he asked Major McCallum for confirmation of compliance with JSP 535 on a number of occasions – says he asked for this at weekly meetings – specifically asked re Lifejackets – he confirmed they were correct and had sought advice from the Royal Navy – two adults trained to maintain lifejackets – asked re safety boats – McCallum confirmed to me safe arrangement of boats would act as safety boats for each other and would have capacity to uplift one from other boats – I questioned this but took his advice – assumed none of the boats be fully occupied – he said three boats would be used but not all would be occupied – aware of section 21 but had not read it in any detail – made passing comment "remember your risk assessment" – says that CEO (McCallum) by virtue of his job description was acting as Safety Advisor) [*this is not correct – the job description –see production x for relatives] only permits the CEO to provide safe training advice when no TSA is appointed and only when directed by the Secretary of the Regional RFCA a TSA had been appointed and there is no evidence that there had been such a direction]* – describes how it emerged that Kaylee missing - Vikki Lorimer said Kaylee had not been seen since got back to Rangehead – describes CEO's role and that of TSA and Training officer – says Donald responsible for APC training and McCallum responsible for watermanship training mechanics of that event – deployment to be a watermanship event and not linked to the exercise – only to take place if weather allowed – says had conversations with Donald and McCallum – would only see the Risk assessments after the event (*does not explain why)* – accepted that possible letter

requesting boat (Crown Production 17) in it terms because activity was well outside syllabus for cadets- it was something they should not have been doing – says he asked CEO if guidance was being followed – says travelling by sea not part of the exercise – I made it quite clear it was not to be part of the exercise – says cadets could go by minibus and no one would be forced to go by sea [*this position is untenable*] Declined to answer when pressed on this] – not seen technical information re RRMark II (Crown Production 20) – says assured CEO had ordered appropriate life jackets and had sought advice – accepted TSA could have been asked re life-jackets but wasn't – declined to answer when asked if consulted anyone higher in chain of command given activity had never been carried out before – accepted others responsible as well as McCallum including himself – Declined to answer when asked about what e knew about number of persons on the boats – indicated not know how many cadets would be on the large boat – declined to answer when asked how many trips were required – declined to answer when suggested that he did not enquire too closely into the exercise – said did not know who the safety officer was – did not ask – said did not have access to AGAI chapter 18 – first time saw it was after event – never attempted to obtain it accepted was reference to it in red book (JSP 535) – declined to answer when suggested that just asked McCallum if all had been complied with- accepted he cannot delegate his responsibility because he commandant

26. John Adams – Prepared LAIT documents [Crown Production 30 (Demonstration and Trials and 31 (Report)] – made specific recommendations – explained how lifejackets were issued – RRC Mark II procured June 2007 from Boats and Sea Survival Integrated Projects Team – accepted that requisitioning lifejackets and boats worthy of inquiry – have to look at CEO's experience on a case by case basis – gifting of boats stopped – accepted that if manual had been provided with the boat then accident might have been avoided – Kaylee wearing assault troop life jacket that would not self inflate – explains that matrix in JSP 535 outlines buoyancy of lifejackets – there was no paperwork to indicate who was safety officer – safety orders are shopping list of number of people and qualifications they would need – safety officer would need to have formal qualification

and have completed the course – requires a formal watermanship qualification - at Chatham with the Royal Engineers or Royal Logistics Corps – no one had any such qualification – was difficulty in communications as per Paul Mara's evidence – specifies failures to comply with AGAI – weather information – elementary – jetty sheltered from South – confirms that Donald the line manager in relation to training – He and Taylor subject to leaflet 11 -

27. George McCallum – Cadet Instructor – Chief Executive Officer – confirmed that was a reconnaissance involving Gatt, Donald, Taylor, Hay and himself – says the extraction and insertion of cadets – Loch Carnan and Skiport – asked to source boats – Ian Clarke – Wimberly at Brigade aware of gifting of boats – only qualifications were RYA – Cant explain why not follow the JSP 535 format – says realises Taylor delegated responsibility for organising boats - claims thought ATLJ were 275 N- Campbell and Milne had to go on training in relation to lifejackets - clear TSA aware of gifting of boats – denies saying to Taylor that boats would not be filled to capacity – denies that Donald said to do a good risk assessment – declined to answer whether Taylor and Donald mistaken or deliberately misleading – not responsible for syllabus training – Commandant and Deputy Commandant invited STV says told what to put down by Clark in relation to requisition of the boats – declined to answer when pressed about knowledge re ATLJ – it has a label – declined to answer re acquisition of machine gun being an example of his state of mind – no admiralty charts or knowledge of the tides – acknowledged tides important – CP 10 – unclear what is meant by maximum capacity – unclear what meant by "end of camp"- declined to answer that it worthless document – did not have manual declined to answer that request inaccurate and did not know how to use the boat – lack of safety officer critical – accepted not trained to devise training – not trained to prepare a risk assessment – TSA knew – risk assessment (CP10) mentions safety boat (section 8) but there was no safety boat – says obtained template for risk assessment from the fire service

28. Ian Morrison – Police Officer – Detective Sergeant – Investigating Officer- confirms lifejacket worn by Kaylee label 1 matches CP 23 and video of Loch Carnan

29. [Called by MOD] David Tobey – Colonel – MOD develop ACF policy and develop through chain of command – accepted system failed