

Serious Explorers - Livingstone
Investigation into the Fatality on 30th October
2009 in Tanzania

Report compiled December 2009

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EXECUTIVE SUMMARY

Introduction

The *Serious* brand has been a commission for CBBC since 2001. Six previous *Serious* series have taken children to challenging environments around the world, from the jungle in Borneo to the desert in Namibia. The series promotes the spirit of adventure and environmental awareness, and it is documented to have changed the lives of the children who have taken part. In development of the brand, in 2009 the focus moved to following in the footsteps of famous world explorers; in the current series *Dr David Livingstone*.

On 10th of October 2009, a CBBC production team left London for Tanzania to start filming for an 11 part series based on the explorations of *Dr David Livingstone*. The main recording period was planned to be for 34 days and was to be split into five phases. In the third phase the group were split into two teams, with half travelling to Tarangire National Park and the second team continuing in the Mbarika Mountains completing an 11 day safari trek. This Mbarika Team had 38 people which included the expedition team, production crew, three children, Hunters, Guides and local specialists.

Anton Turner was employed as a fixer, professional hunter and chief guide. He was selected because of his extensive knowledge of Tanzania, having lived and worked in the country since 2001 and because of his expansive experience of working in and around wildlife, leading safaris and working in similar terrains.

Incident - 30th October 2009

30th of October 2009 was day nine of the planned 11 day trek (day 21 of the planned 34 day shoot) and was progressing as planned. The team had risen as usual and set off on their trek at approximately 07.00hrs. About 20-30 minutes prior to the incident two bull elephants were seen ahead of the party. The path split and the elephants were seen to take the path to the right and Ben Major (Expedition Leader) directed Anton Turner (Chief Hunter) etc to lead the team along the left path, which he did. Anton Turner was in the forward party with two Trackers. As the team were aware that elephants were in the vicinity, they acted as they should when in proximity to elephants. At approximately 10.10hrs (07.10hrs UK time) an elephant suddenly charged very quickly towards the forward party, coming down a hill from the party's left. The elephant was spotted by the trackers,

who shouted and ran, which alerted the rest of the group. Anton Turner stood his ground, was heard to shout at the elephant and seen to point his weapon. No shot was fired. Anton Turner was charged by the elephant and was mortally wounded.

The Investigation has identified the immediate causes for Anton Turner's death and the possible underlying causes.

Immediate Causes

The immediate cause of the accident that killed Anton Turner was the attack from a charging elephant, which struck him and caused fatal injuries.

Underlying causes

Information sourced from elephant experts indicates that the elephant reacted in an unusual, unexpected way and it is not possible to conclude why. Possible underlying contributory factors could be that the elephant was protecting a second bull elephant; that it may have been previously injured through combat with other elephants, by accident or by man; that it may have been surprised by the party and felt threatened; that it may have felt trapped, and/or that the visibility in the bush meant it did not notice the party until they were in its 'fight or flight' zone and that it chose to fight.

Anton Turner did not fire his weapon. Inspection of the weapon showed it was loaded, ready to fire and in working order. The Investigation is unable to conclude why Anton Turner did not fire his weapon. Possible reasons are: the speed of the elephant charge; the visibility from the bush; the remote chance of it being a full charge and then the late recognition that it was a full charge and not a mock charge. It is considered through discussions with hunting experts that even if Anton Turner had fired his weapon it may not have changed the outcome.

Conclusion

The conclusion of this investigation is that the death of Anton Turner was a tragic accident. This is the conclusion arrived at by the Tanzanian authorities and they are not investigating the death any further¹.

¹ Based on the information provided by the British High Commission and Undertakers

It is considered that the preparations undertaken by the production and expedition team were appropriate, thorough, detailed and considered. They had carefully and methodically identified, considered and reduced the risks, with appropriate expert advice. Elephant charges had been identified as one of the risks of the Mbarika trek and steps had been taken to manage and minimise that risk. These included a strict walking formation based on recognised procedures for walking in a 'big game' environment, with Anton Turner at the head of the group as Chief Hunter/Guide as the agreed first line of defence. Pen de Vries was the second Hunter and positioned in accordance with procedures and acted as the second line of defence. Two Trackers were in the forward party slightly ahead of Anton Turner and their role was to provide an early warning to the Chief Hunter. This formation was as documented in the risk assessment. There were also an adequate number of Professional Hunters and armed Guards. Adequate training and drills had been provided to the team. The production team were all very experienced and had the required competencies to work on this production. The expedition team all had extensive training and experience in leading expeditions, with certified accreditation, and are considered competent in their role on this production.

The Expedition Doctors' consider that the provision of medical assistance was in accordance with the agreed plan for dealing with an incident of this nature. The Expedition Doctors consider that it was extremely unlikely that Anton Turner would have survived his injuries even if he had been close to a fully resourced hospital.

The emergency evacuation plans were very well planned, were followed by the team and the Expedition Leader showed exemplary leadership skills in dealing with the situation and ensuring the safety of team.

The BBC's mission is to **inform, educate** and **entertain**. It achieves this through six public purposes. Two of those purposes are *to promote education and learning* and *to bring the UK to the world and the world to the UK*. The CBBC *Serious* brand clearly fits with those two core purposes. While delivering against the BBC's core purposes an overall objective is to ensure the inherent risks that cannot be avoided are minimised and that vigilance across the BBC is ensured.

During the investigation, areas of improvement were identified and recommendations have been made against these. These include improving the BBC's preparedness for managing an incident such as this; conducting safety

debrief sessions after overseas productions of this nature and improving the way the BBC shares its knowledge and expertise of productions across the organisation. It is our conclusion that had those recommendations been in place, they would have had no effect on the outcome of this accident.

The report also identifies many good practices of the *Serious* programme team and it is recommended that these good practices are shared across the BBC.

1.1 RECOMMENDATIONS

Recommendations Specific to the Serious Explorers Production

The following recommendations are specific matters that should be addressed for future *Serious* Productions.

1. To ensure that all accidents and incidents on similar (overseas) productions are recorded and communicated appropriately. ²
2. All future series of *Serious* and similar productions must ensure that a written summary risk assessment of significant findings be provided to the parents/guardians of all participants after a recce has been completed and well before the anticipated date of travel.
3. All recce trips for productions must have a detailed risk assessment undertaken in advance and the significant findings documented. Where changes are made during the recce the significant findings of the risk assessment should be recorded; this should be proportionate to the identified risks.
4. All future overseas production schedules and Medevac plans must contain all Next of Kin details for locally recruited overseas personnel as well as all UK team members.

General Recommendations Resulting from this Investigation

During the investigation, certain areas of good practice and areas for improvement were identified arising out of our general considerations of how the BBC approach these types of Productions. The inclusion of these recommendations does not, necessarily, reflect on this production. It is considered that all of these points might not have been identified without this investigation and that conducting safety debrief sessions following overseas productions, such as this, would be beneficial. As a learning organisation it is important that the BBC shares the lessons learned from this investigation. Our recommendations are as follows:

² This recommendation has been identified after a review of incidents from previous *Serious* productions and does not relate to the *Serious Explorers - Livingstone* production

5. BBC production staff that travel and film in remote locations should attend the recently developed 'Remote Locations' training course, where considered appropriate. This course combines remote first aid training with practical and logistical training required for working in a range of different environmental conditions including cold, tropical, desert, water and altitude.³
6. BBC Safety, in conjunction with the production community, to promote the use of existing methods for sharing good practices and consider new methods, within practical limitations.
7. When reviewing medical emergency arrangements careful consideration must be given to the evacuation times and methods of evacuation, which should be measured against the level of risk to agree an acceptable plan.
8. Review the BBC procedure for 'Incidents Involving Death or Serious Injury to BBC Personnel' including the roles of those involved so it is clear, simple and easy to understand in an emergency. Design and implement this procedure across the BBC.
9. Trauma Risk Management (TRIM) training to be implemented across the BBC, where appropriate.
10. This investigation should form an agenda item on the appropriate BBC Divisional Health and Safety meetings, with the recommendations discussed and good-practice therein shared across productions.
11. Overseas productions of this nature should schedule a safety debrief on their return to base to provide an opportunity to identify the lessons learned that can be carried forward to future productions.

³ All of the senior leaders of the Serious Explorers - Livingstone expedition had the requisite skills and knowledge and it is considered that this course would not have provided them with additional training.

2.0 TERMS OF REFERENCE

The terms of reference for the investigation were as follows:

Stakeholders

Report Commissioner: Caroline Thomson - Chief Operating Officer and Director with overall responsibility for Health and Safety.

- Jana Bennett - Director, Vision
- Joe Godwin - Director of Children's
- Paul Greeves - Head of Safety
- Anna Murray - BECTU National Official for Health and Safety affecting members of the BBC

Investigation Team

Lead Investigator

- Donald-Iain Brown, Head of Talent Division & Operations - Scotland

Other Members:

- Philippa Miles, Senior Safety Manager, BBC Safety
- David Milligan, Safety Adviser, BBC Safety
- Dominic Parry, Production Executive, Vision
- Stephen Moss, Series Producer, N.H.U.

Team Competence

The lead investigator and at least one of the team have completed the BBC's Lead Accident Investigator Course.

Background and Purpose

Caroline Thomson in her role as Executive Board member with overall responsibility for Health and Safety, in accordance with BBC guidance for the investigation of accidents, has commissioned this investigation into the death of Anton Turner in Tanzania on 30th October 2009.

Investigation Remit

With reference to safety management the investigation will seek to:

- Determine the events that led up to the incident and determine the immediate cause(s).
- Review programme planning, hazard identification and risk control
- Identify any underlying causes and contributory factors which led to the incident.
- Identify who and to what extent any other persons were at risk
- Review the appropriateness and effectiveness of measures taken after the incident including contingency plans and provision of medical assistance.
- If relevant, recommend actions to address any findings the investigation makes in relation to the above matters.
- The scope of the investigation will be limited to this incident. The scope of the recommendations may be extended to any aspect of the BBC's operations.

Information, data and relevant documentary and physical evidence will be gathered and statements and interviews undertaken to establish the above. Notes will be made of any discussions.

All people interviewed will be given the opportunity to be accompanied by a colleague or Trade Union Representative. Regular liaison with a Union nominated safety representative will be maintained throughout the investigation.

Intended outputs

An interim report on the current status of the enquiry and any initial recommendations will be submitted within 28 days of the incident.

Further updates will be issued every calendar month until the final report is issued.

We will seek, if possible, to complete the final report by 14th December.

The final report shall be agreed by the report commissioner.

The investigation report excluding only any sensitive personal information will be published on the BBC's external website.

The investigation report and evidence will be recorded in the myRisks incident system.

Sign Off

Terms of Reference were agreed by Caroline Thompson 5th November 2009.

2.1 INVESTIGATION CALENDAR

Date	Activity	Who
31.10.09	Travel to Dar es Salaam, Tanzania to start investigation and support the team on location	Dave Milligan* (Safety Advisor, BBC Safety), Philippa Miles** (Senior Safety Manager, BBC Safety), Dominic Parry (Production Executive, Children's)
01-05.11.09	Interviews in Dar es Salaam	As above
02.11.09	Lead Accident Investigator appointed	Donald-Iain Brown***, Head of Talent & Operations, BBC Scotland
03.11.09	Terms of Reference agreed	Caroline Thomson
09.11.09	Meeting between Investigation team and members of Children's Management team to discuss Investigation protocols and timeline	Investigation Team Paul Greeves (Head of BBC Safety), Tamara Howe (COO, Children's), Richard Perry (BBC Safety)
09.11-09.12.09	Paperwork, photographs and footage relevant to the investigation sourced from the BBC and other sources	Investigation Team
16.11-03.12.09	Interviews in London	D-I Brown and Philippa Miles
29.11.09	Interim Report published	D-I Brown
30.11.09	Elephant behaviour specialist appointed	Stephen Moss (NHU Series Producer)
01-09.12.09	Report drafted	Investigation Team
12-13.12.09	Report finalised	Investigation Team
14-15.12.09	Report provided to stakeholder group and production team for factual accuracy	Stakeholder group and Gillian Scothern, (Exec Producer) Marshall Corwin (Series Producer, Serious Explorers), Ben Major (Expedition Leader, Serious Explorers).
17.12.09	Report published	Investigation Team

*Safety Advisor for Children's; had background information of the production.

**Completed the BBC lead accident investigator course and had background information of the production.

*** Completed the BBC lead accident investigator course.

3.0 BACKGROUND

3.1 BACKGROUND to *SERIOUS* SERIES

The 'Serious' series started in 2002. *Serious Explorers - Livingstone*, was the seventh in that series. They have all been produced by Marshall Corwin, and the team have generally remained consistent throughout the seven years. It is a series of 30 minute programmes commissioned by CBBC and transmits on BBCONE, BBCTWO and the CBBC Channel. It is also distributed around the world to over 36 countries.

The premise of the series is that eight young people aged 12-15 years old take part in a challenging adventure in different parts of the world, often helping wildlife, getting involved in conservation, or carrying out some research, usually culminating in a final challenge.

The sequence of the series is:

Serious Jungle (Borneo 2002) - six episodes

Camping in the heart of the Borneo rainforest, where they build a huge hardwood feeding platform to help return captive orangutans to the wild.

Serious Desert (Namibia 2003) - six episodes plus four behind the scenes.

They build an enclosure for camels and survey rare black desert rhino, before a marathon trek of more than fifty miles across the Namib desert to the Skeleton coast.

Serious Arctic (Canadian Arctic 2004) - six episodes plus four behind the scenes.

They undertake an epic journey by husky sled, in temperatures down to minus 30 degrees, to measure a glacier as part of major research into global warming.

Serious Amazon (Peru 2005) - six episodes plus four behind the scenes.

The team head into the Amazon rainforest taking on two environmental projects. The first, building an enclosure for rare uakari monkeys and the second to remove illegal fishing nets which trap pink river dolphins.

Serious Andes (Ecuador 2006) - six episodes plus four behind the scenes.

They build a pre-release enclosure at high altitude to help return endangered spectacled bears to the wild. They also attempt to climb Mount Cotopaxi which is 20,000 feet, and some make it to the peak.

Serious Ocean (Chile/Argentina 2007/08) - 10 episodes

They travel on an environmental voyage in the icy waters of Tierra del Fuego, conducting research into penguins, dolphins, elephant seals and albatross. They end by rounding Cape Horn.

Serious Explorers (*Marco Polo* - China 2009) (*Livingstone* - Tanzania 2009) 10 episodes plus a 'making of' episode.

This was due to be filmed in July 2009 in Xinjiang province, China and planned to follow in the footsteps of *Marco Polo* and his exploration of that area. This was cancelled due to the unrest in that area at that time.

This was followed by a commission planned and secured in 2008/09 which followed in the footsteps of the great explorer *Dr David Livingstone* through Tanzania.

3.2 SAFETY RECORD

'*Serious*' has a good safety record for all six of the previous expeditions, considering the tasks, activities and wide ranging filming environments. Details of known accidents/incidents are below.

A child cut his lip after falling over during *Serious Desert* in 2003, and in 2007 a boy cut his face when filming *Serious Ocean*. Neither accident was significant to warrant further investigation.

During *Serious Andes* in 2006, a small number of the children showed early symptoms of altitude sickness and could not complete the final ascent of Cotapaxi. They were safely removed back to base camp and treated by the expedition doctor.

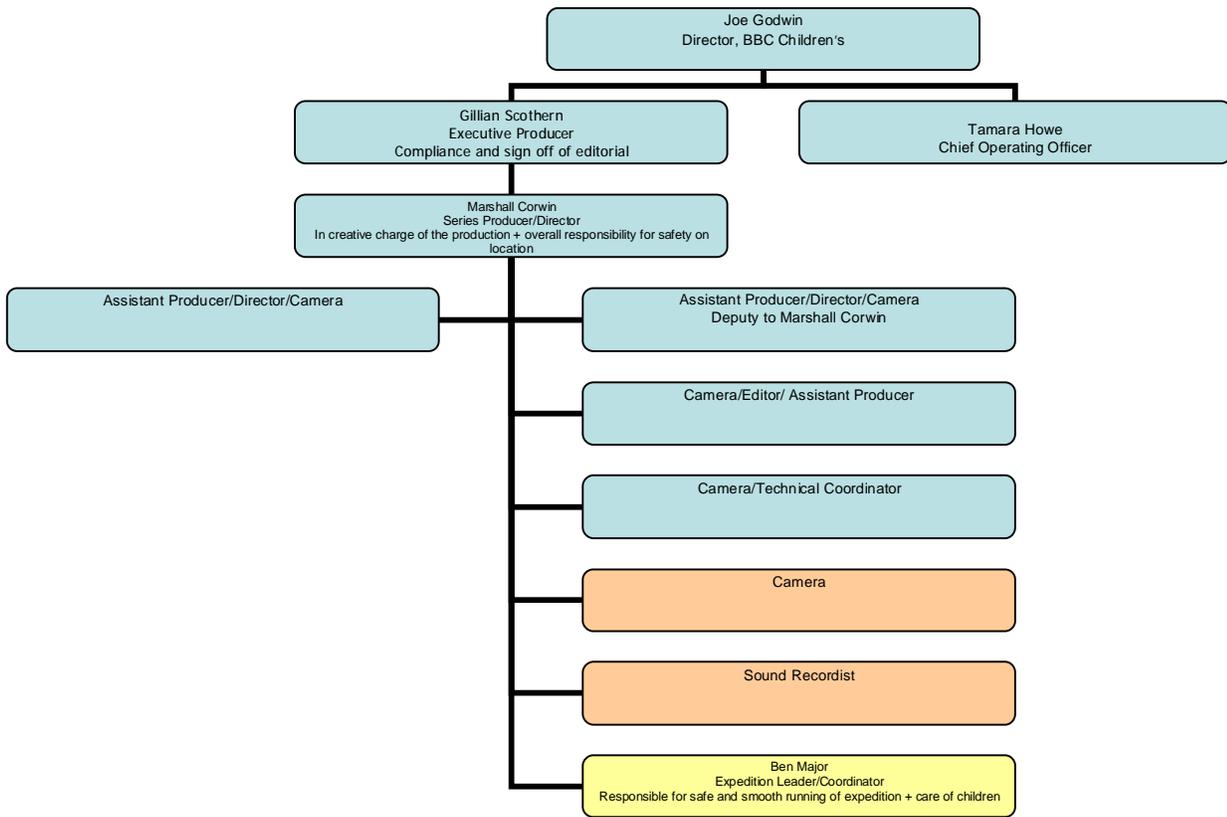
The team has always included at least one Doctor for all expeditions and this has been increased to two doctors when appropriate, based on the type of activities and whenever the team have been divided for filming purposes. Usual ailments such as sore feet, minor cuts, scratches, upset stomach complaints and similar have been dealt with on location by the expedition doctor.

The above incidents above were not recorded on the BBC central system as required.

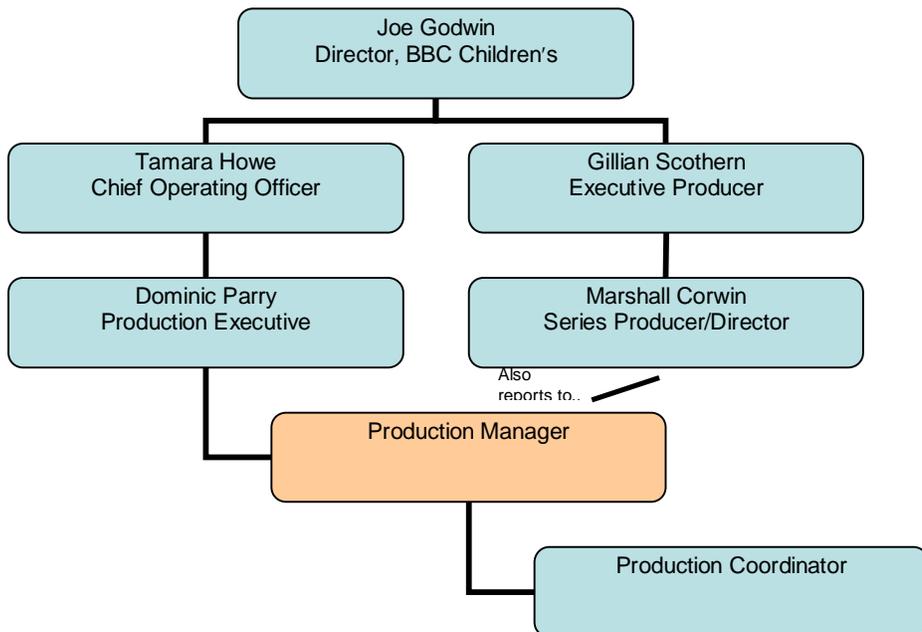
RECOMMENDATION (Specific to *Serious* Productions): To ensure that all accidents and incidents on similar (overseas) productions are recorded and communicated appropriately.

3.3 OVERVIEW OF *SERIOUS* PRODUCTION STRUCTURE

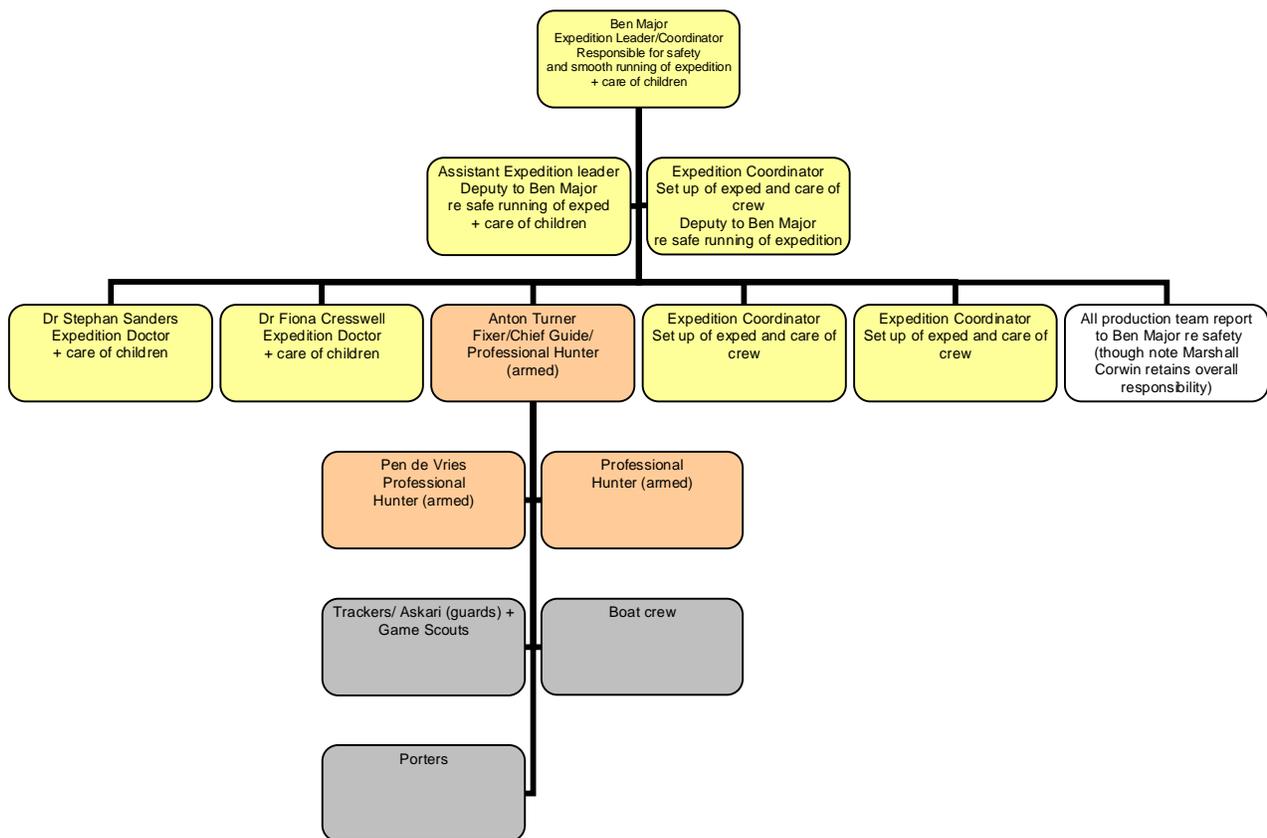
SERIOUS EXPLORERS - Production and Editorial



SERIOUS EXPLORERS - Production Management



SERIOUS EXPLORERS - Expedition



Safety Training of Production Management

Tamara Howe	Member of the BBC Vision Health and Safety Forum. BBC Production Safety Training in 2007.
Dominic Parry	BBC Production Safety Training in 2002, Risk Management of Production in 2003, online Risk Assessment Training in 2007, Production Safety Refresher in 2008 and Child Protection Training.
Gillian Scothern	Safe Management Prods Pt 1 in 2002, Working with Children training in 2008, and Production Safety Refresher in 2008.

3.5 SUMMARY OF ELEPHANT BEHAVIOUR

We were provided with the following by Dr Kate Evans who is a professional elephant scientist based in the Okavango delta, Botswana, who runs the research and conservation charity Elephants for Africa⁴.

The African elephant (Loxodonta africana) is the largest land mammal on earth and subsequently can pose a danger to humans when in close proximity be it either in a vehicle or on foot. You are not safe in a vehicle should an elephant decide to attack.

Elephants should always be approached with caution and preferably with a good open option for retreat/escape should the elephant you are getting close to become uncomfortable or charge.

It is unusual for an elephant to attack unprovoked, but not unheard of. Females with calves are very protective of their young and will charge if they feel vulnerable. Males, in my experience, are less prone to charging; however a male in musth should be approached with more caution as he is full of testosterone which makes them aggressive. Additionally elephants who have been injured through combat with other elephants, by accident or by man, can be very aggressive and attack totally unprovoked. These wounds may not be obvious from a distance, or indeed up close.

Elephants are easily spooked so do not assume they have seen you and know that you are there, their eyesight is limited and therefore if you are downwind of them they could be unaware of your presence. Even if they have acknowledged your presence they can easily be surprised by sudden movement or noise as if they have appeared to have forgotten you were there.

Some behavioural changes in elephants can warn of a potential charge:

Group defence *is employed against all potential predators, particularly by female herds, with the youngsters huddled in the middle of the adults.*

⁴ References: Estes, R.D. (1993) *The safari companion: A guide to watching African mammals*. University of California Press, USA

- *Disturbed elephants undecided whether to stand their ground, flee or charge will often display **displacement behaviour**, with the trunk coiling and uncoiling, swinging and kicking of the ground. They may rub parts of their body with their trunk. They may also break branches or push over trees but not feed on the items.*
- *People who know elephants, and have spent a lot of time in the bush can usually tell the difference between a demonstration and a real charge, however experts have been killed by elephants and so no hard and fast rule exists and elephants can change their mind mid charge.*
- *A serious charge can come without warning, in fact when an elephant means business they usually do come immediately and without warning, perhaps with a momentary rocking motion at the start. It often comes without sound, so if you are not facing the elephant you may not know it is coming until they are very close. The tail stiffens the tusks are held up high and the trunk is drawn close to the body. The ears are usually spread out to make the head appear as large and threatening as possible.*

4.0 PREPARATION IN THE UK

Series seven of the *Serious* brand and its move into the Explorer strand of programming was due to be filmed in China following the adventures of *Marco Polo*. The children that went through the selection process were all working on the assumption that they were going to be travelling the *Silk Road* in *Marco Polo's* footsteps. The Marco Polo Expedition was planned and all travel arrangements were booked for travel on 5th July 2009. All children and the associated team travelled to Beijing and then Urumqi, but due to an assessment of the political situation and civil unrest in the country they did not embark on the journey as planned. The expedition did not leave the area close to the airport and returned to the UK on 9th July 2009. The production team and Children's management considered the risks of embarking on this expedition and decided that it was not safe for the expedition to continue. As the result of another assessment on 20th July 2009 it was decided that it was not possible to travel to China anymore this year (2009). This was communicated, on the same day, to all parents, by email from Marshall Corwin (Series Producer).

In the same year as pitching the *Marco Polo* idea to the CBBC Commissioner, the *Dr David Livingstone* expedition was also pitched in 2008/09. Research had been carried out to determine what this might entail, which was included in the pitch document. Both were accepted as programmes that were wanted for the channel, but that the *Marco Polo* programme would be the first to be recorded.

When Marshall Corwin emailed the parents of the children to say that *Marco Polo* would not be going ahead, he signalled that Tanzania was a distinct possibility but that he would come back to all and confirm this after a recce to Tanzania, which Ben Major (Expedition Leader) was going to undertake.

The planning lead-time for the *Livingstone* programme was less than the normal time allocated. This was offset by having Ben Major contracted for a cumulatively longer period of time than the production had had on previous series.

Ben Major spoke to the BBC's International Filming Advice team and the BBC's Natural History Unit (NHU) who provided him with a list of contacts in Tanzania and Kenya. He spoke to a number of these contacts and met with one Tanzania-based fixer company.

4.1 COMPETENCE

The expedition to Tanzania, in the footsteps of *Dr David Livingstone*, was led by Marshall Corwin and Ben Major. Marshall Corwin has Series Produced all six previous series of the *Serious* Brand, and has extensive experience of filming in difficult and arduous terrain.

Ben Major, who is an experienced expedition leader, has worked on four previous series. He was appointed on *Serious Explorers - Livingstone* to work with Marshall Corwin to plan the expedition and also during the expedition to assume the role as Expedition Leader. Ben Major has extensive experience of working in difficult and challenging environments / terrain. He has a proven track record of expedition leadership with experience of jungle, desert, ocean/rivers, Arctic/Antarctic and mountain expeditions. He has also undertaken advice to other television productions as well as commercial advice to other clients working in similar environments. He had also been a commissioned officer in the British Army.

Anton Turner (Fixer/Chief Guide/Professional Hunter) had wide experience of working in difficult environments having worked in Iraq, Nigeria and Kenya. He had previously worked with the BBC in many challenging environments including Darfur and Baghdad. He had also been a commissioned officer in the British Army. He had worked extensively in Africa and with wildlife, as a hunter and possessed a Professional Hunter qualification.

The Professional Hunters that were employed locally had their licences checked and were deemed to be competent.

The production team were all very experienced broadcast professionals all of whom had worked on previous series of *Serious*, as well as many other BBC productions in challenging environments.

All of the expedition team, with the exception of Dr Fiona Cresswell (one of the Expedition Doctors), had been involved on previous series of the *Serious* brand. In particular, it is important to note, the Expedition Doctors were trained in Advance Lifesaving Techniques.

The only people that were new to the team were those people who had specific skills and knowledge that related to Tanzania. This included the Chief Guide, Guides, Professional Hunters, Askari (Guard), Trackers, the boat crew and Porters.

This is in keeping with the procedures the *Serious* productions have previously employed.

The Expedition Leader, Assistant Expedition Leader and Expedition Coordinators all have extensive training and experience in leading expeditions, with certified accreditation. Cumulatively, the team had experience of working extensively in Eastern and Southern Africa; some have Professional Hunter qualifications and experience of mountaineering.

4.2 TRAINING

BBC SAFETY TRAINING RECORD FOR 'SERIOUS' PRODUCTION TEAM	
NAME & ROLE	TRAINING COMPLETED
Marshall Corwin, Series Producer	Battlefield First Aid 1 st Aid Appointed Person Safe Management of Productions TV Production Safety Refresher Hostile Environment Training Working with Children
Ben Major, Expedition Leader	Safe Management of Productions Working with Children TV Safety Production refresher
Assistant Producer	Public Order Training
Assistant Producer/Director/Camera	Safe Management of Productions Hostile Environment Training Child Protection Workshop TV Production Safety Refresher
Assistant Producer/Director/Camera	Child Protection Workshop Hostile Environment TV Production Safety Hostile Environment Refresher Public Order Training Working with Children
Technical Coordinator/Camera	DV Lighting Safety Electrical Safety
Cameraman	Safe Working with Cameras & Lights Location Safety Electrical Safety on Location Battlefield First Aid Driver Training Manual Handling
Sound Recordist	Experienced Overseas Location work

There is no specific training that the team had to undertake in order to go on this trip as Tanzania is not categorised as a 'Hostile Environment' (classified by BBC Safety), although it is clear that it can be a harsh and difficult environment to work

in. During the investigation it was noted that a 'Remote Locations Course' has recently been developed. It was piloted in September 2009 and will be rolled out in January 2010. It should be noted the senior leaders on this production have already received training in excess of what they would receive through a Remote Locations Course.

In advance of the expedition the children were encouraged to take long walks on flat ground gradually increasing the incline of these walks to incorporate hill walks that were challenging but not too steep. It was suggested that they increase walking distances and general exercise to maintain and improve fitness the closer the departure for the expedition. It was also suggested that the walking boots that they had been provided with should be broken in gradually. These recommendations were in keeping with the advice provided to children throughout the previous six series of *Serious*. It is important to note that the children had already been assessed for their mental and physical fitness during the selection process.

GENERAL RECOMMENDATION - PAN BBC: BBC production staff that travel and film in remote locations should attend the recently developed 'Remote Locations' training course, where considered appropriate. This course combines remote first aid training with practical and logistical training required for working in a range of different environmental conditions including cold, tropical, desert, water and altitude.

4.3 SELECTION OF CHILDREN

The children that are selected to take part in a *Serious* Expedition go through a rigorous selection process. The Series has traditionally attracted a huge number of applications; this series was no different with 12,000 children applying for the eight available places.

The process for selection is as follows:

- All applications are reviewed and a short list of 500 is created.
- Phone interviews to the shortlisted 500 candidates takes place.
 - This involved briefing to parents / guardians on the nature of the expedition, general risks, how these are mitigated and to ensure that they are happy for their child to remain involved in the selection

process. (This work is conducted by the research team working to a pre-determined script).

- First auditions are held for 120 children. They were held in three locations: Manchester, Bristol and London.
 - During this process applicants are asked to carry out some physical tasks, are interviewed and have to talk to a “diary camera” to assess their suitability for selection.
 - The nature of the expedition is explained as are some of the safety aspects along with the BBC’s approach to safety.
- From the 120 children seen at the regional auditions, 16 are selected to go forward to a three day camp in Wales. From the 16, eight successful children are selected.
 - During the three days the children are asked to carry out physical, mental and team working activities. They are interviewed during the activities and assessed for suitability for the series.
 - At the end of the three day camp the final eight are chosen. Their parents/guardians accompany them during the weekend. In order to tell the 16 assembled of their success (or not) the group is split into two, in separate rooms - a successful group and an unsuccessful group. The parents/guardians are told before the children of their success or not, and are available immediately to congratulate those selected and to commiserate/comfort those that are unsuccessful.
 - The successful children, parents/guardians and crew receive a briefing after the selection process. This includes details of the planned expedition and an outline of some of the associated risks. This briefing is carried out by Marshall Corwin and Ben Major.
- After this weekend, the successful children and parents are regularly communicated with by Marshall Corwin who updates them regularly.
- One child was unable to attend the expedition because they were unwell resulting in seven children travelling to Tanzania.

4.4 RECCE AND PLANNING

The recce trip for *Serious Explorers Livingstone* was agreed after it was clear that *Serious Explorers - Marco Polo* was not going to be possible to achieve.

Ben Major, as Expedition Leader, was employed to go to Tanzania to assess the suitability of the terrain and the country to achieve the outcomes of following in the steps of *Dr David Livingstone*. It is important to note that the production team considered other areas of Africa that *Livingstone* had been, but chose Tanzania as the most suitable and because of the relative stability of the country in relation to other parts of Africa.

Ben Major and Marshall Corwin determined that there was a requirement for a Fixer/Chief Guide/Professional Hunter for the expedition. Anton Turner, based on his expertise and competence, was selected for this role by Ben Major, in consultation with Marshall Corwin.

Following from Ben Major's pre-recce trip, Marshall Corwin travelled to Tanzania on a production / editorial recce, which also included Ben Major, Anton Turner and the Expedition Coordinator where all the details of the trip began to take shape and the schedule began to emerge. *Refer to Section 5 for details of the recce.*

As a consequence of the recce in Tanzania, Marshall Corwin continued to communicate with the parents of the children through email and telephone. This communication was supported by the Production Coordinator and the Production Manager, who each made regular calls to all the participants regarding the logistics of the trip.

In interviews with the Senior Management team in BBC Children's it is clear that health and safety is a primary consideration and it is clear that each person takes this responsibility seriously and gives it due care and attention.

Having conducted our investigation, we believe that the risks of the trip were adequately highlighted to everyone concerned. We are satisfied that this is also the case with the parents of all the children. However, it is considered that we should not rely solely on telephone conversations as an adequate way for these issues to be communicated in the future. It is recommended that a summary note of the known serious risks should be provided to parents, in writing, after a recce trip has been carried out and all risks identified. This must be well before participants depart.

RECOMMENDATION (Specific to *Serious* Productions): All future series of *Serious* and similar productions must ensure that a written summary risk assessment of significant findings be provided to the parents/guardians of all participants after a recce has been completed and well before the anticipated date of travel.

4.5 INITIAL ASSESSMENT OF RISKS

As previously explained, the *Serious* Brand takes children to remote parts of the world to challenge them in all kinds of ways. It was understood from the outset of this programme that the trip to Tanzania was going to be arduous; however, in relation to previous series the residual risks were considered to be lower by BBC Children's Management, than that of *Serious Arctic* or *Serious Ocean*, for example.

Other production areas of the BBC were not contacted specifically in relation to the safety aspects of this trip, even though the Natural History Unit (NHU) has filmed in similar, challenging environments.

It was considered by the production team that they had the necessary skills, knowledge and contacts. Whilst it is appreciated that this may have been the case for the *Serious* team, it is nonetheless considered that it would be beneficial to share good practice of working in these environments across the BBC.

GENERAL RECOMMENDATION - PAN BBC: BBC Safety, in conjunction with the production community, to promote the use of existing methods for sharing good practices and consider new methods, within practical limitations.

5.0 PREPARATION IN TANZANIA

5.1 RECCE

The recce was made up of three distinct parts,

- Pre-recce 22nd July - 31st July 2009 completed by Ben Major (Expedition Leader)
- Second Recce 1st Aug - 2nd Sept 2009 completed by Ben Major with assistance from Anton Turner (Fixer/Chief Guide/Hunter).
- Final Recce 3rd Sept - 15th Sept 2009 completed by Marshall Corwin (Series Producer), Ben Major, Expedition Coordinator and Anton Turner. This was to allow Marshall Corwin to confirm the schedule/locations/activities of the expedition; to ensure that it would work editorially and to be satisfied, as the senior manager in charge, that it could take place safely.

The Pre-recce

Ben Major completed a pre-recce to establish whether it would be feasible to undertake the expedition in October 2009. He considered logistics, safety, budget and editorial requirements; this involved discussions with local Guides, Professional Hunters and Fixers and a review of potential locations. Ben Major engaged Anton Turner as a Fixer/Chief Guide/Professional Hunter. He visited the The Selous Game Reserve, where Anton Turner's company was based, to consider if it was suitable to film parts of the series. Regular communication was made with Marshall Corwin in London where progress was discussed. On the completion of the pre-recce a decision was made by Marshall Corwin, Ben Major and Gillian Scothern (Executive Producer) that it was feasible to complete the expedition in October 2009. This decision was based on there being enough time to plan and prepare a safe expedition. This decision was communicated to the Senior Management team in Children's. Marshall Corwin noted that without Anton Turner's expertise and local contacts it would, probably, not have been feasible to complete the expedition in 2009.

Second Recce

From 1st August 2009 to 2nd September 2009 Ben Major made local contacts, sourced advice from Hunters, Trackers, Game Scouts (who work for the Tanzanian Government), commercial safari organisations, the owner of a Mining company and others. He spent time with a safari organisation in Lukula for two weeks in order to review the area and increase his knowledge. He reviewed transport options, met aircraft owners and pilots, liaised with the British High Commission and the

BBC Stringer in Tanzania regarding hospitals, medical support, transport etc and reviewed medical evacuation options.

Editorial control is the responsibility of the Series Producer. However, Ben Major had a good understanding of the editorial requirements and identified typical *Livingstone* locations suitable for the programme. This included swamp areas, Lake Tanganyika, mountainous areas, beach areas (Mafia Island), rivers suitable for rafting and suitable locations for the epic start and epic finish to the programme. Ben Major sketched out a rough suggested plan of the trip so he could explain this to Marshall Corwin when he arrived for his recce and show him the locations.

Selection of the Mbarika Mountain Location

Ben Major visited the Selous Game Reserve to determine whether it would be a suitable location for part of the trip. The location contained swamps, mountainous areas and allowed foot safari. Ben Major considered it to be typical *Livingstone* country.

Anton Turner ran a business that arranges safaris - walking, jeep and boat. It was established in 2007 and has approximately 175-225 visitors per year. There are other commercial organisations within the Selous Game Reserve that run similar safaris. Anton Turner was experienced in leading walking safaris within the Selous Game Reserve. Ben Major asked Anton Turner if there was an area that would be suitable for remote trekking and observing fauna. Anton Turner recommended the Mbarika mountain range. This area was not commonly used because it is less accessible than other areas. Ben Major asked Anton Turner to undertake a recce of the Mbarika Mountains, for a trek on foot that would be suitable for children. Anton Turner completed this recce with two local Trackers in five days. Elephants were observed on each day of this recce and there were no reported issues.

Final Recce

From 3rd to 13th September 2009. Marshall Corwin, Ben Major, Expedition Coordinator and Anton Turner reviewed and assessed Ben Major's suggested plan of the trip. He had carried out this research and developed the plan between 22nd July and 2nd September 2009. This included visiting all locations such as Mafia Island, Lukula, Selous Game Reserve, Pemba, Lake Tanganyika and other areas. During this period, meetings took place between the BBC team and the British High Commission, the BBC Tanzania Stringer and local Professional Hunters.

The four flew over the Mbarika mountains and Anton Turner explained the route that he had walked on his five day recce. The only accessible routes through the

mountains were trails made by elephants, which is typical of this area. Having walked the route Anton Turner recommended a more suitable route, which included suitable water sources, locations for overnight camps, suitable walking terrain etc. Following the recce the original estimate of eight days for this 150km walk was extended to 11 days. It was also decided a smaller group should complete this as they would be quicker and lighter. After making these alterations to the plan it was deemed by Ben Major and Marshall Corwin to be a suitable walk that could be achieved by the children and the production team.

After visiting the locations, Marshall Corwin and Ben Major spent time planning the schedule for the five week expedition with assistance from the Expedition Coordinator and Anton Turner. Prior to Marshall Corwin leaving Tanzania on 13th September, Ben Major and Marshall Corwin had agreed on all the phases and the schedule. These five phases were: Jihazi Phase, Lukula Phase (in the Selous Game Reserve), Mbarika and Tarangire Phase, Rafting Phase and Mahale Phase.



(Hand drawing by Marshall Corwin depicting the layout of the area)

Marshall Corwin met with Gillian Scothern within a week of returning to the UK, and ran through the phases and schedule. Gillian Scothern was comfortable with this plan.

Ben Major typically completes a pre-recce for the *Serious* programmes a year in advance of the filming to enable a review of the conditions at that time of year and to provide time to reflect on the recce. Ben Major noted that additional time would have allowed for longer planning time which may have made the trip more organised and efficient but it would not have changed any of the safety management of the trip.

Marshall Corwin noted that this trip had more time planning on location than previous series.

It is considered that the recce stages were thorough and that the time provided was adequate.

5.2 SET UP STAGE

After the expedition schedule had been agreed by Ben Major and Marshall Corwin, additional members of the expedition team arrived to assist with setting up the trip. On 15th September 2009 the Assistant Expedition Leader and 2 Expedition Coordinators arrived in Dar es Salaam.

This set up stage included the team working in Dar es Salaam arranging kit bags, food, transport and logistics. Also preparation of some phases on location including the portered safari over Mt Nkungwe in Mahale National Park, the rafting phase at the Ruhudji river and the sailing phase in Pemba. Relevant information obtained during this set up stage was fed into the expedition risk assessment.

The expedition team received a copy of the risk assessment document for the set up phase prior to leaving the UK. On arrival in Dar es Salaam the expedition team were briefed by Ben Major on the safety aspects of the planning stage and the expedition. Where the team travelled outside of Dar es Salaam to set up different phases of the expedition they verbally assessed the risks and agreed control measures with Ben Major.

A review of the documented risk assessments for the recce and set-up phases indicated they lacked a degree of detail. Whilst it is noted that the expedition

team, local guides and Marshall Corwin are collectively all experienced with working in these types of environments and have proven ability to assess and manage the risks on location, it is considered that the significant findings from these assessments should have been better documented during the recce phase.

RECOMMENDATION (Specific to *Serious* Productions): All recce trips for productions must have a detailed risk assessment undertaken in advance and the significant findings documented. Where changes are made during the recce the significant findings of the risk assessment should be recorded; this should be proportionate to the identified risks.

5.3 SELECTION OF LOCAL SUPPORT TEAM

During the recce stages Ben Major appointed key roles such as the fixed-wing plane and helicopter pilots, drivers and camp managers. Anton Turner appointed Trackers, Guards and Porters for the Mbarika Safari Trek. The roles of the Trackers, Guards and Game Scouts were clearly defined:

Trackers - Operating in the immediate area to act as an early warning system to the Hunters whilst facilitating controlled wildlife encounters. During safari walks they were in the forward party with the Chief Hunter.

Guards - (professional guard; armed with an assegai / spear). They were required to guard the camp and team at night. Whilst walking they were interspersed within the group and were positioned near the children. They too acted as an early warning system, and would protect the middle party.

Game Scout - Employed by the Tanzania Government Wildlife Department. With safari treks such as the one in the Mbarika Mountains it is a requirement of the Tanzanian Government that a Game Scout accompany the trekking group. Whilst walking they were positioned at the rear of the party with a light calibre weapon providing protection for the rear of the group and acting as a 'back up' to the hunters.

Game Scouts have extensive experience of working with hunters and trackers.

Trackers and Guards were Mgnati or Masai tribesmen who come from a herdsman

background, living and working in the African bush. They have thorough knowledge of the wildlife and terrain. They have an intimate knowledge of how to operate safely and communicate in a “big game environment”.

Discussions with the Trackers and Guards determined that they understood their role in the expedition, that they were very experienced and understood elephant behaviour. All noted they had previously witnessed both full and mock elephant charges on safari.

The investigation team are satisfied that the competence of the locally recruited team was very good.

5.4 EMERGENCY ARRANGEMENTS

The emergency arrangements for this trip can be found in the Medevac plan which is in. These plans are detailed in relation to actions required in an emergency and how these are evoked.

The emergency procedures for this trip very much follow the procedures that have been developed for the *Serious* Brand over the past six series and were developed during the recce and planning stages by Ben Major. These were reviewed by BBC Safety (including the High Risk Team), BBC Insurance, Expedition Doctors, Series Producer, Senior Managers within Children’s and all considered them comprehensive. These have since been reviewed by an NHU Series Producer with experience of overseas filming, in remote parts of the world, who considers them very detailed and comprehensive.

Emergency arrangements also included actions to be taken in the event of charges by fauna, in particular elephants, buffalo and hippo. These are discussed in section six of this report.

Immediate medical support on location was provided by two Expedition Doctors and when the party split one doctor travelled with each group. Each doctor carried an emergency medical kit plus each group had a medical trauma kit with them; details of these are contained in the risk assessment/medevac document. The medical trauma kit list was ascertained from the experience and knowledge of the Expedition Doctors who have experience of working in similar environments.

The Expedition Doctors were responsible for sourcing the medical kit and compiling it ready for the expedition.

The production arranged with CEGA (the BBC medical insurance policy providers) that any persons identified by the Expedition Leader requiring rescue would be rescued and evacuated. For those on a BBC contract this would be paid through BBC Insurance and for those not on a BBC contract, such as locally recruited Trackers/Guards, this would be paid for by the production.

Three priority levels of medical emergency evacuation were identified in the plan; the priority being defined by the severity of the injury/illness. The mode of evacuation depended upon the location and the priority level. The main means for evacuation was using fixed-wing aircraft. Two phases were not accessible for fixed wing aircraft or vehicles so a helicopter was put on stand-by for these phases; this included the Mbarika mountain trek. If helicopter evacuation was required from these two phases a helicopter landing site (HLS) would be cleared by the team. It was noted that it may be necessary to stretcher a casualty to the HLS or nearest road. Evacuation times were listed in the medevac plan.

The plan included hospital details, prioritised on the facilities, and based on recommendations from CEGA, Ben Major, the British High Commission in Tanzania and the BBC Stringer in Tanzania. A hospital in Dar es Salaam was identified as the 'Grade A' hospital, which would be used in the first instance. A hospital in Nairobi with superior facilities was also identified in the plan, which could be used to treat patients if recommended by the evacuation authority. Alternative hospitals were listed if the Grade A hospital was not feasible/practical; these were in Dar es Salaam and Arusha. Total evacuation time to the hospital from the Mbarika Mountains was approximately seven hours by helicopter. The only commercially registered helicopter in Tanzania was based in Arusha, North Tanzania and was on standby during the Mbarika phase. Other measures to reduce this risk included an Expedition Doctor, a trauma medical kit and first aid trained members of the expedition team and production team.

Five methods of communication were available - *refer to the risk assessment and medevac document*. These included local mobile phones, Inmarsat BGAN satellite phones, Iridium satellite phones, VHF radios and Emergency Positioning Indicator

Radio Beacons (EPIRB). VHF radios were used for shorter distance communications within parties. A number of locations that the group were working in had mobile phone coverage and Iridium satellite phone coverage. The BGAN satellite phones were the most reliable and provided the greatest coverage. They worked in any area in Tanzania where there was a clear line of site to the sky.

When two groups split the following was held by each team: local mobile phone, Iridium satellite phone, VHF radios, BGAN satellite phone and EPIRB. A number of people in each party were trained to use the communications. Within 'Team A', who travelled to the Mbarika mountains, one of the Assistant Producers was given the role of arranging communications, in the first instance, in the event of an emergency situation.

The two Emergency Positioning Indicator Radio Beacons (EPIRB) were available as 'last resort' emergency communications. Once activated these transmit the location coordinates to an emergency centre in the UK run by the Maritime and Coastguard Authority (MCA). The MCA would then contact those identified on the productions' emergency contact list who would initiate a rescue. These EPIRB's were held by the Expedition Leader and the assistant Expedition Leader.

A laminated 'emergency card' was provided to all members of the expedition team, production crew and children which contained emergency instructions and contact numbers.

A safety file was provided to Dominic Parry, Gillian Scothern, Production Coordinator, Production Manager and Tamara Howe (Chief Operating Officer). This included the risk assessment and medevac plan, copies of passports, children's information, next of kin details, flights itineraries etc. They were asked to have them to hand at all times during the duration of the filming period.

There were some Next of Kin details (for the locally appointed personnel) which were not included in the medevac plan. It is important to note that this in no way hindered the communications to anyone during this incident. It is imperative that in the future all requisite details are contained in such documents. It is also considered that when reviewing medical emergency arrangements careful consideration must be given to the evacuation times and methods of evacuation.

RECOMMENDATION (Specific to *Serious* Productions): All future overseas production schedules and Medevac plans must contain all Next of Kin details for locally recruited overseas personnel as well as all UK team members.

GENERAL RECOMMENDATION - PAN BBC: When reviewing medical emergency arrangements careful consideration must be given to the evacuation times and methods of evacuation, which should be measured against the level of risk to agree an acceptable plan.

6.0 EXPEDITION RISK ASSESSMENT

The risk assessment, for the expedition was developed by Ben Major (Expedition Leader) during the recce and planning stages. This included input from local experts, local Hunters, the expedition team, BBC Occupational Health, BBC Insurance and BBC Safety. Ongoing discussions were held between Ben Major and Marshall Corwin (Series Producer) over the safety risks and control measures.

The safety and insurance arrangements were reviewed at a meeting on 28th September 2009 with the Production Executive, Production Manager, Production Coordinator, BBC Insurance, BBC Safety, and Marshall Corwin. Safety and insurance documentation for the catamaran, fixed-wing planes and helicopters was sent to BBC Safety and BBC Insurance for review. Feedback was received and acted upon. Final safety documentation for the planes was received on 9th October 2009 by BBC Safety and confirmed as satisfactory.

A detailed, thorough review of the schedule, locations, risks, controls and medical evacuation plans was held on 6th October with Joe Godwin (Director, Children's), Tamara Howe (Chief Operating Officer, Children's), Production Manager), Marshall Corwin, Dominic Parry (Production Executive), Gillian Scothern (Executive Producer) and Ben Major (Expedition Leader) (on the phone). Questions were raised by the senior managers and answered by Ben Major and Marshall Corwin. Additional points were requested to be documented on the assessment, including controls for managing heat, snake anti-venom and further details regarding the medical evacuation. The Director of Children's considered the programme was very well planned, that there was an excellent level of detail on the risk assessment and that he had full appreciation of the level of risk and considered it acceptable.

The risk assessment and medevac plan were sent to Philippa Miles (BBC Safety, Senior Safety Manager) and Colin Pereira (BBC High Risk Advisor) on 6th October 2009. Both noted the risk assessment and medevac plan were comprehensive. Both asked for additional details regarding the road travel risks. This was seen as one of the significant risks of the trip. Feedback was added to the risk assessment by Ben Major.

The final risk assessment was approved by Dominic Parry, Gillian Scothern, Marshall Corwin and Ben Major on 10th October 2009.

The risk assessment detailed a number of risks and control measures relating to the Mbarika trekking phase. In particular it identified the risk of attack (through trampling, charging or attack) by fauna such as elephants, buffalo and hippo.

General risks and control measures during the Mbarika Safari Trek phase

The risk assessment document detailed risks and corresponding control measures that relate to the trekking phase. These included food and water quantity and quality, getting lost, communication failure, heat, health hazards and fitness/working patterns. These hazards were mitigated through a number of control measures including provision of clothing and equipment suitable for the weather and environment; maps of the planned route, GPS, experienced Guides and Trackers, walking during cooler parts of the day, regular breaks, water, rehydration salts, ongoing medical assessment by the Expedition Doctor, the use of sunscreen and training.

Risk and control measures of Fauna attack during the Mbarika Safari Trek phase

Different phases of the trip involved safari elements where the group had an opportunity to stalk and observe animals. This included learning about animal behaviour, stalking/tracking techniques, and how to do this safely. The risks associated with fauna that were identified on the risk assessment are death or severe injury through mauling, charging, trampling, envenoming. Control measures against these included avoidance of likely risk areas, bushy or limited visibility areas such as not going into high grass or beyond designated areas in camp or on walking trails. The terrain during the trek varied and included open areas, dry river beds and paths created by elephants. Limited visibility areas were avoided where possible. Other documented control measures included not cornering or surprising fauna, not approaching young fauna, knowledge and understanding of animal behaviour and defensive actions if confronted. Training and ongoing briefings with regular reminders when approaching areas of specific fauna risk. Fires kept lit at night, armed sentries throughout hours of darkness, with a night time routine established and enforced.

Training was provided on arrival in the Selous Game Reserve and ongoing training was undertaken throughout the expedition. This included training the children to be safe in different situations in African bush environments, training in health and hygiene (provided by the Expedition Doctors), procedures for walking as a group in

wild animal territory, safety around guns, safety around animals (snakes, small animals), order of march, camp safety and specific training on the procedures to be followed in the event of an animal charge.

This style of training regime is routine practice for the '*Serious*' series with Ben Major taking the lead and the experts providing specialist training.

Animal charge procedures were established and discussed with the group. The morning before the entire group started the trek into the Mbarika mountains training on what to do if an elephant charged were rehearsed and this was filmed to be included in the programme. It was noted by those interviewed that all understood the actions to be taken, including the children.

During the Mbarika Safari Trek a walking formation was used based on recognised procedures for walking in a 'big game' environment.

This involved a forward party with an armed Professional Hunter and at least one Tracker approximately 15-30 metres ahead of the main party to provide early warning and protect the group from the front, which is the most likely direction of attack. The distance would depend on the walking terrain and visibility. In areas of good visibility the distance between the forward party and the main party was up to 60 metres. A second hunter was positioned in the middle of the walking party (column); the hunter would then move forward if there was a threat from the front. When the entire group were walking a third hunter was positioned at the end of the group but before the Porters. When Team A continued on the trek, they were accompanied by two Professional Hunters who carried Jeffrey 500 weapons, also known as 'elephant guns' as they are capable of killing an elephant. Killing fauna would be the option of last resort. The Hunter in the forward party would have their weapon loaded and made ready at all times during walking and the Hunters in the middle of the party would make their weapon ready (round into chamber, safety catch on) if fauna were in the area. An armed Game Scout was positioned at the rear of the party and carried a light calibre weapon providing protection for the rear of the group and acting as a 'back up' to the Hunters. Local Trackers and Guards (Masai and Mgnati tribesmen) were interspersed within the group, in particular near the children. Trackers and Guards have thorough knowledge of the wildlife and areas, intimate knowledge of how to operate safely

and communicate effectively in this environment and particularly when wildlife is encountered. The Trackers carried spears and knives and those in the forward party used machetes to clear higher level foliage to allow easier access for the Porters. The Expedition Doctor was positioned directly behind the children. The Expedition Leader was positioned directly in front of the children with specific responsibility for their safety. Porters were positioned at the back of the party between an expedition team member and the Game Scout.

Communication between the walking party was primarily through VHF radios held by the Professional Hunters, the Game Scout and the Expedition Leader. Established hand signals were also used.

7.0 EXPEDITION/FILMING PHASE IN TANZANIA

The filming and activities for the expedition when in Tanzania was split into five main phases:

Jihazi Phase	Sailing from Mafia Island to Pemba.
Lukula Phase	In the Selous Game Reserve, Bush training and stalking/tracking techniques.
Mbarika and Tarangire Phase ⁵	Team A Trekking through the Mbarika's; Team B Living and working in a Masai Village in Tarangire.
Rafting Phase	Construction of raft and rafting along Ruhudji river (not completed).
Mahale Phase	Ascent of Mount Nkungwe and final arrival at Lake Tanganyika (not completed).

In addition two reconstruction phases were planned at the end of the expedition which would not include any involvement from the Children.

Jihazi Phase

Having arrived in Dar es Salaam on 11th October 2009, the production team flew to Mafia Island where they spent the night. The next two days were planned as acclimatisation and an introduction to sailing and fishing techniques. This was in preparation for the first phase which was the sail to Pemba, on the East coast of Tanzania.

Ben Major, (Expedition Leader) and the Assistant Expedition Leader, both experienced sailors, led the lectures on the sailing phase including general safety measures and details on heat, food and water.

During this first phase, sailing progressed well without incident but later it became apparent that insufficient wind was available for the team to complete the planned sail to Pemba so it was agreed to head to Kisware Bay which was further North than Pemba. They were met by 4x4 vehicles which then transported them to their destination at Pemba. This did not affect the filming schedule. This first phase lasted five days.

⁵ When the two teams split

Lukula Phase - (duration five days)

During the Lukula Phase at the Selous Game Reserve, the size of the expedition team increased significantly, with the addition of Hunters, Guards, Trackers and Porters. A single file walking formation was established for the team when trekking as described in section 6.

Whilst learning to track animals a small group including Anton Turner (Chief Guide/Hunter), Ben Major, Cameraman, Sound Recordist and four children followed five elephants. Anton Turner and Ben Major were teaching the children about the techniques and safety aspects of tracking. They were downwind of the elephants so the elephants did not know the group were approaching them, which is standard practice when stalking/tracking fauna. During the tracking one of the elephants ran at the group in a mock charge. Ben Major told them all to stay still. Anton Turner was ahead in the forward party and stood his ground shouting at the elephant; the elephant stopped and backed off. Pen De Vries (Hunter) also accompanied this group and took up the agreed position. This allowed the children and team to understand safe stalking/tracking techniques, elephant behaviour and how to act in the event of a mock charge.

⁵Mbarika and Tarangire Phase - (planned duration 11 days)

A typical day in the Mbarikas consisted of an early rise at approx 04.45hrs for the production team, Guides and Porters. The children were usually woken at 05.00hrs, they packed their kit and breakfast was taken. A briefing was held of the planned activities for the day. Trekking started at 07.00hrs. The usual routine was to walk for one hour and then take a break of approximately 20 minutes but occasionally the break would be longer if the Expedition Doctors were required to attend to any medical issues, such as blisters etc. This routine would be followed throughout the day with ongoing medical assessments of everyone, with a 45 minute break for lunch, until the group had reached their required destination, usually by 15.00hrs. The Group would begin setting up camp for the evening, erecting tents, lighting fires, boiling water and making arrangements for the night watch. Dinner was usually at 18.00hrs and the children were in their beds at 19.00hrs and the crew by 20.00hrs.

⁵ when the two teams split

On the second day, in the afternoon, the group were split up - Team B with four children walked back to Lukula out of the Mbarika Mountains moving on to complete the Tarangire Phase. The remaining three children planned to complete the Mbarika Phase. Selection of the children to carry on with the Mbarika mountain trek was made by the Expedition Leader, Assistant Exhibition Leader and Expedition Doctors in consultation with Marshall Corwin.

Marshall Corwin, along with the Cameraman, the Sound Recordist, four children and the support team travelled North, in a light aircraft, to Tarangire National Park. They planned to carry out licensed lion darting and the building of a Masai camp fence. Dr Stephan Sanders (Expedition Doctor) was in this group as a male doctor needed to pair with a female expedition leader.

The Mbarika phase team, (Team A), consisted of 38 people, and their plan was to continue through the Mbarikas until they reached Kilosa in the Matisi area. The editorial leadership for this group was provided by an Assistant Producer and Ben Major. In Tarangire the editorial lead was Marshall Corwin.

Up to the day of the incident, the expedition and associated filming was proceeding as planned, but due to the team being upwind of any fauna, they did not encounter them until day eight. The group were in good spirits, although tired. They were a day and a half away from their destination.

Approximately 20-30minutes before the incident two bull elephants were seen ahead by the forward party (estimate 80 metres ahead). The forward party informed the group behind and the elephants were filmed in the distance by one of the Assistant Producers.

The party were not tracking elephants and were upwind of them so it is considered by the Hunters and Trackers that the elephants would have known the group were there. The second Hunter (Pen de Vries) made ready his weapon, which is recognised practice when big game is sighted. The Hunter in the forward party, Anton Turner (Chief Guide/Hunter), always had his weapon ready to fire. The path split into two, the elephants were seen to have taken the path which went to the right and Ben Major (Expedition Leader) instructed Anton Turner to take the left path, which they did.

The group were walking in the agreed formation (refer to diagram 8.1.1) with a forward party made up of Anton Turner and two Trackers. The terrain and foliage at this point can be seen in the photograph below.



(members of the team ahead of the group)

Looking straight ahead up the path (elephant trail), visibility would vary and is estimated between 25 metres to at least 100metres. Experienced trackers are trained to see much further than a layman and the broad estimate is that the two Trackers would have been able to see 25-30 metres into the bush bordering the path.

The forward party and Ben Major were being quieter than normal because they knew elephants were in the vicinity, which is agreed practice when around big game and this is what was previously rehearsed. The Trackers were making less noise when cutting with machetes and all were walking more quietly; Ben Major mouthed to those behind him to keep quiet.

Suddenly an elephant charged very fast through the foliage from the front left down the hill towards the forward party. The Trackers saw the elephant first (approximately 20 metres away) and ran back and right towards the valley, shouting. The group were alerted by the shouting and movement and ran to the right for safety as practised in their training. Anton Turner stood his ground with his gun (see diagram 8.1.2 for movement 5-10 seconds after charge). The elephant was a young bull (estimate by Pen de Vries that it was 15-18yrs old and approximately 7ft/8ft to its shoulder); it is not known whether it was one of those seen earlier.

Anton Turner was heard shouting at the elephant and seen pointing his weapon at the elephant. No shot was fired by Anton Turner. Anton Turner was charged by the elephant and mortally wounded. The group had run to the right of the path and were behind trees and in the valley; the Porters dropped their bags and climbed trees and the second Hunter (Pen de Vries) moved forward. Pen de Vries fired one shot into the rear of the elephant, being careful not to shoot it in the spine in case it fell on Anton Turner. The footage shows there was no movement from the elephant. A shot was fired into the air by the Game Scout; there was still no movement from the elephant. Pen de Vries reloaded and fired a second shot into the rear of the elephant (within nine seconds of firing his first shot); the elephant turned towards him and charged him. Pen de Vries scrambled behind bushes and the elephant attempted to grab him with its trunk, brushing his arm. About 9 seconds after Pen de Vries' second shot the elephant fled along the path in the opposite direction to which the group had previously been walking, leaving a trail of blood from its injuries.

A Guard noted that he saw a second elephant towards the top of the hill where the first had charged from.

All Trackers, Guards and Hunters noted that prior to the charge they were aware and observant of the elephants but were not fearful of them and that they would not be fearful of trekking in that area again. They also noted that they were surprised by the elephant's behaviour and that it was unusual for an elephant to behave in this way.

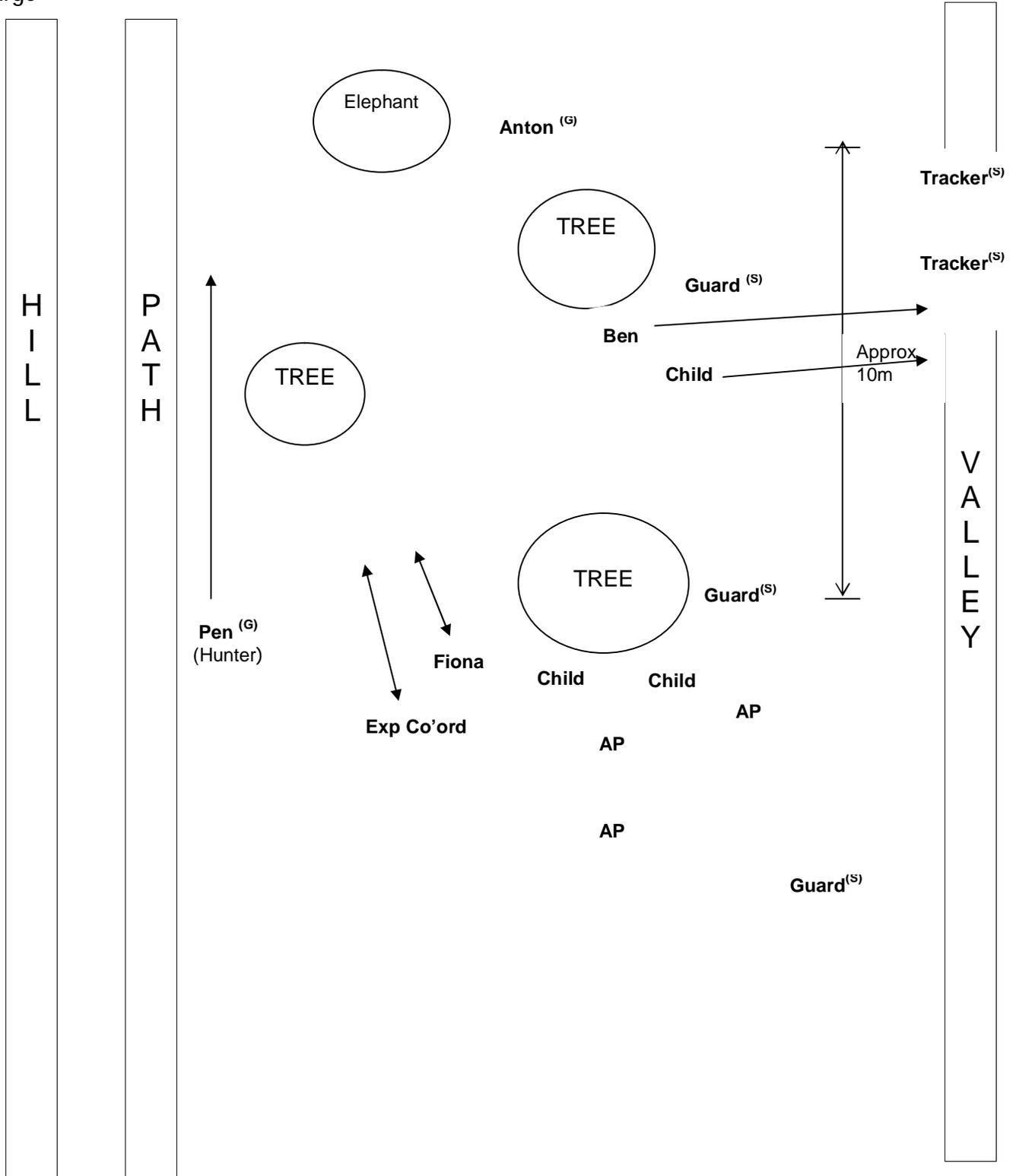
8.2 OTHERS AT RISK

Pen de Vries was charged by the elephant and it is considered that he narrowly escaped being seriously injured. It is considered that the two shots he fired seriously injured the elephant and that this is probably the reason, nine seconds after the second shot, that the elephant fled the area.

Anton Turner as Chief Hunter/Guide was the first line of defence. In this role he stood his ground as the elephant charged. It is considered that if Anton Turner had not stood his ground then the group behind him would have been at greater risk of injury from the elephant charging. It should be recognised that the second Hunter acted as the second line of defence as planned. Pen de Vries had moved forward and was in a position to protect the group; he shot the elephant as per the agreed emergency procedures.

Diagram 8.1.2 Movements immediately (estimated 5-10 seconds) after elephant charge

Direction of elephant charge



Porters
x21

Game Scout (G)

8.3 EMERGENCY RESPONSE

Medical assistance was provided to Anton Turner by Dr Fiona Cresswell (Expedition Doctor) immediately the incident occurred. An emergency first aid kit was carried by the Expedition Doctor and a medical trauma pack was carried by the Porters, which was brought forward to the scene immediately. The medical response was coordinated by the Expedition Doctor.

Within two minutes of the incident Ben Major reached Anton Turner who was being assessed by Dr Fiona Cresswell. Ben Major immediately took charge of the overall situation, following planned emergency and evacuation procedures. This included getting the medical trauma pack to Dr Fiona Cresswell, establishing communications, ensuring the group were safe and had armed Guards/Hunters with them, contacting the helicopter pilot, informing London and Team B (in Tarangire National Park) and the local contact of a Priority 1 medical evacuation. He also ensured that a helicopter landing site (HLS) was prepared. Emergency phone calls had been made within ten minutes of the incident occurring.

The children were looked after by the Assistant Producers and the Porters and were unable to see Anton Turner being given medical treatment, although the children may have seen the Assistant Producer providing CPR. The Porters lit a fire and provided hot sweet drinks for the children.

Ben Major continued to ensure everyone was safe and focused on their roles and that emergency plans were followed. Communication was maintained. An armed Guard/Hunter was with each group and they were provided with water. The children were supported/supervised and Anton Turner was out of their vision where medical support continued. Emergency plans to evacuate Anton Turner to a hospital in Dar es Salaam/Nairobi continued, including moving helicopter fuel from a secure location to a landing site in Kilosa Kwa Mpepo, liaising with Team B and London and obtaining Anton Turner's next of kin details. The team recollect that the helicopter arrived at approximately 14.00hrs. The flight time to Dar es Salaam by helicopter is approximately 3 hours.

Anton Turner sustained life threatening injuries which rendered him instantly unconscious. Within five minutes of the accident, the Expedition Doctor noted that

spontaneous breathing ceased. After medical assistance, Anton Turner was declared dead by the Expedition Doctor, at the scene, at 12.45hrs.

Anton Turner's body was covered and moved to the HLS on a stretcher made by Porters under the instruction of Ben Major. The whole group, which included three armed Guards/Hunter, moved towards the HLS; the crew and children were kept a distance from the stretcher so they could not see it. Evacuation plans focused on getting Anton Turner's body to a hospital in Dar es Salaam. Discussions with Team B and London concluded that the children and crew should be evacuated to the permanent camp in Kilosa Kwa Mpepo. It was agreed that Ben Major would fly with Anton Turner's body to the hospital. The helicopter could take up to three people at a time; the remaining daylight and available fuel dictated that the whole party (38 people) could not be evacuated from the area at that time.

The children were informed of Anton Turner's death by Ben Major. The children were supported by the team.

The helicopter arrived and transported Anton Turner's body and Ben Major to Kihanzi where they transferred to a fixed-wing plane, arriving at a hospital in Dar es Salaam about 19.00hrs. The children, production crew and Expedition Doctor were transferred by helicopter to Kilosa Kwa Mpepo and stayed the night in a permanent camp. The second Hunter, Expedition Coordinator, Trackers, Porters and Game Scout walked to Kilosa Kwa Mpepo, staying overnight at the Matisi river and walked out of the bush the next day.

The Expedition Doctors consider that the provision of medical assistance was in accordance with the agreed plan for dealing with an incident of this nature. The Expedition Doctors consider that it was extremely unlikely that Anton Turner would have survived his injuries even if he had been close to a fully resourced hospital.

It is considered that the emergency evacuation plans were extremely well planned, they were followed by the team and that Ben Major showed exemplary leadership skills in dealing with the situation and keeping the team safe after the incident.

8.4 COMMUNICATIONS WITH THE UK

Dominic Parry (Production Executive) was phoned by Ben Major within ten minutes of the incident occurring, and informed it was a Priority 1 situation and that Anton Turner was seriously injured and that it was a life or death situation. Ben Major informed Dominic Parry of their coordinates, that a helicopter had been scrambled, that the rest of the group were safe but that he was unable to raise Marshall Corwin (Team B) or Expedition Coordinator and requested that Dominic Parry contact them to arrange for the helicopter fuel to be moved to the airstrip.

Dominic Parry made contact with Marshall Corwin and informed him of the incident and asked Marshall Corwin to contact the Expedition Coordinator to arrange for re-location of the helicopter fuel.

Dominic Parry then spoke with Tamara Howe (Chief Operating Officer, Children's), the Production Manager, Gillian Scothern (Executive Producer) and Dave Milligan (Safety Advisor). Tamara Howe contacted Richard Deverell (Controller, Children's), Human Resources and the press office. This was the agreed escalation procedure.

Dominic Parry noticed that Anton Turner's next of kin details were not documented within the risk assessment so requested these from the team in Tanzania, which they provided. These were passed on to Gillian Scothern.

It was agreed that Dominic Parry would liaise with the team in Tanzania and Gillian Scothern would liaise with Anton Turner's family and Partner (see section 9).

A BBC procedure developed by BBC People known as Section G 'Incidents Involving Death or Serious Injury to BBC Personnel', last documented 6th February 2009 and expiry date 30th June 2009 sets out the steps to be taken by Human Resources and BBC Safety with an incident such as this. The production team and Human Resources Incident Officer (HRIO) on the day were not aware of this documented procedure. It is considered that this procedure is not very clear and that some of the roles overlap.

It is considered that the communication and management of the incident within the UK was well managed. There are areas for improvement, however, around the documented procedure and clarification of the roles of those involved.

GENERAL RECOMMENDATION - PAN BBC: Review the BBC procedure for 'Incidents Involving Death or Serious Injury to BBC Personnel' including

the roles of those involved so it is clear, simple and easy to understand in an emergency. Design and implement this procedure across the BBC.

9.0 SUPPORT/CARE BY BBC FOLLOWING THE INCIDENT

There were different stages to the support and aftercare:

1. The immediate response to the incident within 48 hours.
2. The secondary response and actions 48 hours onwards.
3. Aftercare once everyone returned to the UK or their home outside the UK.

The aftercare has been provided to:

Children and their parents, Production Team, Expedition Team, Anton Turner's Family, Anton Turner's Partner, Local contact in Tanzania and the UK based Support Team

Immediate response

Immediately after the incident Ben Major (Expedition Leader) took charge of Team A and ensured the doctor was treating Anton Turner. He also ensured that the other team members were following the Priority 1 procedures and that the three children were kept safe by members of the production team and the Porters, Guards and Hunter. The children were provided with hot sweet drinks whilst medical care and medical evacuation (MEDEVAC) plans were being implemented. Ben Major, supported by the production team, informed the children at an appropriate time that Anton Turner had died.

The children were evacuated along with the production team and Expedition Doctor to Kilosa Kwa Mpepo camp.

On 30th October 2009 Team B were at Tarangire National Park, in the North of Tanzania. This was being led by the Assistant Expedition Leader and Marshall Corwin (Series Producer) who were in a Masai camp with the four children building a fence. Once contact was made they kept the children occupied with their task while they were involved with implementing the emergency Priority 1 evacuation plans over the phone. The expedition team were gathered for further instruction.

Again at a suitable time later that day Marshall Corwin, Dr Stephan Sanders (Expedition Doctor) and the Assistant Expedition Leader informed the four children of Anton Turner's death. They all stayed together that night in the crew camp.

30th October 2009 - UK

UK Coordination Team and BBC Children's Management, Safety, Human Resources and the Press Office.

Communication took place as described in section 8.4.

At a meeting in BBC Television Centre, led by Richard Deverell (Controller, Children's) and involving the UK based response team an update of the situation was given by all, and the next step were discussed. These included:

- The progress of the evacuation and safety of the children and teams, and the next movements. It was agreed that they should all return to Dar es Salaam the following day. Consideration was also given to them all returning back to the UK on 2nd November 2009. Advice was taken from Dr Stephan Sanders in Tanzania about what was appropriate.
- It was agreed that Dominic Parry (Production Executive) would liaise with the teams in Tanzania and Gillian Scothern would liaise and become the BBC contact with Anton Turner's family and Partner.
- An update on the next of kin communications was given. Discussion ensued regarding a visit to the home of Anton Turner's Partner.
- There was a focus on getting Anton Turner's family and Partner to Tanzania.
- The children's welfare was discussed, including the support that would be needed to both themselves and their families.
- It was confirmed that local control, in Tanzania, was in place and everyone was accounted for.
- Discussions ensued about contacting the British High Commission to inform them of the fatality and to find out the protocols that should be followed.
- It was agreed that the *Serious Explorers - Livingstone* production would be suspended.
- An internal communications plan was agreed.
- It was agreed to contact the parents of the children to inform them of the incident and that their children were safe. It was agreed that the next of kin of the production team would be contacted to inform them of the situation.

- A small team from production and safety were asked to travel to Tanzania as soon as was practical to offer support and begin fact finding.
- It was agreed that Gillian Scothern would travel with Anton Turner's family and partner to Tanzania a few days later.
- The contents of a press statement and timing of its release were discussed.

Another meeting was held at around 17.00hrs to follow up on the above.

The BBC's Chief Medical Officer provided travel health advice to the outgoing BBC team and members of Anton Turner's family who were planned to travel to Tanzania. He arranged for the BBC BUPA Counselling service to be available to all those affected by the incident. This was also available to their families. He also explained the importance of not forcing counselling on individuals, but ensuring that they were made aware of how to seek advice should they require it.

There was an internal communication to the whole of the Children's Division from Richard Deverell which was sent at approximately 18.00hrs. An external press release was distributed after this time.

Tamara Howe (Chief Operating Officer) and Dominic Parry, in consultation with Dr Stephan Sanders and Marshall Corwin, agreed that it would be sensible for the children and the team to be together, to rest, support and talk to each other before returning to the UK.

31st October 2009 in Tanzania

Teams A and B, except two Expedition Coordinators, were flown to Dar es Salaam and re-united in a hotel. At the hotel the children and crew were all given the opportunity to ask questions and openly discuss the incident if they wished. Marshall Corwin arranged for all the children to telephone to the UK.

31st October 2009 in UK

Dominic Parry, Philippa Miles (Senior Safety Manager) and David Milligan (Safety Advisor) flew to Tanzania arriving early on 1st November 2009. Confirmation was provided that the production had been suspended and that the children and the production team would return to the UK.

The secondary response

2nd November 2009 - Dar es Salaam

Dr Stephan Sanders spoke with the BBC's Chief Medical Officer (CMO) about ongoing support for the team, children and parents. He also provided his assessment of the team and the children. It was agreed that the CMO would attend a de-brief session when the children returned to Heathrow airport.

Marshall Corwin and Dr Stephan Sanders held a de-brief session with the production and expedition teams. Dr Stephan Sanders explained some of the symptoms of trauma and possible reaction(s) to the incident over the next few days and weeks. He explained that support would be available which included the BBC BUPA counselling service.

Marshall Corwin, Dr Stephan Sanders and Dominic Parry briefed the children on what was happening the following day and amongst other things discussed the incident and advised that it would not be helpful to speculate about what happened; the typical feeling and emotions from an incident like this; the importance to keep talking to family and friends and that there was other support available. The children wanted to discuss things and asked a few more questions.

2nd November 2009 - UK

Gillian Scothern flew with Anton Turner's Partner and family from Heathrow Airport to Dar es Salaam arriving on 3rd November 2009 and were met by the British High Commission.

Gillian Scothern stayed with the family in a hotel in Dar es Salaam, where she continued to offer support during the funeral arrangements. Dominic Parry supported her but was based with the production and expedition team at a separate hotel.

3rd November 2009

The production team and children returned to the UK. There were special arrangements made at the airport to ensure that the children arrived quietly and undisturbed. A briefing room was made available.

Debrief 1 - The parents were briefed before the children arrived by Joe Godwin (Director, Children's) BBC's Chief Medical Officer (CMO), a Press Officer and a Human Resources Manager. This covered the well-being of the children and their

understanding of what had happened in Tanzania. The BBC support available to both children and parents was also outlined. The CMO outlined some of the possible reactions to the incident that the children might have. A contacts sheet and an NHS trauma leaflet were provided to all.

Debrief 2 - The parents and children - together - were briefed by the same team as in debrief. Marshall Corwin attended this also. The CMO also spoke to the children and parents about the impact the incident might have on them and the support available to them.

The production team were met by Joe Godwin, Human Resources and other members of the production team. They were provided with a similar contacts sheet and the same NHS trauma leaflet.

Aftercare: On going

The expedition team, Gillian Scothern and Dominic Parry remained in Dar es Salaam for a week. Dr Stephan Sanders stayed in Tanzania at the request of the management team to provide support to those who were still there.

Dealing with incidents of this nature has highlighted that it would have been beneficial for the support team that travelled to Tanzania to have an understanding of trauma and its effect.

GENERAL RECOMMENDATION - PAN BBC: Trauma Risk Management (TRIM) training to be implemented across the BBC, where appropriate.

All those involved have received a Counselling Support handout, which included the number and details of the BUPA counselling service.

Communication is ongoing with all those involved.

10. ANALYSIS OF THE INVESTIGATION FINDINGS AND CONCLUSIONS

10.1 IMMEDIATE CAUSES

The immediate cause of the accident that killed Anton Turner was the attack from a charging elephant, which struck him and caused fatal injuries.

10.2 POSSIBLE UNDERLYING CAUSES

Information sourced from elephant experts indicates that the elephant reacted in an unusual, unexpected way and it is not possible to conclude why. Possible underlying contributory factors could be that the elephant was protecting a second bull elephant; that it may have been previously injured through combat with other elephants, by accident or by man; that it may have been surprised by the party and felt threatened; that it may have felt trapped, and/or that the visibility in the bush meant it did not notice the party until they were in its 'fight or flight' zone and that it chose to fight.

Anton Turner did not fire his weapon. Inspection of the weapon showed it was loaded, ready to fire and in working order. The Investigation is unable to conclude why Anton Turner did not fire his weapon. Possible reasons are: the speed of the elephant charge; the visibility from the bush; the remote chance of it being a full charge and then the late recognition that it was a full charge and not a mock charge. It is considered through discussions with hunting experts that even if Anton Turner had fired his weapon it may not have changed the outcome.

10.3 CONCLUSIONS

The conclusion of this investigation is that the death of Anton Turner was a tragic accident. This is the conclusion arrived at by the Tanzanian authorities and they are not investigating the death any further⁶.

It is considered that the preparations undertaken by the production and expedition team were appropriate, thorough, detailed and considered. They had carefully

⁶ Based on the information provided by the British High Commission and Undertakers

and methodically identified, considered and reduced the risks, with appropriate expert advice. Elephant charges had been identified as one of the risks of the Mbarika trek and steps had been taken to manage and minimise that risk. These included a strict walking formation based on recognised procedures for walking in a 'big game' environment, with Anton Turner at the head of the group as Chief Hunter/Guide as the agreed first line of defence. Pen de Vries was the second Hunter and positioned in accordance with procedures and acted as the second line of defence. Two Trackers were in the forward party slightly ahead of Anton Turner and their role was to provide an early warning to the Chief Hunter. This formation was as documented in the risk assessment. There were also an adequate number of Professional Hunters and armed Guards. Adequate training and drills had been provided to the team. The production team were all very experienced and had the required competencies to work on this production. The expedition team all had extensive training and experience in leading expeditions, with certified accreditation, and are considered competent in their role on this production.

The Expedition Doctors' consider that the provision of medical assistance was in accordance with the agreed plan for dealing with an incident of this nature. The Expedition Doctors consider that it was extremely unlikely that Anton Turner would have survived his injuries even if he had been close to a fully resourced hospital.

The emergency evacuation plans were very well planned, were followed by the team and the Expedition Leader showed exemplary leadership skills in dealing with the situation and ensuring the safety of team.

The BBC's mission is to **inform, educate** and **entertain**. It achieves this through six public purposes. Two of those purposes are *to promote education and learning* and *to bring the UK to the world and the world to the UK*. The CBBC *Serious* brand clearly fits with those two core purposes. While delivering against the BBC's core purposes an overall objective is to ensure the inherent risks, that cannot be avoided, are minimised and that vigilance across the BBC is ensured.

During the investigation, areas of improvement were identified and recommendations have been made against these. These include improving the BBC's preparedness for managing an incident such as this; conducting safety debrief sessions after overseas productions of this nature and improving the way the BBC shares its knowledge and expertise of productions across the organisation.

It is our conclusion that had those recommendations been in place, they would have had no effect on the outcome of this accident.

The report also identifies many good practices of the *Serious* programme team and it is recommended that these good practices are shared across the BBC.