



wilderness expertise

The Duke of Edinburgh's Award Trainer Manual 2022



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Contents

Part 1 Training Framework and Session Plans Page 3

Bronze:

- Page 4.....Bronze (Basic) Training Framework
- Page 8.....Tents Session Plan
- Page 9.....Stoves Session Plan
- Page 10.....Rucksacks and Kit Session Plan
- Page 11.....Food and Drink Session Plan
- Page 12.....First Aid and Emergency Procedures
- Page 13.....Navigation

Silver:

- Page 14.....Silver Training Framework
- Page 15.....Silver Navigation Session Plan

Gold:

- Page 16.....Gold Training Framework
- Page 18.....Gold Navigation Session Plan

Part 2 Training Manual Page 19

- Page 20.....Navigation (Bronze, Silver, Gold)
- Page 23.....Campcraft: Tents
- Page 25.....Campcraft: Rucksacks
- Page 26.....Campcraft: Stoves
- Page 29.....Food and Drink
- Page 32.....Hygiene

Part 3 Roles and Responsibilities Page 33

- Page 34..... DofE Trainers Job Description
- Page 35.....General Responsibilities: Risk Assessment, Client Relations, On-Call.
- Page 37.....Specific Roles
- Page 40..... Incident Management
- Page 43Trainer Field Checklists

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Part 1

Training Framework and Session Plans

Bronze (Basic) Training Framework

NOTE: The Bronze Framework forms the basis for all DofE training and is also known as the Basic Training Framework. For participants progressing onto Silver and Gold awards, further detailed training is required to reflect the demands of those expeditions, which is outlined later. Direct entrants into Gold and Silver, still require to complete all aspects of the Basic Framework.

For the Bronze Award, the two day Qualifying expedition requires 6 hours of daily planned activity, and one night camping. The environment should be “normal rural countryside which can be familiar to the participants”. **NOTE:** Time associated with overnight accommodation and cooking is not considered within the 6 hours of planned activity.

The following subjects need to be covered and the Trainer must be satisfied that the participants have sufficient skills to complete the Qualifying expedition safely.

First Aid and Emergency Procedures

- Basic life preservation techniques, DRABC
- Signs, symptoms and treatment of hypothermia
- Treatment of wounds and bleeding
- Signs, symptoms and treatment of hypovolemic shock
- Treatment of blisters, cuts, abrasions, minor burns and scalds, headaches, sunburn, splinters, insect bites
- Recognition of more serious injuries, e.g. sprains, breaks, dislocations
- To know what to do in an emergency:
 - (i) Keep safe and warm
 - (ii) Know what information will be required (position 6 figure grid ref., number in party, nature of injuries or illness, condition of the rest of the party)
 - (iii) Summoning help, the WE emergency contact card, emergency services

Risk Awareness

- Expedition fitness
- Route cards and emergency information (it is necessary to explain the importance of this information for the safe supervision of the group)
- Identifying and avoiding hazards in both planning and en route.
- Keeping together
- Weather forecasts: where to find forecasts and a basic understanding of changing weather conditions.

Navigation and Route Planning.

- Understanding maps
 - (i) Map direction (cardinal points and how they relate to the map)
 - (ii) Scales and distances, measuring distances, distance and time
 - (iii) Map symbols
 - (iv) Grid references
 - (v) Simple introduction to contours and gradients
 - (vi) The ability to describe a route from a map, linking two places
- Practical Map Skills
 - (i) Setting the map
 - (ii) Locating your position from the map
 - (iii) Determining direction of travel from the map
 - (iv) From a “set map” determining the direction of paths
 - (v) Identifying and locating features marked on the map
 - (vi) Planning a route and writing a route card and the importance of this information to others
 - (vii) Following a planned route
- Compass Skills

Instruction in compass skills at Bronze level should be basic with emphasis on good map reading

 - (i) Care of the compass
 - (ii) Parts of the compass i.e., base plate, direction arrow, bezel and degree markings, cardinal points, needle and roam.
 - (iii) Setting the map using the compass
 - (iv) Determining direction of travel in terms of the four cardinal points and the four inter-cardinal points.

Camp Craft, Equipment, Food and Hygiene

- Choosing the right clothing, footwear, rucksack and emergency equipment (use kit list as basis for discussion)
- Tents; different types, best practice on how to erect tents i.e., pushing poles through sleeves, guy ropes for tension, keeping the inner away from the outer, folding up and packing away the tent.
- Rucksacks; types and sizes. How to pack i.e. nothing on the outside except sleep mats which should be weather proofed. Fitting rucksacks, e.g. back length, strap tension, 2/3 weight on hips. Lifting rucksack and help from teammates to avoid injuries. Weather proofing rucksacks with liners or expedition bags and the use and limitations of rucksack covers.
- Safe use of stoves:
 - (i) Never leave a lit stove unattended
 - (ii) No cooking in tents and all cooking at a safe distance from the tents
 - (iii) Issues with gas canisters, connection and disposal
 - (iv) Issues with meths burners (Trangias), safe position of fuel bottle, taking cooled burner to the fuel for refilling, lighting the burner and how to check that the burner has a flame, allowing unused fuel to burn off.
 - (v) Pans: Always pick up pans by the pan handle.
- Safe positioning of participants when cooking ie active kneeling position. No dangling parts such as hoodie straps, long hair etc. Boots to be worn when cooking.
- Food: A substantial hot meal to be cooked and eaten each day.
 - (i) Ideas for meals and nutrition, eg complex carbohydrates (pasta and rice, oats), protein (soya products, pulses, meat, fish)
 - (ii) Packaging (avoiding tins and glass)
- Hydration: How much per day. What happens if you become dehydrated i.e. Headaches, poor brain function, lack of energy, illness, overall poor performance.

Countryside, Highway and Watersports Codes

- Understanding the Countryside Code:
 - (i) Be safe and follow any signs.
 - (ii) Leave gates and property as you found them.
 - (iii) Protect plants and animals and take all litter home.
 - (iv) Consider other people, especially with regard to noise.
- The Highway Code: which side of the road to walk in single file, road hazards and safe crossing points.

Team Building

All participants must work as a team in order to successfully complete their expedition. Therefore team-building exercises should be used along with regular reviews in order to develop this.

Furthermore, participants should have a discussion on the twenty conditions that have to be met for the qualifying expedition, so that they fully understand the criteria set by the DofE for successful completion.

Choosing and Recording an Aim for the Expedition

Trainers should provide Ideas and guidance to help participants choose a suitable aim for their expedition, as well as advice on recording information through different media (notebooks, cameras etc) as well as providing further reading recommendations.

Proficiency in Mode of Travel

- Cycling
 - (i) Bike handling skills both on and off road if appropriate.
 - (ii) Basic bike maintenance.
 - (iii) Carrying equipment, use of panniers, trailers and rucksacks.
 - (iv) Handling a fully loaded bike.
- Paddling
 - (i) Participants must be able to swim 25m in light clothing without any buoyancy aid.
 - (ii) Must be competent and confident in any capsized and recovery drill or man overboard drill.
 - (iii) Wear appropriate buoyancy aids or lifejackets.
 - (iv) Wear suitable clothing and footwear.
 - (v) Understand the water sports code.

Tents – Session Plan & Safety Points

Purpose	To instruct participants on the principles of erecting and collapsing a tent.
Objectives	At the end of the session Participants should be able to confidently discuss, describe and demonstrate use of: Tents, parts & Suitable sites Best practice in putting up and collapsing tents Weather proofing and issues with condensation Responsible tent care
Supporting material	Wilderness Expertise Trainers Guide
Trainer Prep	Refresh knowledge of: Various tent types to be used in demonstration

Session Plan

Introduction	Outline the objectives of the session
Ask	What experience participants have of camping or putting up tents?
Discuss	Shelters, what do we want them to achieve for us? How are we going to make sure our tent does that? What makes a good campsite? Where is the tent best sited (flat ground, removing stones and twigs)
Demonstrate	Unpack the tent Lay out the parts Assemble the poles and lay on the ground
Discuss	What the various parts of the tent are for Which way the tent should be orientated for the wind.
Demonstrate	How to thread poles through sleeves Clipping poles into tent and tensioning tent material Pegging the tent out Using and pegging the guy lines and why.
Observe and direct	Participants putting up tents clearing up any issues
Discuss	Ventilation, weather proofing and tent fabric tension
Demonstrate, Observe and discuss	Collapsing the tent Repacking and after care
Discuss	Review the session

Safety Points

Please make sure you advise the participants to be aware of the following points;

- Pole ends catching others, especially faces & eyes – keep low to the ground
- Over bending poles can damage them and leave sharp edges – take care
- Tent peg & guy-line trip hazard – wear boots/ shoes, use head torch in the dark & don't run near tents. Keep tents a safe and practical distance from one another.

Stoves – Session Plan & Safety Points

Purpose	To teach the safe operation and use of stoves.
Objectives	At the end of the session Participants should be able to discuss, describe and demonstrate use of: Safe cooking site, Assembly & use of the Trangia and storage of fuel
Supporting material	Wilderness Expertise Trainers Guide
Trainer Prep	Refresh knowledge of different fuel and stove types. WE standards in use of Trangia stoves

Session Plan

Introduction	Establish type(s) of stove to be used
Ask	Potential hazards: burns/injury/setting fire to something How? Misuse, carelessness
Discuss	Safe practices: how can we make using stoves safer? Choose cooking site safe distance away from tents: why? Fuel site 3m from cooking site, take burner to fuel bottle: why?
Demonstrate (use WE Trainers Guide as standard)	<p>Assembly and operation of stove:</p> <p>Gas Stove (dependent on type):</p> <ul style="list-style-type: none"> (i) Ensure the regulator sits properly on the Trangia (ii) Check the connector is hand tight connected to gas cannister (iii) Practice lighting of gas stove <p>Trangia Spirit Burner:</p> <ul style="list-style-type: none"> (i) Parts of the stove and cooking utensils, (ii) Filling the burner 2/3 full (iii) Lighting the burner, checking the flame. (iv) Putting the burner out. <p>SAFETY: This must always be taught.</p> <ul style="list-style-type: none"> (i) Never leave a lit stove unattended. (ii) The cooled burner should always be taken to the fuel bottle for refilling, never the other way. (iii) To check for a flame, hold the back of the hand above the stove to feel for heat. (iv) Never pour unused fuel back into the bottle (v) After cooking, unused fuel should burn off. Do not leave unused fuel in the burner.
Discuss	Review the session

Safety Points

Make sure you advise the participants of the following safety points;

- Burn injuries from stoves – pay attention around stoves and fuel at all times
- Boots or Trainers must be worn during cooking and around stoves, no sliders or flipflops.
- Long hair must be tied back.
- There must always be something in the pan, when on a lit stove

Rucksacks & Kit – Session Plan & Safety Points

Purpose	Instruct best practice for expedition kit, packing and fitting a rucksack
Objectives	At the end of the session Participants should be able to discuss, describe and demonstrate use of: The expedition kit list and what they require for their expedition How to pack a rucksack How to fit a rucksack Weight issues Manual lifting guidelines
Supporting material	Wilderness Expertise Trainers Guide
Trainer Prep	Refresh knowledge of expedition kit list. Bring required materials for demonstration (rucksack, clothes, tent, first aid kit, emergency kit etc.)

Session Plan

Introduction	Outline the objectives of the course
Ask	Previous experience
Discuss	What kit is required, personal kit, group kit Clothing materials (cotton -v- polyester), waterproofs (cost -v- function) Look at kit list as a GUIDE and develop kit list for the group How are we going to carry this personal kit & group kit distribution Weight of all the kit
Demonstrate (use WE Trainers Guide as standard)	Packing a rucksack follow guideline principles: (i) nothing hanging on the outside (ii) waterproofing items (iii) fuel bottles (iv) regularly needed items readily accessible (v) heavier items close to your back and halfway up pack Lifting a rucksack – getting help from friends, lifting straight to avoid twisting Fitting – correct length, does the cradle fit the torso, C7 to iliac crest Adjusting – hip-belt first, followed by shoulder straps, then the tension straps, to bring pack closer to the centre of gravity
Discuss	Comfort, distribution of weight 70% on hips & 30% on shoulders Overall weight limit of pack ¼ of personal body weight
Discuss	Review the session

Safety Points

Please make sure to advise the participants to be aware of the following points;

Overall weight of load, especially when fatigued – take care on uneven ground & share group kit fairly

Food, Drink and Hygiene – Session Plan & Safety Points

Purpose	To instruct on nutritional qualities of food and drink
Objectives	At the end of the session the participants should be able to confidently discuss and understand: What constitutes a substantial meal, the components Average daily intake of kcal and what extra is required on expedition. Major nutrients, how the body uses the energy sources as fuel Food allergies, dietary needs and the potential consequences The importance of hydration and the dangers of dehydration Personal, environmental and food hygiene
Supporting material	Wilderness Expertise Trainers Guide
Trainer Prep.	Refresh knowledge of major food groups Bring handouts (can use resources from GDrive) suggested menu items

Session Plan

Introduction	Outline the objectives of the course
Ask and discuss	Why do we need food? What food do you like? What food have you used on trips before? What worked well and what didn't?
Discuss	Major nutrients (carbs, fats and protein)- Effect & correct balance of major nutrients on the body, how the body converts food into energy. What happens if we don't get enough fuel What makes a balanced menu suitable for expedition Any allergy or dietary needs within a group Packaging and weight
Ask	How do we know when we are dehydrated?
Discuss	Hydration: how much we need (2.5l per day without exercise) Proper hydration measured in the amount and colour of pee Consequences of dehydration: low concentration, low energy etc What to avoid (caffeine, alcohol)
Ask	What do we mean by hygiene? What does this mean on expedition?
Discuss	Food hygiene issues; bacterial contamination, foreign body contamination, food prep, cooking and storage, clean utensils. Sources and use of clean, potable water Personal hygiene: cleanliness, use of anti bac gels, Environmental hygiene: toilet/washing-up facilities (including wild camp), clean camp, all rubbish responsibly disposed of.
Discuss	Review the session

Safety Points

Please advise the participants to be aware of the following points;

- Avoidance of travellers' diarrhoea – drinking potable water and good hygiene practice
- Food Allergies, dietary needs and the potential consequences

Bronze Award First Aid and Emergency Procedures – Session Plan & Safety Points

Purpose	Deliver session on practical first aid and emergency procedures
Objectives	At the end of the session participants should have a basic understanding and the practical skills to deal with: Personal and group first aid kits Primary survey & basic life preservation techniques Treatment of wounds - bleeding, blisters, abrasions, minor burns and scalds, headaches, sunburn, splinters and bites. Signs, symptoms and treatment of Hypothermia/Hyperthermia Signs, symptoms and treatment of Hypovolemic shock To recognise more serious injuries (sprains, fractures, dislocations) To know what to do in an emergency Risk Awareness: expedition fitness, identifying and avoiding hazards in both planning and en route, keeping together, understanding effects of changing weather conditions
Supporting material	Wilderness Expertise Trainers Guide, First Aid Training Manual.
Trainer Prep	Refresh knowledge of basic first aid and WE operational procedures and on call system. Have demo equipment, eg prints outs and sample exped kit to purchase/bring

Session Plan

Introduction	Outline objectives of the course
Ask	What is meant by First Aid?
Discuss	Abilities and limitations, to stay safe and calm, assessment of casualty and necessary treatment, seeking help, your own needs.
Demonstrate	Primary survey & basic life preservation techniques (DRABC) Treatment of wounds and bleeding, blisters, abrasions, minor burns, scalds, splinters.
Discuss	Headaches, causes (dehydration?) and treatment Sunburn, consequences, avoidance and treatment Hypo & Hyperthermia; signs, symptoms, prevention and treatment. Serious injury (breaks, sprains, strains, dislocations & diagnosis limits) Nose bleeds, chocking, fits
Ask	What is meant by Hypovolemic shock, how can it happen?
Discuss	Treatment of Hypovolemic shock
Discuss	What to do in an emergency (getting help, information required by emergency services, looking after self and group) Risk awareness (identifying hazards, keeping together, route cards and emergency information, where to find weather forecasts) Emergency procedure cards, how to use and store.
Discuss	Review the session

Safety Points

Please make sure you advise the participants to be aware of the following points;

- Personal Safety during an incident – Priorities are you, others, casualty
- Moving and rolling casualties during an incident or practice scenario – take care

Bronze Award Navigation – Session Plan & Safety Points

Purpose	To teach basic navigation skills for participants on Bronze expedition
Objectives	At the end of the session Participants should be able to confidently discuss, use and understand: Map scales, symbols, distances, grid references, contours, a route from a map. Parts of the compass, compass care, set the map by compass, and determine the direction of travel by cardinal and intercardinal points. How to set a map, locate a position, determine direction of travel, identify features on the ground from the map, plan a route, write a route card, follow a planned route
Supporting material	Wilderness Expertise Trainers Guide
Trainer Prep	Refresh knowledge of basic training framework Bring nav equipment (compasses, maps if required, pens etc) and any educational aids

Session Plan

Introduction	Outline the objectives of the course
Ask	Previous map or navigational experience
Discuss	Map scales, symbols, the UK national grid, eastings and northings, grid references, contours
Demonstrate	Parts of the compass Measuring distances on the map The cardinal and inter-cardinal points Setting the map both by using observed features and the compass, Locate your position from the map From set map determine direction of paths
Ask	Name features on the map and locate on the ground. Locate features on the ground and identify on the map and give 6 figure grid reference.
Demonstrate	Determining direction of travel by cardinal and inter-cardinal points
Ask	Route planning/cards, why is this important, who needs this info
Discuss and demonstrate	Planning a route Route cards Following a planned route
Discuss	Review the session

Safety Points

Please make sure you advise the participants to be aware of the following points;

- If lost, remember emergency procedures – sit down, get your bearings, locate yourself on the map, back track if necessary, call supervisor where appropriate

Silver Training Framework

The expedition should take place in normal rural or open countryside which is unfamiliar to the participants. The environment should be more demanding than that at Bronze. Where possible the expedition should be in, or include, areas of open countryside or forest. The Qualifying expedition duration should be three days and two nights camping with 7 hours of planned activity during daylight.

NOTE: Time associated with overnight accommodation and cooking dinner is additional to the seven hours of planned activity.

For direct entrants to the Silver award, the Basic Framework needs to be covered in detail. For participants progressing onto Silver, a thorough review of the Basic Framework should be all that is needed. Any shortfalls in understanding or competence can then be highlighted and addressed.

The Silver expedition is more demanding of participants and this should be reflected in their skills and knowledge, particularly navigation. All previous training on navigation should be revised and tested. Participants should progress from basic map and compass skills to a more advanced level and so the following needs to be trained.

Navigation and Route Planning

- Compass Skills
 - (i) Understanding degrees and direction
 - (ii) Taking a bearing from the map
 - (iii) Determining direction of footpaths and direction of travel
 - (iv) Travelling on a bearing
 - (v) The influence of ferrous objects

Silver Award Navigation – Session Plan & Safety Points

Purpose	To teach intermediate navigation skills for Silver Award participants
Objectives	At the end of the session Participants should be able to confidently discuss, use and understand: All the headings covered in the Bronze Basic Training Framework Degrees and direction Determine direction of foot paths on the ground and relate that to the map and vice versa. Direction of travel and travelling on a bearing
Supporting material	Wilderness Expertise Trainers Guide
Trainer Prep	Refresh knowledge of Basic and Silver training framework Bring navigational equipment (compasses, maps if required)

Session Plan

Introduction	Outline the objectives of the course
Ask	Previous map and navigational experience. Determine if participants are direct entrants and need full instruction or progressing and only need to review previous sessions.
Discuss	Degrees and direction
Demonstrate	Taking a bearing from the map and converting it to magnetic Determining the direction of footpaths from the map and relating that to the ground Determine direction of footpaths on the ground and relating that to the map Direction of travel and travelling on a bearing
Discuss	Planning routes Route timings Route cards Importance of escape routes
Discuss	Review the session

Safety Points

Please make sure you advise the participants to be aware of the following points;

- If lost, remember emergency procedures – sit down, get your bearings, locate yourself on the map, retrace your steps if necessary, call supervisor where appropriate

Gold Training Framework

The Expedition should take place in “wild country”, which is unfamiliar to participants. The environment should be more demanding for participants than that at Silver level. “Wild country is defined as an area remote from habitation. The Qualifying expedition duration should be four days and three nights camping with 8 hours minimum planned activity during daylight. NOTE: Time associated with overnight accommodation and cooking is additional to the minimum daytime hours of planned activity.

For direct entrants to the Gold award, the Basic Framework and Silver training framework needs to be covered in detail.

For participants progressing onto Gold, a thorough review of all the headings covered in the Basic and Silver training framework should be all that is needed, and any shortfalls in understanding or competence can be highlighted and addressed.

The expedition at Gold level, operating in remote country, is far more demanding of participants. Therefore, they require a high degree of skill and knowledge, particularly in First Aid and Emergency Procedures and Navigation, to safely complete the Qualifying expedition. These areas should be revisited and thoroughly tested. Additionally, the following needs to be trained.

First Aid and Emergency Procedures

- Recognition and immediate treatment of more serious conditions, sprains, dislocations and broken limbs.
- The emergency transport of casualties.
- Recognition, treatment and prevention of hypothermia.
- To know what to do in an emergency in remote areas and how to get help.

Risk Awareness

- Undertake a risk assessment
- Weather forecasts: develop a better understanding of observed conditions and signs of change.

Navigation and Route Planning

Understanding maps

- Understanding contours and recognition of major landforms such as hills, valleys, ridges, spurs and reentrants.

- Interpretation of contours into mountain landforms and relief, slope (convex and concave) gradients.

Practical Map Skills.

- Relating the map to the ground
- Relating contours to the ground, use of slope aspect.
- Estimating journey times in wild country
- Navigation in poor visibility and action to be taken if lost or temporarily misplaced.

Compass Skills.

- Confidence in ability to take a bearing
- Confidence in ability to walk on a bearing in poor visibility and understand the difficulties and limitations in doing so over a long leg of the journey.

Camp Craft and Hygiene

- Choosing a campsite in wild country
- Arrangements for water, sanitation and refuse disposal.

Gold Award Navigation – Session Plan & Safety Points

Purpose	To teach advanced navigation skills for Gold Award participants
Objectives	<p>At the end of the session Participants should be able to confidently discuss, use and understand:</p> <p>Contour interpretation, intermediate and index contours, convex, concave and uniform slopes. How to identify these slopes and the issues that they present to planning.</p> <p>Landform Recognition; hilltops, valleys, ridges, spurs and re-entrants.</p> <p>Spot, linear and area features</p> <p>Navigational strategies, use of attack points, aiming off, and collecting features.</p> <p>Relocation strategies, slope aspect, intersection and resection, along with issues and limitations to these strategies.</p> <p>Measuring distances by pacing.</p> <p>Walking with confidence on a bearing and understanding difficulties of walking a long leg.</p>
Supporting material	Wilderness Expertise Trainers Guide
Trainer Prep.	<p>Refresh knowledge of Basic and Gold training framework</p> <p>Bring navigation equipment (compasses and maps if required)</p>

Session Plan

Introduction	Outline the objectives of the course
Ask	Previous map and navigational experience. Determine if participants are direct entrants and need full instruction or if they are progressing and only need to review previous sessions
Discuss	<p>Contour interpretation recognizing convex, concave and uniform slopes, what these terms mean, what problems might they present.</p> <p>Land forms such as hill tops, valleys, ridges, spurs and re-entrants.</p> <p>The significance of spot heights</p>
Ask	<p>How can we use these features to aid navigation?</p> <p>Does the weather have different effect on or within these landforms? (escape routes)</p>
Demonstrate	<p>Relating contours to the ground</p> <p>Spot, linear and area features and the use of handrails</p> <p>Slope aspect, intersection and resection</p> <p>Walking on a bearing and pacing distances.</p>
Ask	What are the issues and limitations to these navigational strategies?
Discuss	Review the session

Safety Points

Please make sure you advise the participants to be aware of the following points;

- If lost, remember emergency procedures – sit down, get your bearings, locate yourself on the map, retrace your steps if necessary, call supervisor where appropriate

Part 2

Training Manual

Navigation

Introduction

Teaching navigation requires a great deal of skill on the part of the Trainer. For some participants map reading and using a compass is a difficult concept. Unfortunately, some dry theory must be taught but true progress is made when map reading is taken into a practical environment. Map reading is a vital skill in navigation and resorting to other skills should only be necessary in difficult conditions.

Good old Langmuir summed it up well, "Observation is still the keynote to successful navigation today although this is sometimes obscured by our tendency to rely on gadgets or the recorded experience of other experts." Either way the process should be fun with the emphasis on patience and inclusion, so that everyone in the group should be able to navigate.

Teaching navigation skills to DofE participants should follow a modular approach matching the skill set to the award level. For most Bronze participants this is likely to be their first introduction to the outdoors and using maps. Their expedition will take place in normal rural countryside that may be known to them. The training programme should reflect this with an emphasis on map skills and an introduction to the compass. Conversely, Gold participants will be operating in wild country and they will require a very high standard of navigational skills in order to enjoy and safely complete their journey.

Bronze

At Bronze, this is likely to be the first introduction to an outdoor experience for some participants. This gives us some great opportunities and also some undoubted challenges. Some will be daunted by the challenge, others will embrace it, while others will be totally indifferent. A great Trainer delivers the information in a way that is engaging for all the participants.

Understanding Maps

These are the basics that need to be covered.

- General description of the map as a two-dimensional representation of the land area covered. The cardinal points and how they relate to the map.
- Scales and how map scale relates to the ground.
- National grid lines and how they are used to give a grid reference
- Map symbols
- Simple introduction to contour lines and gradients
- Using symbols and contours describe a route on the map from point A to B

Practical Map Skills

Start to build upon the initial introduction.

- Setting the map to observed features
- Locating your position on the map by observation and relating this to the map
- Eastings and Northings and how to determine a 6 figure grid reference.
- Identifying features on the ground locating them on the map and give a 6 figure grid reference for those features.
- Travelling from point A to point B and being able to identify “tick points” along the route

Introduction to the Compass

- Care of the compass, effects of ferrous material upon the compass needle
- Description of the compass, base plate, direction arrow, bezel, cardinal points, needle and the romer
- Setting the map using the compass
- Determining the direction of travel in terms of the four cardinal points and inter cardinal points
- Using the romer to accurately determine 6 figure grid references

Pulling it all together

- Planning a route, including “escape routes” and timings for each leg and totals for the route.
- Writing a route card and understanding the importance of the information on the route card to others.
- Following the planned route

Silver

The expedition for the Silver award takes place in normal rural or open countryside which is unfamiliar to the participants. The expedition therefore places higher demands upon the participants than the Bronze award and this should be reflected in a higher level of training and knowledge.

Direct entrants need to learn all of the basic navigation skills as outlined above for Bronze participants. For those progressing onto the Silver award, a thorough review of the basic navigation syllabus should be all that is required with any shortfalls in understanding or competency addressed.

Note: Silver expeditions may take place in “wild country” areas, if the supervisors must be sure that the participants are trained to the standard that allows them to operate safely in these areas, i.e. to Gold standards.

Practical Map Skills and Using the Compass

- Taking a bearing from the map (grid bearing) with confidence and accuracy.
- Determining the direction of footpaths from the map and relating that to the ground
- Determining the direction of footpaths and relating that to the map
- Direction of travel and travelling on a bearing

Gold

Gold expeditions should take place in “wild country” that is, remote from habitation. Participants at Gold level need a high degree of skill and knowledge and be able to apply different strategies in order to navigate safely and efficiently.

Understanding Maps

- Contour interpretation, understand the relationship between contours and the shape of the terrain.
- Recognizing intermediate and index contours and significance of spot heights
- Convex, concave and uniform slopes and how to identify them from the map. Slope gradients, what these slopes mean in terms of route planning and the difficulties they can present.
- Recognizing land forms such as hill tops, valleys, ridges, spurs and reentrants.
- Weather influences on ridges and hill tops and how this influences planning and escape routes

Practical Map Skills and Using the Compass

- Relating contours to the ground
- Spot, linear and area features
- Use of attack points, aiming off and collecting features
- Relocation strategies: slope aspect, intersection and resection, along with a discussion on the issues and limitations to these strategies (poor visibility; if you are unsure of where you are, can you identify features from which to take a resection)
- Measuring distances by pacing
- Walking with confidence on a bearing and understanding the difficulties and limitations of doing so over a long leg of the journey

Trainers come equipped with an extensive tool kit for the various subjects that they must cover and teaching navigation is no different. Training resources can be found on the internet at the following link:

<https://www.ordnancesurvey.co.uk/education>

Interesting further Reading: *Mountain Navigation by Peter Cliff*
Outdoor Navigation Tutors Handbook by Pat Mee et al
Hill Walking by Steve Long

Camp Craft, Equipment, Food and Hygiene

Tents

Proper shelter is vital to a successful and safe expedition and therefore the tent is vital. They must be hard wearing, stable and strong yet light. Protect you from the wind and be waterproof but not allow for excessive buildup of condensation. They should be roomy enough for all occupants and their equipment while being compact.

To achieve this balance there are various designs, all of which are a compromise of function and cost. Geodesic, semi-geodesic, single hoop, tunnel and ridge tents are the basic types of tent Trainers are likely to come across (although ridge tents now are usually the preserve of “old school” Scout Trainers).

Quality of materials is also important. Many believe that they have bagged a bargain but these tents need to be examined against their intended use. A wet and windy night in the Peak District is no time to find out that your £35.00 pop up tent is not up to the job! Unfortunately, as with many things, you get what you pay for. That said, many manufacturers do produce high quality tents at reasonable prices.

With so many designs and styles there is no definitive way of erecting a tent, but some basic principles apply to all types.

Choose a suitable site which is level and sheltered. Avoid pitching under trees as sap can damage the tent outer or falling dead wood/branches might injure the occupants. Long after the rain has stopped, water tends to drip from leaves in large heavy drops, which can penetrate the material, as well as being annoying. Spend time removing twigs and stones from your intended spot (time well spent!).

As a starting point the tent should be laid out and the constituent parts identified. Determine whether the tent is erected inner or outer first. The poles should be assembled and laid upon the ground while the flysheet or Inner is opened out and oriented correctly. If the wind is from a constant direction, orientate the tent tail into the wind. It is important not to have the main door opening out into a gale.

Poles should be pushed through the sleeves, not pulled. If the inner is pitched first and it is raining then the inner should be covered with the fly whilst threading the poles. If a strong breeze is blowing peg the tent down and insert the poles from the upwind direction. Do not force the poles. Poles are put under the highest tension during pitching and if forced poles can and do break. If the sleeve is gathered, gently ease out the material as you rethread the pole. To stop water pooling up on the tent which will lead to leaks it is important to tension the tent. Ensure the pole feet are pulled out and pegged so that the tent fabric is properly tensioned. The guy lines should always be used. They provide strength and stability to the tent and further tension the outer material. Moreover, in the lightest breeze any loose tent fabric will flap. In a slight breeze this can lead to a night of misery but in a storm the tent could be severely damaged.

Pegs should always be angled away from the tent and driven into the hilt for maximum strength. In very soft or hard ground where the pegs cannot be driven in very far, rocks can be placed on the pegs to secure them.

The design of the tent should ensure that the inner is kept out of contact with the outer fabric. This is important for keeping the inner dry. However, this will only be the case if the tent is pitched properly with the outer fully tensioned. In prolonged and heavy rain the outer fabric will absorb some of the water and expand. This is known as wetting out. The increased weight of the material will cause it to sag and, under these conditions, it may touch the inner. It will then be necessary to readjust the tension of the outer tent fabric. Once dried out the fabric will contract and you will then need to release the tension on the fly sheet.

Condensation occurs in all tents. One person can produce a litre of perspiration in a single night! The key to minimizing the effects of condensation is by ventilating the tent. Again different tents allow for different ways of venting but it is best to try and achieve a flow of air across the top of the inner.

When collapsing the tent, care should be taken with the poles. The poles are under a lot of tension. When released from the eyelets, Participants should be instructed to ensure that their face is clear of the pole being released. Injury could occur if the pole is taken out of the eyelet and then whips up into the participants face or eyes. Again poles should be pushed through the

sleeves and not pulled as this will put stress on the shock cord. If the tent is wet, either through condensation or rain then, if conditions allow, they should be dried out as much as possible. If the tent has been split and carried by different team members then it needs to be packed together with the fly, inner, pegs and poles and put back into its own stuff sack. If the tent is in any way damaged or missing parts then this should be recorded on the bag (red tags are available in the tent repair kit or in WE vehicle) and if possible kept separate from the rest. This ensures the tent is not used again until repaired.

Rucksacks

A rucksack is required for carrying all the equipment required for the expedition. 60-80 litres is more than sufficient for most expeditions. The bag needs to be big enough to accommodate all the necessary equipment without the need to hang things on the outside. The weight of a fully laden pack is key and so a discussion of the kit list, along with amount and types of food to be carried, is vital. Ideally this weight should be no more than 25% of the participant's body weight and if necessary rucksacks can be reduced for this reason or due to injury, at the discretion of the Trainer and CD.

Fitting

There are many brands of rucksack of varying quality and functionality. Whatever the make, the pack must fit properly. A poorly fitting rucksack can at best make an expedition a miserable experience and at worst could cause injury.

Many rucksacks have adjustable back systems (cradle) to allow for different back lengths. Back length is determined by measuring from the C7 vertebrae (the knobbly bone at the base of the neck) to the iliac crest (found by placing your hands on hips around you back and feeling where the spine meets the hip bone). The back system should then be adjusted so that the back length fits these two points.

Once the correct size is determined then the rucksack needs to be worn correctly. Once the pack is lifted onto the shoulders, the hip belt needs to be placed in the correct position (over the iliac crest) and then tightened. Next, the shoulder straps need to be pulled in so that the pack hugs close to the back. The tension straps at the top of the shoulders need to be tightened, which brings the top of the pack in closer to the centre of gravity and adds stability. The weight distribution should be approximately 70% on the hips and 30% on the shoulders.

Lifting

Participants should be instructed on correct manual handling techniques. Help in lifting fully laden rucksacks should be sought. A team mate should assist with a straight lift. That is, they bend their legs (keeping the back as straight as possible) and then lift the pack so that the wearer can slip their arms through the shoulder straps. Alternatively, the pack can be picked up,

by the wearer, in a straight lift and then rested on a stile or low wall while slipping the arms through the shoulder straps. Either way participants should avoid the twist and lift manoeuvre which can cause serious injury.

Packing a rucksack

There is some subjectivity involved in how to pack a rucksack and many experienced back packers will have tried and tested systems that work for them. However, a few basic principles apply. Equipment needed regularly, early on, or in a hurry should be packed near the top or in an outer pocket. Packing heavier items closer to the back in the middle of the pack will result in a more stable carry but hard or sharp items pressing into the wearer's back must be avoided. Nothing should hang off the outside of the rucksack, with the possible exception of a roll mat, using the attachment straps, although this could be barreled in a rucksack. Compression straps should be pulled tight to create a slimmer profile and stop the load moving about.

Fuel bottles must not be allowed to contaminate anything in case of leakage, and should be carried in a separate pocket away from food items.

There is no such thing as a waterproof rucksack and so everything needs to be protected from the rain. There are various ways of doing this. Rucksack liners, individual waterproof bags (exped bags, etc.) bin bags or rubble sacks. Bin bags are cheap and cheerful, but they are fragile and tear easily. Rucksack covers provide extra protection but they do not make the rucksack weather proof and are easily blown away in strong wind.

Stoves

Proper training in the use of stoves is essential if injury is to be avoided. There are three main types of stove used, gas cartridges, pressure stoves and spirit burners. They all have different advantages and so disadvantages. However, basic principles apply to all stoves. They should never be used inside the tent, a cooking area should be established a safe distance from other tents. All stoves work better if shielded from the wind (Trangias and some other stoves have built in windshields) and need to be placed on a flat, stable surface. A LIT STOVE SHOULD NEVER BE LEFT UNATTENDED.

Gas

Back packing stoves use disposable cartridges, usually filled with a butane/propane mix. Burn rates are approximately 150g per hour, providing enough power to boil a litre of water in 3-6 minutes. However, as the gas is used, pressure drops and the power of the stove is severely reduced. Furthermore, while propane is used in the mix to give better cold weather operation, temperatures much below freezing can seriously affect stove performance. However, this should not be a problem during the expedition season. Where the gas burner is mounted on top of the cartridge the stove is less stable and extra care should be taken.

For use on DofE expeditions all gas cartridges have to be self-sealing. Changing gas cartridges must be done in the open. First check that the burn control knob on the burner is fully closed. Then insert the fitting to the gas cartridge and screw together (note: Camping Gaz has a clip and screw system) until fully locked. Lighting is simple, turn the burn control knob and light the gas. The flame should be blue and very obvious even in bright sunlight. NOTE: It is important that the gas cartridge is well ventilated and **not** allowed to get too hot. Separate windshields should not be placed around the gas cartridge. To turn out the flame turn down the burn control knob. The gas cartridge should be removed for storage and carriage. This is the reverse of fitting and should only be done once the burner has cooled. Used gas cartridges present an environmental concern and should be disposed of properly at a recycling site and not in your rubbish bin.

Pressure Stoves

Based on the design of the blow torch. The first stoves were made by Primus but there are many brands on the market now including MSR, Optimus and Coleman. They can use a variety of fuels which is great if supply of one type is an issue. They generally have good cold weather performance and heat very effectively. However, because of the volatility of the fuel and the relatively complicated lighting process Operating Authorities and LEAs are reluctant to allow their use, so Trainers are extremely unlikely to see them on DofE expeditions.

To operate the stove the fuel tank needs to be pressurised by the small hand pump. Then for safe lighting the stove needs priming (heating up the jets enough that the fuel will vaporise to a gas.) If this is not done properly then when the fuel is introduced it will flare and a big flame ball will envelop the stove (not good). To prime the stove a small amount of fuel is introduced to the burner and ignited. Once this has burnt for about 90 seconds, then the burner control knob can be turned very slowly allowing fuel into to the burner jets. The burner should hiss as the fuel is vaporised. If it starts to flare, the control knob must be turned down immediately. After a short wait a further attempt can be made. Once the fuel has vaporised and is hissing, the control knob can be turned fully up.

Spirit Stoves

Spirit stoves burn ethanol, usually in the form of denatured alcohol. Denaturing alcohol does not change the molecular structure of ethanol, rather it is treated with additives to deter people from drinking it. (Denatonium for a bitter taste, pyridine for smell, dyes for colour and finally methanol (hence methylated) to make it toxic (will cause blindness and death). This means that the methylated spirit is undrinkable and therefore not due the high alcohol tax. So, methylated spirit, cheap and good to burn, but rubbish in a Pina Colada.

The most popular spirit stove is the ubiquitous Trangia. The stove comes packed together with two parts of the body housing, burner and screw top, simmer ring, a pan handle, two pots and a

lid which doubles as a frying pan. There is a specifically designed fuel bottle (0.5 to 1.0 litre capacity) to use with the stove.

To assemble the stove, undo the strap, remove all items and then assemble the two halves of the body (a twist and click to ensure the ramps and flanges are locked together). The burner comes with a screw top lid which needs to be removed. The burner then sits inside the centre of the housing.

To operate the stove, first the burner needs to be fuelled. Remove the burner from the stove and take it to the fuel bottle. The fuel should be kept at an obvious location a safe distance from the cooking area and tents. A safe distance will depend on other factors such as the size of the site, other tents, hazards, etc. but a minimum of 3 metres is reasonable. The burner needs to be filled to a maximum $\frac{2}{3}$ of its height, the fuel bottle fully closed and then the burner returned to sit in the housing.

To light, apply a lit match directly to the burner. During day light the meths burns with an almost invisible and silent flame. Unfortunately, accidents have occurred because participants did not realise the stove was alight. The heat coming off the flame can be felt by “hovering” the back of a hand well above the stove. Placing body parts into the stove to test the heat coming off should not be taught.

The Trangia can be used in all weather conditions but will benefit from a sheltered position. The flame can be regulated by using the simmer ring. To do this move the top plate of the simmer ring to the desired position and carefully place the simmer ring on top of the burner using the pan handle. This should allow partial cover of the burner and reduce flame size. The flame intensity can be increased by turning the air holes in the lower windshield towards the wind, increasing the air flow.

The hinged hook supports should be lowered and the pots rested on them. Pots should always be moved with the pan grab handle, even when cold, as a best practice. The lid should be placed on top of the pots (again with the handle) to speed up boiling times. If the lid is used as a frying pan then the hook supports should be raised, once again using the handle and the pan placed on top.

With the burner filled to the maximum $\frac{2}{3}$, it will burn for approximately 25 minutes. Approximately 5cl of fuel will boil 1 litre of water in 10-15 minutes. To refill the burner it is important to take the burner to the fuel bottle and not the other way around. Methylated spirit is very volatile and volatile vapours can spread very quickly. If they ignite on a hot stove it can spread instantly to the fuel bottle with disastrous consequences. Once the flame is definitely

out the burner should be allowed to cool. Once cool enough to be touched, it is cool enough to be carried to the fuel bottle for refilling.

The burner can be extinguished by closing the simmer ring fully and, with the pan-handle, placed carefully over the burner. Oxygen is cut off to the flame and after a short period it will extinguish. There is a lid for the burner which can be screwed in place. However, over time the rubber seal becomes damaged and may leak. As a best practice, once cooking has finished, the unused fuel should be allowed to burn off. Meths all over the cooking utensils is difficult to remove and taints all food cooked in them.

Once used, the Trangia must be fully cleaned. All food traces must be removed as well as the black soot marks at the base of the pans. Attention should be paid to the wind shields as a build-up of food matter occurs, especially around the spring holding the hinged supports. Steel wool or brillo pads are very effective in bringing a used Trangia back to pristine condition. Once cleaned, the stove needs to be repacked, making sure that all the parts are together.

Food and Drink

Food

A DofE expedition is a sustained period of strenuous activity which places a high energy demand on participants above what is required for normal everyday tasks. One kilo calorie (kcal) is the amount of heat energy required to raise the temperature of a litre of water by 1 degree Celsius. The required daily intake for men is 2,550 kcal per day whilst for women it is 2,000 kcal.

The amount of extra energy required for the expedition will depend on body weight, age, sex plus the length of the route and the height to be climbed. Other influencing factors include the terrain (more energy is required crossing rough ground), and the experience of the group (being able to move efficiently decreases the energy used). Complicated! Steve Long in Hill Walking suggests “a daily allowance of 3,500 calories” as a useful starting point when planning a menu, with “adjustments for larger bodies, heavy loads or strenuous outings”. This seems a reasonable way of simplifying matters.

How does the body convert food to energy? The major nutrients in food can be broken down as:

Carbohydrates - 4 kcal per gram.

Protein - 4 kcal per gram.

Fats - 9 kcal per gram.

Carbohydrates are divided into simple and complex. Simple carbs are made up of the sugary compounds found in honey, sugar and sweets, and are quickly absorbed into the bloodstream.

Complex compounds are starches, such as rice, cereals, potatoes and pasta. They need to be digested by the body and broken down into simple sugars (glucose) before absorption into the bloodstream. A good, high carb breakfast is essential.

Fats are either saturated or unsaturated, according to the proportion of fatty acids present. They are a very concentrated form of energy. Fats are essential to a balanced diet, providing a medium for micro nutrients. However, a high fat diet (higher than 35% of total intake) is potentially harmful long term.

During sustained periods of activity the body will use a mixture of carbohydrate and fat for energy. The more trained that the muscles are, the more efficient the body becomes at utilising fat. However, this is a slow process and if the supply of glucose is not maintained then it will be difficult to maintain endurance and you will become tired and heavy legged. Emphasis should therefore be on a high carb menu, with a small amount of fat.

Protein has an energy value but this is not its primary use. Protein is made up of amino acids which are the building blocks of the body and can be found in both animal and plant sources. Good sources of protein are soya, pulses, legumes, dairy, fish or meat. Protein is essential for muscle repair after exercise, however it should be noted that any unused protein is stored as fat by the body so again emphasis should be on small portions.

Menu choices should reflect a balance of energy sources obtained from carbohydrates, fat and protein. Different commentators claim differing values for this balance, but 60-70% carbs, 15-20% fat and 15-20% protein is about right.

It should also reflect dietary needs and allergies as often menus are a shared choice of food.

As previously stated, breakfast is vital to replenish glycogen stores lost throughout the night. Good sources of carbohydrate include wholegrain cereals, porridge, muesli, fresh or dried fruit, bread, especially whole wheat, and muffins.

It is important to maintain glucose levels throughout the day and 50% of total energy intake should be consumed between breakfast and the evening. Sandwiches, cereal bars, dried fruit, nuts, bagels, biscuits such as Jaffa Cakes or fig rolls, pre-prepared pasta, cheese, oatcakes, rice cakes, flapjack, chocolate, and peanut butter, all make great snacks.

To fulfil the requirements of the award one substantial meal should be cooked each day. This is usually the evening meal. Pasta, rice or couscous are good choices as they can be easily mixed with proteins and fats. Tuna, tomato sauces, cheese, soya-based mixes (eg Quorn), sausages

(cured meats), or ham can be added to create a meal. Instant noodles have a very high salt and fat content and are a poor substitute for whole wheat pasta.

A hot drink of sweet tea, instant soup or hot chocolate helps to kick start the refuelling process and improves wellbeing. Instant custard with cake or chocolate is a good pudding!

Some people would rather starve than eat food that they don't like and so it is important that the group discuss their food preferences beforehand. If they are inexperienced, suggest that they practise cooking their meals at home.

Food is heavy and bulky and so any menu plan must take this into account. Packaging should be light and strong. Avoid glass containers like the plague. Cans are heavy and if there is no way to dispose of the empty can properly, then they must be carried out. If the food is decanted into a lightweight container, then food hygiene issues must be considered. Dried food rather than wet would reduce weight, remember 1ltr equals 1kilo in weight.

Drink

The average person requires 2.5 litres of water per day. During exercise the body sweats to cool down. A lot of fluid can be lost through increased sweating and higher respiration rate. In high temperatures this is exacerbated. It cannot be overstated how important it is to maintain hydration levels.

As the body loses fluids, several functions become compromised. Even very low levels of dehydration diminish concentration, coordination and energy. Losing 2% body weight in fluid can impair performance by 10-20%. Symptoms such as headaches, lightheadedness, weakness, nausea, muscle cramps can be felt. If the condition persists, heat exhaustion could develop. This is a very serious condition and if not treated the casualty can become unconscious.

Preventing dehydration is best. You should be drinking small amounts regularly throughout the day. Drinking when you are thirsty is too late, as thirst is a sign that you are already dehydrated. You should pee regularly throughout the day, and it should be a pale straw colour (sometimes described as chardonnay). Coffee, tea, coke, Monster, Red Bull or any other caffeinated drink should be avoided as they are diuretic.

Water is adequate in most situations but after salt loss through excessive sweating, some carbohydrate and electrolyte may be needed. A simple replacement drink, post exercise, is fruit juice (1 part) with water (2 parts) and a pinch of salt, or diluted squash with a pinch of salt. It is important to note that a high carb concentration in drinks delays rehydration because the body can't absorb the fluid from the stomach.

Hygiene

Hygiene: Conditions or practices conducive to maintaining health

These conditions and practices, in the context of a DofE expedition, relate to food preparation and cooking, environmental and personal hygiene. It is important to maintain good practice in the preparation and cooking of food so that participants enjoy the experience of cooking al fresco and more importantly, avoid illness. Cleanliness is paramount.

Pans, plates and utensils need to be thoroughly cleaned immediately after use to prevent bacterial infection of remaining food particles which will cause contamination during subsequent use. Care is needed around the cooking site to prevent solid matter or foreign body contamination. The food needs to be cooked to high temperature in order to kill off any bacteria. Any water that is used in the cooking process if not obtained from a reliable source needs to be treated chemically, collected via a proprietary water filter or boiled. All group members need to observe strict personal hygiene practices. Hands must be washed clean, and anti-bacterial gel applied. Care should be taken with raw foods such as meat and fish and any utensils used in their preparation should be kept separate and cleaned thoroughly to prevent any cross contamination.

Pans should be cleaned immediately after use and not left lying around, as this will encourage vermin. Similarly, the campsite should be kept clean and free of rubbish and any food matter dropped on the ground cleared up. If at a wild camp, all waste should be packed out, never buried nor burnt, with the exception of toilet waste which needs proper management.

If at a campsite with washing up facilities, these should be used and kept clean and tidy. The water collection point should not be used for washing up and food matter should not block up any drains. If at a wild camp, any washing up must be done well away from water sources and dirty washing up water poured into a small hole made with a trowel.

Toilet facilities at a campsite must be used with consideration for others and left clean.

At a wild campsite it may be advantageous to designate a latrine area well away from any water courses. A hole at least six inches deep should be dug preserving the top sod. When finished it is preferable to secure it in a nappy sack and pack out, then replace the soil and the top sod.

Most of these practices are common sense and many relate to leaving things as you would wish to find them. The above list is not exhaustive but provides a Basic Framework to apply and expand upon.

Part 3

Roles and Responsibilities

Wilderness Expertise DofE Trainers Job Description

Introduction:

This part of the document has been produced to clearly set out the roles and responsibilities of all parties involved in the delivery of DofE programmes for Wilderness Expertise. All staff working for Wilderness Expertise on these programmes are required to read and understand this document.

Job Purpose:

Working for Wilderness Expertise the role will involve working as either a Course Director, Supervisor or Assessor on DofE expedition programmes throughout the country.

Required Skills:

- The Trainer must hold an ML (Summer) Award
- Assessors must hold a current Assessor number and badge.
- Supervisors must have attended a DofE Supervision course and be able to demonstrate an understanding of the DofE programme and the expedition section.
- Trainers also have to demonstrate that they have completed Child Protection Safeguarding Training.

General Responsibilities

Wilderness Expertise is a personal development company. We love theDofE because it offers great opportunities for experiential learning. The challenge for everyone involved in running the programme is to balance learning experiences with safety.

The Trainer will need to be able to teach hard skills such as navigation, camp craft, etc. but also be able to facilitate opportunities for participants to develop communication, management and problem-solving skills. It is ok for the participants to make mistakes but you must take control if there is a safety concern.

Course Information Pack (CIP)

Every Trainer/CD will be sent a CIP before the programme commences. This pack contains essential information about the programme, joining instructions, key contact details, participant and liaison teacher details and nearest hospitals.

The WE Risk Assessments and guidance on Transformational Leadership, which is at the core of all WE programmes are accessible to all freelancers via the G:Drive.

Risk Assessment

As a Trainer or CD you have a “duty of care” to all participants and for under 18 year olds you must act as a conscientious parent would. For the individuals in your charge, this duty of care cannot be delegated. You need to know where everyone is and take reasonable steps to ensure that they are safe at all times.

Risk assessments for all activities are sent with every CIP and must be read and understood. In addition to this, key to the safe and appropriate supervision is continuous or dynamic risk assessment by the Trainer and the continual monitoring of the group.

Decision making will be a dynamic process involving the CD, the Trainer and possibly the school staff. For example the CD will make a plan for deploying a team of Trainers through an area for the effective supervision of number of groups. The team will work together to ensure a safe outcome and good communication is extremely important. However, the Trainer will be expected to intervene or change the plan if there is a safety concern. Obviously any changes must be communicated to the CD as soon as possible. Any major changes to the programme or planning should also be passed on to WE On-call.

Client Relationships:

The Teacher and Trainer relationship is important. The School will take responsibility for pastoral issues and the Teacher should take the lead in this respect but the Trainer should still be there for support and help to the participants and teaching staff.

All staff have a responsibility for child protection and good practice must be applied at all times. Safeguarding Training is compulsory for all Trainers and details of training completed will be held on record.

The Trainer also has a responsibility to Wilderness Expertise to present a professional appearance. Trainers should wear WE branded clothing (all Trainers are provided with a WE t-shirt) and **under no circumstances** should Trainers wear clothing branded in a competitor's name or logo. Trainers must not smoke in the presence of the clients. Alcohol must not be consumed whilst on duty. Furthermore, Trainers must do nothing that will, or has the potential to bring Wilderness Expertise into disrepute and comply with all reasonable directions of the company.

JE - Do we want a comment here on handover of duty of care at end of day and beginning of day to ensure clear lines of responsibility are engaged at the right times?

On-Call

WE operates a 24-hour number to support all the UK programmes it operates. The On-Call number is handled by Senior Management and a Director is also available for extra support.

CDs/Trainers are expected to contact On-Call in the event of any incident or major change to the programme or itinerary. On-Call should also be updated when a programme finishes successfully.

Specific Roles and Responsibilities

Course Director:

The Course Director is key to the success of the programme. They manage all aspects of the course on behalf of Wilderness Expertise and their early involvement in planning will help with this process. The CD is responsible for managing the performance of the Trainers, including their personal development. Importantly the CD leads the Field Team in the Incident Management Plan.

Responsibilities:

1. Check the details on the CIP and check any group kit requirements.
2. Contact all the Trainers prior to the start of the course.
3. First day of course, arrive in good time and conduct a briefing with the Trainers. The briefing is important to ensure that all Trainers are working together and fully understand the standards that are expected of them. As a minimum, this briefing should include but not be limited to:
 - (i) Setting expectations, use of session plans, training framework, distributing group reports for Trainers to complete.
 - (ii) Check experience of Trainers.
 - (iii) Mobile phone policy (Trainers' numbers and emergency contacts and participants use of phones).
 - (iv) Briefing on Risk Assessments and any updates/additions based on local conditions, participants etc.
 - (v) Incident management plan.
 - (vi) Weather.
 - (vii) Any other issues and questions.
4. Meet School and make introductions to school staff.
5. Look at Medical declarations of participants and advise Trainers of any conditions as required.
6. If they have not been seen already, look at routes, discuss with Trainers and make a plan for safe supervision.
7. Maintain contact with Trainers throughout the course and continuous liaison with School Staff.
8. "Call in" at scheduled times. Text must only be used for non-emergency contact. If no reply has been received to the text then it must be assumed that the message has not been received. Keep the On Call Team advised of any issues e.g. (near-misses/behavioural/medical).
9. Collect and check all group kit making a note of any kit that is damaged or unserviceable.
10. Collect Trainers' reports on their groups or Assessor reports if a qualifying expedition.
11. Conduct a review with the Trainers noting all feedback.
12. Complete Post Course Report including a report on each Trainer.

Link CDs:

A number of Course Directors have a role as the link with client schools. They have additional responsibilities to the above and receive additional payment to reflect this.

1. Liaise with the School DofE Co-Coordinator to help create the DofE expedition programme for the school.
2. Relay this information to Wilderness Expertise in a timely manner so that staff can be allocated in good time.
3. Complete the information pages of the CIP at least two weeks prior to the programme start date and send to the office so it can be finished and passed on to the Trainers.

Trainers:

Trainers are responsible for the safety of the participants in their care. The following attempts to define specific responsibilities. Again this is not an exhaustive list as situations may dictate further duties but is a minimum of what is expected and required.

1. Trainers must follow the standards set out in the Wilderness Expertise Standard Operating Procedures and the Wilderness Expertise Trainers Manual. This manual has been developed following best practice principals to ensure safe and consistent training methods. The Wilderness Expertise Trainers Manual details safe tent erection, safe use of stoves, kit, rucksack packing and fitting, safe lifting techniques, food and hygiene and basic first aid. There are also other resources such as session plans and “in field” aide memoires to use in conjunction with the manual. It is not intended to “teach you how to suck eggs” but supplied as support material to ensure that all Trainers are providing a consistent standard of training for our clients.
2. Instruct DofE participants in all aspects of the DofE Training Framework to the appropriate standard of the Award. The Training Framework follows the modular approach of the Award starting at Bronze and building skill sets to the high standards expected at Gold. So for example, at Bronze level navigation training should be at an introductory level relevant to the area the expedition will take place...not pacing on a bearing to an unseen navigational feature.
3. At camp, Trainers are responsible for the participants until they are deemed “safe”, usually after they have finished cooking. During that time supervision of participants needs to be maintained especially monitoring the use of stoves and making sure that the participants are always wearing appropriate foot wear. Once the participants are deemed safe then care is passed over to the School Staff and the Trainer is effectively off duty. There maybe exceptions to this when participants stay at a wild camp where duty remains with WE, or if requested by the school. This will be agreed on a case by case basis and communicated to all parties before the event.

4. On WE Qualifying expeditions, all the Trainers work as a team so although you may be listed as an Assessor you may be required to supervise another group(s). Trainers will not be required to assess more than three groups.

5. Trainers may give their personal telephone number to participants. Phone contact will be co-ordinated by the CD and by use of the Incident Management Cards, issued to the participants. Trainers ensure participant use of mobile phones is restricted to emergency use only.

Incident Management Plan

Introduction

An incident is defined as an event that: *has the potential to cause, or did cause personal injury or illness, property damage or environmental impact; could have serious financial impact on the operation and/or attract media attention.*

These events could include:

- Injuries
- Illness
- Missing or lost persons
- Theft
- Road Traffic Incident
- Child protection issues

All incidents and serious near- misses MUST be reported to On-Call.

Dealing with Incidents

The Trainer has a Duty of Care and is responsible for the safety and supervision of their group(s). The Trainer needs to have a clear understanding of any potential risks, child protection and the Wilderness Expertise Incident Management Plan.

Wilderness Expertise has a “duty of care” and will provide guidance, support and training in dealing with any incident. There is a 24 hour “On Call” facility in place that is manned by an Incident Management Team.

At an incident your priorities are:

- (i) Remain calm.
- (ii) Assess hazards and risks.
- (iii) Group considerations make sure that the group are in a safe location.
- (iv) Preserve life and prevent further injury. Promote recovery.
- (v) Minimise damage to the environment and property.

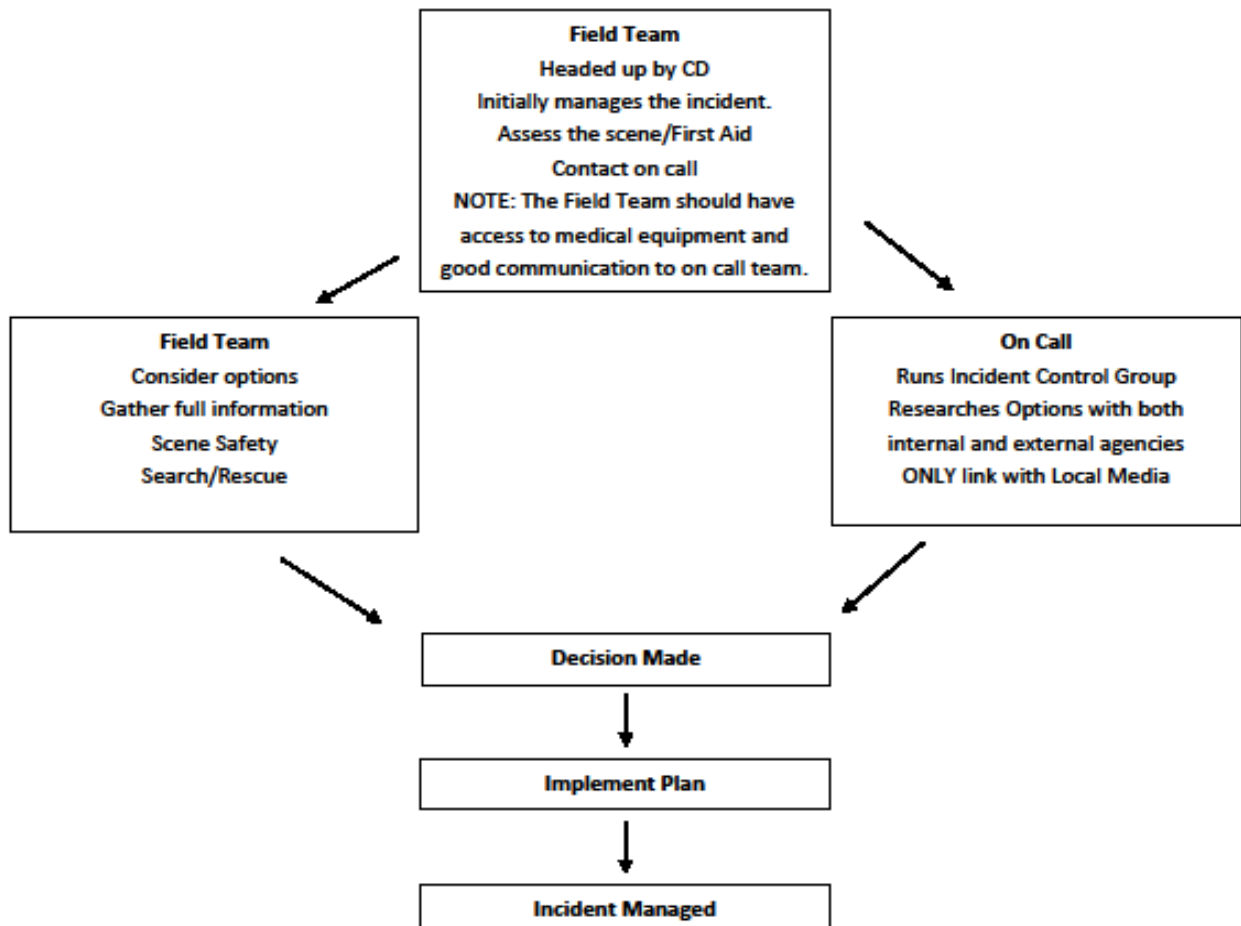
Good communication during an incident is vital in managing the situation effectively. Contact should be made with the CD as soon as possible. The CD, who heads up the Field Team, will contact the On-Call Team. The Field Team will control the situation on the ground.

The On-Call Team will make decisions on how to proceed based on information from the CD and other internal and external resources. They must be the **only** link with the Media. If approached by media, please refer them back to WE On-Call team or the WE main office.

Note: this process does not preclude the Trainer or CD contacting the Emergency Services immediately if that is required. All necessary steps must be taken to provide rescue and medical care for anyone missing or injured. However, WE On-Call must be advised straight away.

- All details of the incident need to be recorded.
- Retain any equipment involved in its original state.
- Any requests from the media must be referred to the Management of Wilderness Expertise.

Incident Management Flow Chart



FIRST RESPONDER CHECKLIST

In the event of a serious incident please follow the procedure below as guidance:

- Ensure your own safety and that of the other participants.
Administer First Aid if necessary to any injured party.
Inform team members **not** to call home until advised.

- Contact WE On-Call with details of:
-Who is affected (full name(s))
-How they are affected
-Where are all other participants
-How best to stay in contact

- Liaise with all local authorities, hospital, police, activity providers.

- Ensure you DO NOT to speak to the Press or admit any liability.

- If possible endeavour to collect any witness statements from anyone who may have witnessed the incident.

- Ensure financial records are kept of any costs incurred in handling the incident e.g. receipt.

- Ensure a log of all events and actions is maintained.

- Complete an incident form.

As First Responders you are the face of the company at the ‘front line’ until we are able to get any other team members to you (if required).

Be assured that we will give our full support whilst you look after those affected. Maintaining communication is key and getting assistance to you, if required, as quickly as possible is paramount.

Remember you may also be affected by the incident and could require further support – never be afraid to ask for help.

**OUR PRIORITY IS TO PROVIDE THE BEST SERVICE POSSIBLE
WE WILL NEVER PENNY PINCH IN A CRISIS
WE WILL SPEND WHAT IT TAKES TO ENSURE EVERYONE IS CARED FOR**

Trainer Checklists

1. Transport Checklist

Before the team embark on any journeys it is imperative that you as the Trainer check the vehicle for roadworthiness. These should be documented. The types of things you should review include:

Are seat belts fitted?	
Are exits labelled and clear?	
Is the driver trained with a license?	
Does the driver take regular breaks?	
Are the lights working?	
Do the tyres look safe and have good tread?	
Does the vehicle carry a spare tyre?	
What safety equipment does it carry, i.e. fire extinguisher, first aid kit?	

2. Accommodation Checklist

Before the team check into a hostel/campsite it is imperative that you as the Trainer assess the facility. The types of things you should review are:

Does it conform to National Fire and HSE regulations?	
Is the site secure at night?	
Are all exits labelled and clear? Are they unlocked?	
Is there adequate ventilation?	
Check heaters/boilers for emissions/leaks	
Is there any wiring exposed?	

3. Third Party Activity Providers Checklist

When using a third-party provider, before you do so you must feel confident they are a reputable company and conform to a competent level.

Does it have specific equipment for the activity?	
What is the condition of any equipment provided?	
Does it keep a log of equipment checks?	
Are instructors trained with the correct license?	
Are instructors seasonal or full time?	