GB Row 2010 The Anglo American Challenge	Assessment Number: Assessment Date: Assessor:	
Risk:	Risk Rating (likelihood x severity): 5 5	
Minor injuries and illnesses that are caused by the daily routine and do not require casualty evacuation.	5 x 1 = 5 Number of people at risk: 4	

Hazards:

1. Blisters, bruises, boils, cuts, sprains, haemorrhoids, burns, scalds, cold sores, bites, stings.
2. Minor fractures (toes, fingers)
3. Sunstroke.
4. Seasickness.
5. Food poisoning.

Controls:

1. Preparation before the event to toughen up the hands and body.
2. Wearing of gloves to delay the onset of blisters.
3. Vaseline to delay onset of chafing.
4. All equipment secured when not in use.
5. Exercise care and caution when moving about the boat to avoid slipping.
6. Exercise care when preparing food to minimise the chance of burns and scalds.
7. A comprehensive First Aid Kit containing treatment for all foreseeable injuries. Will include drips, splints, and homeopathic remedies for bruising. Painkillers essential.
8. Wearing protective hats and layers and suncream.
9. Sea-sickness pills (most-likely *Kwells*, as recommended by RN).
10. Ensure that all eating/cooking utensils are properly cleaned after each use.

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

1. The team will undergo first aid training to improve their ability to treat injuries.
2. As many members as possible will attend a Medical Course to learn skills to deal with more advanced trauma.

Team Approval

• Team Leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge 2010	Assessment Number:	

	Assessment Date: Assessor:	
Risk:	Risk Rating (likelihood x severity): 5 5	
Dehydration	4 x 3 = 12	
	Number of people at risk: 4	

Hazards:

1. Dehydration

Controls:

1. Electric water purification pump. This is powered by solar electricity and produces 5 litres an hour.
2. Manual back up purification pump.
3. A reserve of 20 litres of bottled water.
4. Emergency water supply of 5 litres.
5. Exhaustion of adequate sources of fresh water will result in the abandonment of the expedition.
6. The life-raft contains small packs of water (150ml), sufficient to keep the occupants alive for a period of time.

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

1. An hourly recommended water consumption rate will be established.
2. It is noted that the Coastguard's helicopter cover is intended to reach anywhere within 200 miles of the British Coast in less than 2 hours.
3. The use of energy drinks is considered under advice offered by the medical profession.

Team Approval

• Team Leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge 2010	Assessment Number: Assessment Date: Assessor:	
Risk:	Risk Rating (likelihood x severity): 5 5	
Malnutrition	2 x 3 = 6	
	Number of people at risk:	
	4	

Hazards:

1. Malnutrition

Controls:

1. The UK Military Nutrition Advice Service recommends an intake of at least 5,500 to 6,000kcal per person per day. The breakdown of the consumption of these calories will emerge from sea-trials.
2. Operational Ration Packs for balanced diet and food consumption should be considered.
3. We will carry approximately 300 'boil in the bag' meals and 100 freeze-dried meals. This will be enough for twice the anticipated length of the expedition. This ratio will be finalised after extensive sea-trials.
4. High-energy snacks are strongly recommended.
5. Nutritional supplements, including multivitamins and isotonic sports drinks should supplement the food.
6. One meal a day will be eaten as a crew, allowing team members to monitor each other's food consumption. The 'buddy-buddy' system will be effective in ensuring that people do not skip meals.
7. If deprived of food human beings can survive provided they have a small supply of fresh water. (see GBRC/A02)
8. If we are about to run out of food the expedition will head for port while we still have enough to make land unsupported.
9. Flameless Ration Heaters will guarantee that meals can be heated under all conditions.

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

1. We will take a small set of fishing equipment for use *in extremis*.

Team Approval

• Team leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge 2010	Assessment Number: Assessment Date: Assessor:	
Risk:	Risk Rating (likelihood x severity): 5 5	
Cold injury.	4 x 5 = 20	
	Number of people at risk:	
	4	

Hazards:

1. Continual exposure to wind, spray and rain potentially leading to trench foot or frostbite.
2. Immersion in sea water.
3. Cold Shock
4. Inhalation of sea water.
5. Hypothermia.

Controls:

1. Foul weather clothing will be worn when appropriate. This will reduce the debilitating effects of wind and rain, including trench foot/frostbite.
2. The hatches on the cabins will be kept closed at all times to maintain warmth and dryness for those resting. This will also enable the crew to air/dry themselves to prevent trench foot/frostbite.
3. Foul weather clothing will also improve survival times if a crew member is immersed in the sea for any period of time.
4. Cold shock can kill in minutes. It is therefore important to get someone out of the sea as quickly as possible. Constant vigilance and awareness of the danger will mean that the crew can react quicker.
5. In the event of capsize it is imperative that pre-rehearsed drills are carried out to get people out of the water as quickly and safely as possible.
6. If a crew member goes overboard and inadvertently inhales sea water the symptoms may not be immediately apparent, but are potentially fatal. The 'buddy-buddy' system will ensure that if anyone becomes ill, that appropriate action can be taken early on. This will be casualty evacuation.
7. The chance of hypothermia will be decreased by wearing appropriate clothing to the conditions.

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

Nil.

Team Approval

• Team Leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge 2010	Assessment Number: Assessment Date: Assessor:	
Risk:	Risk Rating (likelihood x severity): 5 5	
Man overboard.	4 x 4 =16	
	Number of people at risk:	
	4	

Hazards:

1. Drowning.
2. Cold injury.
3. Concussion.

Controls:

1. Crew members will be bungeed to the boat so that they do not slip overboard. When rowing we will be attached to the boat by our feet.
2. Assault Troop Lifejackets will be kept within arm's reach at all times. These inflate manually and include a spray flap to keep spray off the face of the man overboard.
3. *Gill* foul weather clothing will be worn in bad weather to protect crew from the cold water and the effects of cold shock and cold injury.
4. When the man overboard has been recovered he will be taken below and dressed in warm dry clothing if available, if not he will be wrapped in a survival blanket.
5. An emergency buoy with beacon will be thrown overboard to mark the position of the man in the water so that the boat can make its way back to rescue him.
6. Should the man overboard be knocked unconscious by collision with a blade or the boat another crew member will jump overboard to keep him afloat while the other two crew manoeuvre the boat.
7. Any men overboard will be monitored by their crewmates to ensure that they show no delayed signs of any cold injury or secondary drowning.
8. A retractable rope ladder will hang from the boat; combined with jack stays this will aid re-entry. Jack stays should also help to prevent anyone falling overboard.

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

1. An Exped Medics Course should be attended by as many members of the crew as possible.
2. The danger posed by Hydrostatic squeeze is noted in the MRA.

Team Approval

• Team Leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge 2010	Assessment Number:	

	Assessment Date: Assessor:	
Risk:	Risk Rating (likelihood x severity): 5 5	
Collision at Sea.	4 x 5 = 20	
	Number of people at risk:	
	4	

Hazards:

1. Being run down by a ship that has not seen us.
2. Collision with flotsam and jetsam.
3. Shipwreck.

Controls:

1. The use of the VHF Emergency Radio Broadcast Channel to communicate with a ship that may be on a collision course with us.
2. Fog horn.
3. Mini-flares.
4. Maritime warning broadcast will warn shipping that we are in a particular area, so that they can be alert.
5. Radar deflector to magnify our size to ships' radar.
6. Lights at night. A single 360 white light is deemed the best way of lighting the boat.
7. The pair rowing will be responsible for maintaining a look out for flotsam and jetsam that may cause damage to our boat. The boat will be fitted with mirrors to improve all-round visibility.
8. In the event of a collision and the destruction of our boat each member of the crew will carry an EPURBS emergency beacon that sends a distress signal out to very long range. All Lifeboat stations receive this signal.
9. The boat has a four man life-raft that auto-inflates. The raft has a bailer, roof and sides, survival bags (including flares, lights, water and food) and a top up valve in case it starts to deflate. The raft can also be righted by one man should it capsize. It is bright orange for high visibility.

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

1. The crew should all have passed the RYA sea survival course.

Team Approval

• Team leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge 2010	Assessment Number: Assessment Date:	

	Assessor:	
Risk:	Risk Rating (likelihood x severity): 5 5	
Loss of communications.	4 x 3 = 12	
	Number of people at risk:	
	4	

Hazards:

1. Inability to communicate with ground support.
2. Inability to communicate with emergency services if required.

Controls:

1. Satellite phone.
2. Mobile phone (Royal Navy experience suggests reception out to a maximum of 12 miles from the shore).
3. VHF (this works in line of sight only).
4. GPS (we can use this to send e-mails in burst transmission, so that we can keep our support staff up to date via the website).
5. EPURBS will be used in emergencies.
6. We have five layers of built in redundancy so that should a system fail we have back up.
7. We expect that we will very rarely have all systems functioning correctly at the same time.
8. Should we lose communications completely we will carry on in case it is a local problem.
9. *Procedure for loss of comms (survival time)?*

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

Nil.

Team Approval

• Team Leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge	Assessment Number: Assessment Date: Assessor:	
Risk:	Risk Rating (likelihood x severity):	

	5 5
Grounding.	2 x 5 = 10
	Number of people at risk:
	4

Hazards:

1. Damage to oars.
2. Damage to boat.
3. Shipwreck.

Controls:

1. Route selection to avoid proximity to land and rocks whenever possible.
2. Constant alertness for uncharted rocks.
3. Should we get too close to any rock the oars can be used to fend the boat off to avoid damage to the hull.
4. A 12ft Parachute Anchor will be on board. This can be deployed to substantially reduce leeway in an unfavourable wind.

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

Nil.

Team Approval

Team leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge 2010	Assessment Number: Assessment Date: Assessor:	
Risk:	Risk Rating (likelihood x severity): 5 5	
Equipment damage or failure.	4 x 3 = 12	
	Number of people at risk:	
	4	

Hazards:

1. Loss of means of propulsion.
2. Failure of watermaker.
3. Failure of other equipment.

Controls:

1. We will carry one spare complete set of oars making a total of 6.
2. Gates, buttons, washers and collars will all suffer wear and tear. We will carry several spare sets of each.
3. The wheels on the seats will also be replaceable.
4. The watermaker is a vital piece of equipment. A member of the crew will learn how to maintain it so that problems can be rectified.
5. Other equipment may be damaged or be unreliable. There are any number of things that could go wrong; the risk of this will be minimised by keeping equipment and technology as simple as possible.
6. A spare rudder will be carried in case of damage to the fitted one. Spare Kevlar rudder rope will be carried.
7. The crew will practice carrying out repairs and replacements at sea.
8. Bungee cord and spinnaker cloth will be used to cover broken or damaged hatches.
9. Rubber bungs, duct tape, Kevlar patches and spinnaker cloth will be used to plug small holes or cracks in the hull.

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

Nil.

Team Approval

• Team Leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge 2010	Assessment Number: Assessment Date: Assessor:	
Risk:	Risk Rating (likelihood x severity): 5 5	
Getting lost.	2 x 3 = 6	
	Number of people at risk:	
	4	

Hazards:

1. Failure of GPS.
2. Failure of GPS and becoming disoriented by a storm.

Controls:

1. Compass.
2. Paper charts should be considered.
3. Basic solar and astral navigation.
4. Should the GPS fail we will have our last known position, from which we can plot a course to the nearest land and through the use of triangulation we can calculate our position.
5. If the GPS fails and we are caught up in a storm and become disoriented we will be able to work out which way the weather has driven us and from there steer a rough course towards land.
6. Once in sight of land we can navigate simply by keeping the land on our left (as we look at it).
7. Actions on loss of GPS will be determined by the stage of the voyage that we are at. Dead reckoning will be possible in certain locations but not in others. The final decision will be down to the expedition leader.

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

Nil.

Team Approval

Team Leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge 2010	Assessment Number: Assessment Date: Assessor:	
Risk:	Risk Rating (likelihood x severity): 5 5	
Reduced Visibility.	5 x 3 = 15	
	Number of people at risk:	
	4	

Hazards:

1. Fog.
2. Night.
3. Rain/sleet/snow.

Controls:

1. At times of poor visibility we will be even more vulnerable than usual to collision and grounding.
2. The radar reflector will be raised to a height of 3m above sea level at night or during bad weather.
3. A 3m extension rod will be sought to enable this extension. Without this the boat will be invisible in a heavy sea.
4. In the event of fog we will use a fog horn to alert people to our presence.
5. The crew will be familiar with fog signals.
6. In conditions of poor visibility we will wear life-jackets and warn the coastguard of our location.
7. It may be possible to anchor to allow the weather to improve.
8. Hand flares and parachute flares will be used to alert other ships to our presence if they have not seen us.

Remaining Risk:

Controls Adequate.

Additional controls required/agreed:

Nil.

Team Approval

• Team Leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge 2010	Assessment Number: Assessment Date: Assessor:	

Risk:	Risk Rating (likelihood x severity): 5 5
Lightning Strike.	5 x 3 = 15
	Number of people at risk:
	4

Hazards:
1. Electrocution. 2. Destruction of electrical equipment. 3. Fire or explosion.
Controls:
1. Impossible to avoid being struck by lightning, but the potential damage can be reduced. 2. Turn off all electrical equipment so that it is not susceptible to a power surge. 3. Fuse box. 4. Rubber grips on blades, seats and foot stretchers insulate rowers from grounding electrical current. 5. There is a relatively small amount of conductive material on the outside of the boat and it is close to sea level so lightning should be grounded without affecting equipment inside the boat that might cause a fire or explosion.
Remaining Risk:
Controls Adequate.
Additional controls required/agreed:
Nil.

Team Approval		
• Team Leader	.....	*Date*……
• No 2	……	*Date*……
• No 3	……	*Date*……
• No 4	…….....	*Date*……

GB Row Challenge Risk Assessment Amendments

The following amendments to the GB Row Challenge Risk Assessment are to be noted:

PAGE A – 7

Controls

7. Will not include drips or homeopathic remedies.

PAGE A – 8

Controls
4. There will be no emergency supply of 5 litres because this is included in the life raft.

PAGE A – 9

Controls
3. We are carrying 50 days worth of food. This includes 40 days of dehydrated rations and 10 days of boil in the bag. The each day is supplemented by an extra two cooked meals to increase calorie intake.

Additional controls:

1. No fishing equipment.

PAGE A – 11

Controls

1. Crew members will not be bungeed to the boat permanently, but caution will be exercised when moving about the boat and this will be kept to a minimum.

2. The lifejackets are not Assault Troop Lifejackets.

4. In lieu of a survival blanket we have sleeping bag and bivvy bag plus a large number of plastic bags.

8. No rope ladder or jack stays.

PAGE A – 13

Controls

9. If a loss of comms is due to a serious/life threatening accident an EPURB will broadcast.

PAGE A – 15

Controls
6. No rudder, no spare rudder rope.
8. No spinnaker cloth for cracked hatches.

PAGE A – 17

Controls

3. No 3m extension rod; tried and tested and found to be ineffective.