



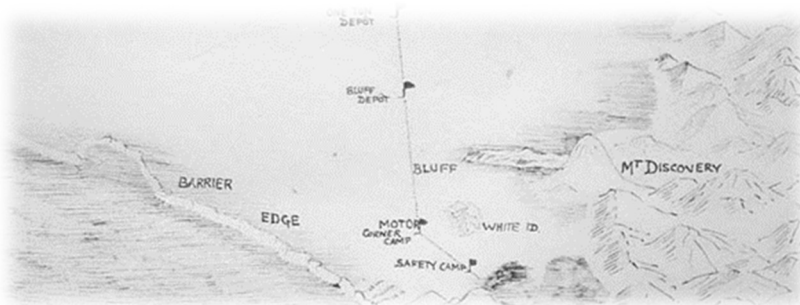
TOM CREAN'S SLED

On the Discovery Expedition, Tom Crean proved an invaluable member of the team setting up depots on the Ross Ice Shelf. From their base at Hut Point, the men established a position from which they

would launch scientific and exploratory sledging journeys into the frozen wilderness.



Crean proved to be one of the most efficient man-haulers in the party; over the expedition as a whole, only seven of the 48-member party logged more time in harness than Crean's 149 days. Crean had a good sense of humour and was well liked by his companions. For a short period on his first expedition, Tom Crean himself could revel in the glory of being a member of the sledging team that held the prized 'Farthest South' record.



Task for Patrols.

Patrols must use what materials they can find to make a robust sled capable of supporting a heavy box. Patrol members should take it in turns in teams to pull the sled like Tom Crean. Particular care should be taken to protect shoulders from rope burn and keeping control of sled at all times.



Scouter Notes:

The patrol will need to work together to build a working sled and transport the box of vital supplies up the hill. There is a template design for the sled but scouts can change and amend the design as long as it is functional. Patrols will need to de-construct the sled prior to the next patrol coming onsite.

Marking Guidelines:

Teamwork	40	Are all the team involved? Are they being safe with the pioneering wood? Are they working together? Do they take turns to pull sled?
Leadership	30	Is there a defined PL/Base Lead? Are instructions Correct? Do all scouts have a task? Is the base lead delegating or taking over?
Task	30	Did the patrol build a Sled? Was it functional? Did they pull the box? Was it deconstructed on time?
Total	100	



Rollers should go on a spar underneath the sled to help it roll on hard ground.

The more ropes to pull the sled the better.

Box should be secured to the sled.

Equipment:

Thick Timber	For main frame of sled
Pioneering spars	To construct the sled frame
Rope/Sisal	For gadget
Thick rope	For pulling the sled
Supply box	Box should be weighted to add difficulty.
Flat boards	To give solid base to sled
Pipe rollers	To help the sled roll.

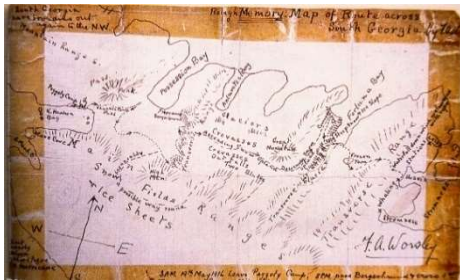
Risk Assessment:

Be careful of rope-burn from running with sled. Timber is quite heavy so patrols should take extra care when lashing sled together.



OCEAN PLAIT

Endurance was trapped by pack ice and crushed in the Weddell Sea. Taking to the lifeboats the crew were stranded on Elephant Island, 800 miles southwest of South Georgia. With five companions, Shackleton set off on the James Caird to find help and landed at King Haakon Bay on South Georgia's south coast. Three men waited there while Shackleton, Captain Worsely and Tom Crean set off across the unknown interior to get help at the whaling stations at Stromness Bay on the other side of the island. They had enough provisions for three days, a length of rope, rudimentary equipment, and a sketch map.



The map suggested they had only 17 miles to cover, but in their way were snowfields, glaciers, precipices and gullies. It was slow going through the knee-deep soft snow, and then they were faced with crossing the peaks of The Razorback. After several attempts to descend carefully, they needed to get off the mountain before



nightfall. They finally made the crazy decision to slide down 1000m using just the coiled rope as a sledge!

Task for Patrols.

With the small rope provided all the patrol should practise making the Ocean Plait Knot. When this has been perfected, the patrol should construct a large mat from the rope.

Ocean Plait Mat Knot
This knotted mat is used to protect decks from damage and provide firm footing. Make one from rope and use it as a doormat!



Make an overhand knot. Pull the top and bottom sections out in long loops.



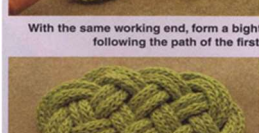
Flip each loop up 180 degrees. Move the lower loop up and put the top loop on top of it.



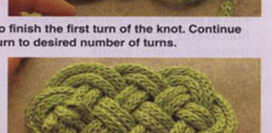
Weave the lower working end under, over, over, under. Weave the upper working end [over, under] twice.



With the same working end, form a bight to finish the first turn of the knot. Continue following the path of the first turn to desired number of turns.



Right Side



Wrong Side

The two sides of a dressed two-turn knot.

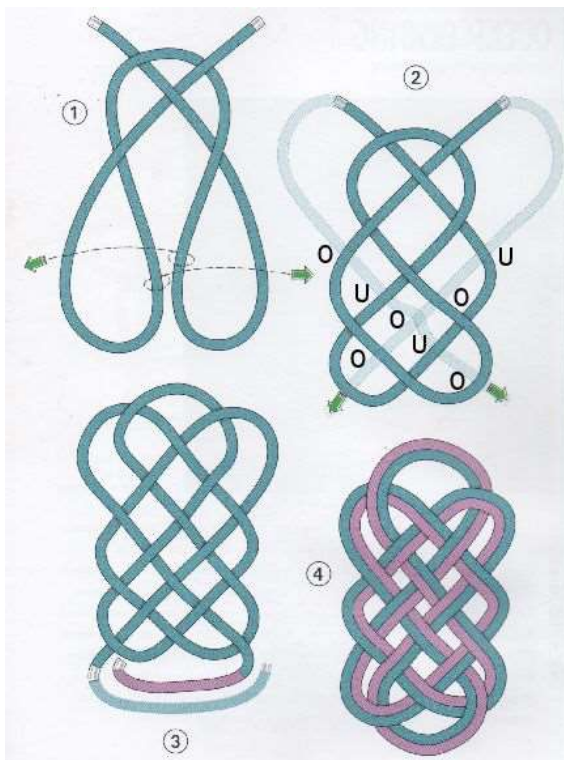


Scouter Notes

This is quite a difficult knot to construct in a short time. The main object of the base is to see how the patrol process and attempt the task. The PL leadership will be tested here as the scouts get frustrated.

Marking Guidelines:

Teamwork	40	Are all the team involved? Are they attempting to do the plait? Are they working together? Are they sharing helping each other?
Leadership	30	Is there a defined PL/Base Lead? Are instructions Correct? Do all scouts have a task? Is the base lead delegating or taking over?
Task	30	Did the patrol all attempt a knot? Did some complete a knot? Did the patrol make a large Ocean plait?
Total	100	



Some scouts might find this easier than others.

Scouts can use their phones if they have them to search for helpful videos.

Keep good examples intact so the following patrols can see that it can be done!

Equipment

Printout	Printouts of Ocean plait instructions for all of patrol
4mm Rope	Enough for multiple knots
Thick rope	For large knot to make a mat.
Template Board	To help at the beginning of knot process

Risk Assessment:

Frustration!



FIRST AID

The biting cold of the Antarctic was a constant danger to the Polar explorers. Temperatures plunged below -20°C regularly. Mere minutes exposed to the elements without a hat or gloves could be fatal. Scurvy, a disease caused by the lack of Vitamin C was also a very common disease.



On an exploratory trek near the South Pole in February 1912, Crean's commanding officer Lieutenant Edward Evans, contracted scurvy and was close to death. Crean and his colleague William Lashly recognising Lt. Evans' plight dragged him on their trek sled to one of the small standing camps. With Lashly left to look after

the stricken Lieutenant Crean embarked on a lifesaving solo march of 56 kilometres over the harshest environment on our planet to get help. Crean managed to make it to the base camp and subsequently turned back around and headed with a team to rescue Lt. Evans.

- Limerick to Thurles 56km
- Limerick to Mallow 58km
- Limerick to Galway 59km



Task for Patrols

Patrols need to make a stretcher to haul the stricken Evans to the basecamp. At the base camp the patrol should treat the patient for hypothermia and make the patient comfortable.





Scouter Notes:

Choose one member of the patrol (not the PI) to be the patient. The patient should be brought away from the main patrol and told to hide. Explain to the patient that they are caught in a snow storm and have Hypothermia symptoms

MILD HYPOTHERMIA

SYMPTOMS

- Shivering
- Lack of coordination,
- stumbling, fumbling hands
- Slurred speech
- Pale, cold skin

When the patrol find the patient, they need to construct a stretcher to transport them to the tent.

The patrol should treat the patient for Hypothermia using blankets and clothes.

MODERATE HYPOTHERMIA

SYMPTOMS

- Shivering stops
- Mental confusion or impairment
- Reduced breathing and/or heart rate
- Unable to walk or stand
- Confused and irrational

Some members of the patrol should prepare a hot sugary drink on the Trangia.

First aid steps for mild – Moderate Hypothermia

- Move to warm area in shelter
- Stay active, moving fingers and toes.
- Remove wet clothes and replace with dry clothes or blankets, cover the head.
- Drink warm (not hot) sugary drinks such as sports drinks.
- Avoid caffeinated beverages and alcohol
- Call for Help
- Cover all extremities completely
- Place warm objects, such as hot packs or water bottles on the victim's head, neck, chest, and groin.

Marking Guidelines:

Teamwork	40	Are all the team involved? Are they being safe carrying the patient? Are they working together? Do they take turns to carry patient?
Leadership	30	Is there a defined PL/Base Lead? Are instructions Correct? Do all scouts have a task? Is the base lead delegating or taking over?
Task	30	Did the patrol build a stretcher? Did they carry the patient to safety? Did they treat the patient correctly? Did the patrol make the drink?
Total	100	

Equipment:

Strong spars	For stretcher poles
Bivvy bag/Sheet	Stretcher base
Tent	Basecamp to do First aid in.
Trangia/ Meths	For hot drink
Water/ Tea bags/ Soup	For the patient
Blankets	For the patient
Printouts	Symptoms

Risk Assessment:

Be watchful of the scouts using the Trangia and the patient drinking the drink. Ensure that the scouts are moving the patient on the stretcher in a safe manner.



PENGUIN HUNTING

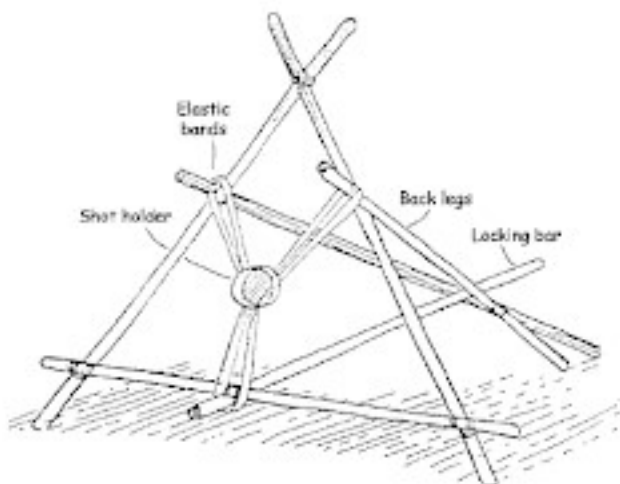
When the Endurance sank in the pack ice, Crean and his crew managed to make it to Elephant Island. While stranded on, Elephant Island, Penguins and seals were an essential source of food for the crew. No knowing how long they would need to stay on the Island the crew had to preserve their precious ammunition. As a result they had to invent new weapons to hunt their food source.



The Newmarket Ballista

For this one you will need six Scout staffs, seven sisal lashings, and a 'shot holder' consisting of an empty tin with three extra-strong elastic bands (cut from car inner tubes) attached to the base. This should be prepared before the Patrol meeting.

Note that the locking bar is movable and is square-lashed to the crossbar of the sheer legs, but merely rests in the crutch of the back legs. The angle of fire can be adjusted simply by moving the locking bar in the crutch. The Ballista is locked in the firing position when the 'gunner' sits astride the back legs. For 'ammunition' use tennis balls, or light balls of newspaper sealed with tape.



Task for Patrol

The patrol need to construct a simple ballista from the materials provided and hunt the penguins of Elephant Island.



Scouter Notes:

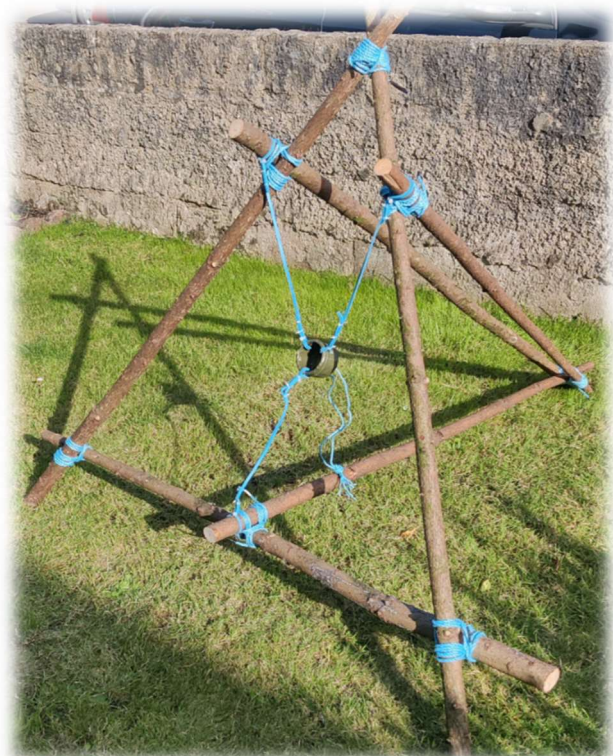
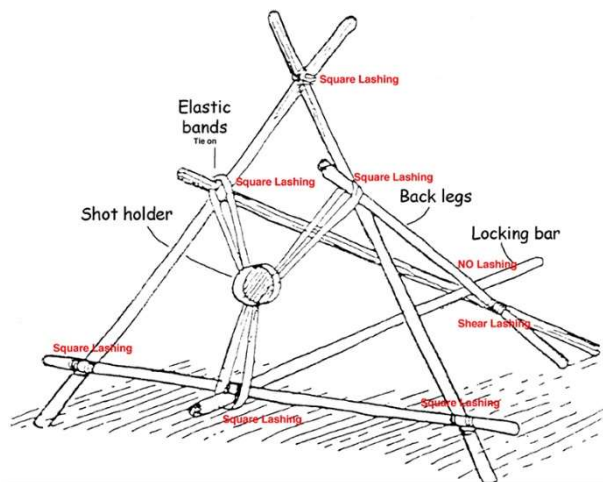
Building the ballista is straight forward. The patrol as whole should be involved. The target should be places far enough away to make the task challenging. The patrol need to deconstruct the ballista after base.

Marking Guidelines

Teamwork	40	Are all the team involved? Are they being safe with the pioneering wood? Are they working together? Is everyone having a go at firing the ballista?
Leadership	30	Is there a defined PL/Base Lead? Are instructions Correct? Do all scouts have a task? Is the base lead delegating or taking over?
Task	30	Did the patrol build a ballista? Did the ballista fire? Did the patrol hit the penguins?
Total	100	

Equipment:

6 pioneering spars	To build ballista
Rope/ sisal	To build ballista
Elastic	For ballista to function
Projectiles	Rough 20 to account for lost projectiles
Penguins	As targets



Risk Assessment:

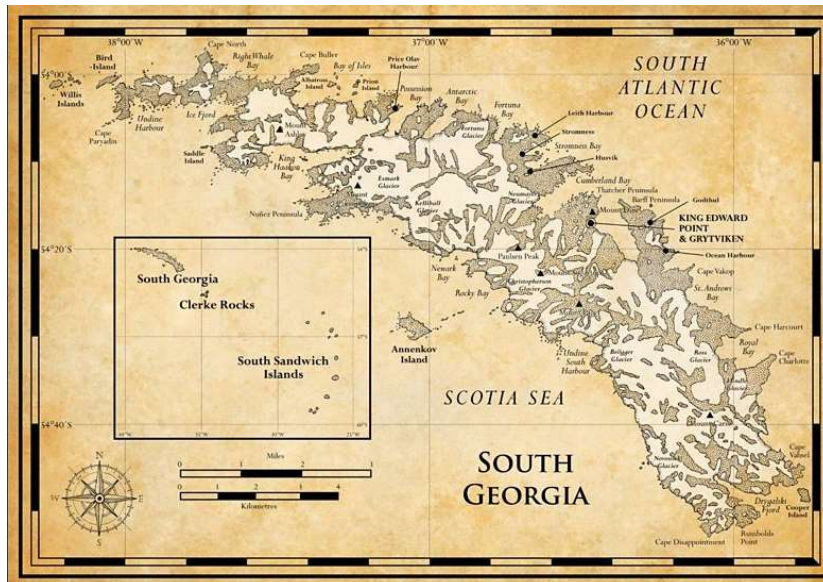
The placement of the targets will be important here as the scouts need to be safe in a public area. Scouts also need to be careful with the elastic and not to pull too hard and cause a breakage and injury.



ANTARCTIC NAVIGATION

After establishing camp on Elephant Island after the sinking of the Endurance the crew knew they would need to get help to survive. After much deliberation Shackleton decided that the island of south Georgia was their best hope. They prepared the best of the lifeboats, the James Caird for the almost 800 nautical mile trip to South Georgia. Using the moon, the stars and most importantly the elusive sun, Captain Worsley guided the tiny lifeboat across one of the most dangerous seas in the world to a the tiny island of South Georgia. After seventeen days, Shackleton, Crean, Capt. Worsley and two others landed on the west coast of South Georgia. The voyage was a marvel of maritime navigation. It has gone down in history as one of the greatest boat journeys ever accomplished.

However the Journey wasn't over!!!



Task for patrol:

Patrols must demonstrate their navigational skills by working together and answering the questions asked about the map of South Georgia.

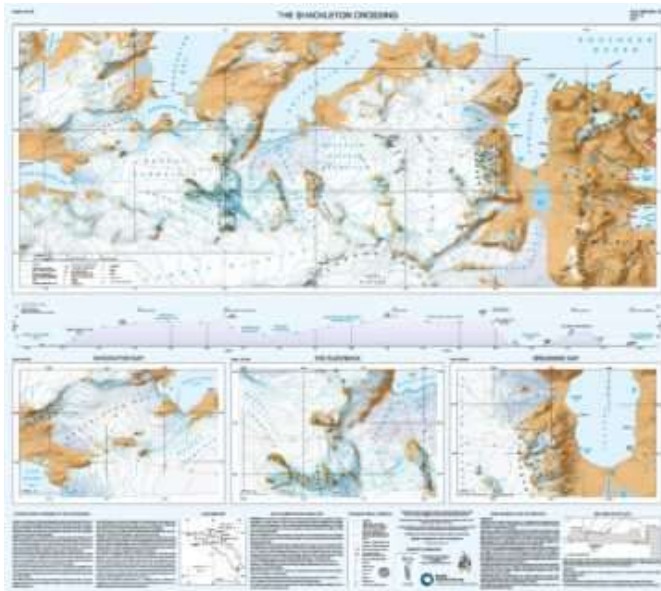


Scouter Notes:

There will be two maps so patrols can be split into two and given a map each to work on. The scouts can confer after and see which answers they are sticking with. The maps are of South Georgia and are different to what the scouts will be used to. They will take a few moments to adjust to the maps.

Marking Guidelines:

Teamwork	40	Are all the team involved? Are they working together? Is everyone trying to understand and contribute?
Leadership	30	Is there a defined PL/Base Lead? Are instructions Correct? Do all scouts have a task? Is the base lead delegating or taking over?
Task	30	Do the patrol understand the task? Did they attempt the task? Did the patrol complete the task?
Total	100	



Equipment:

Maps	Maps of South Georgia
Compass	To get bearings for tasks.
Pen & Paper	To write notes

Risk assessment:

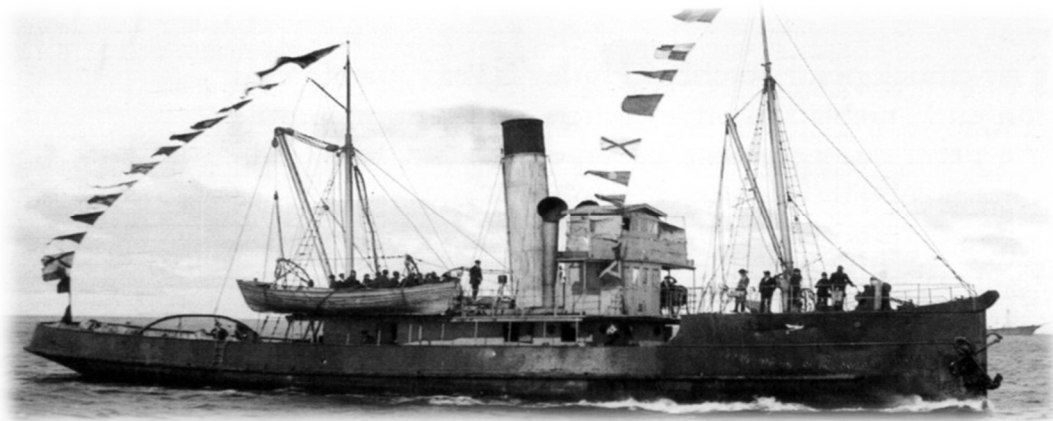
Minimal



SIGNALLING

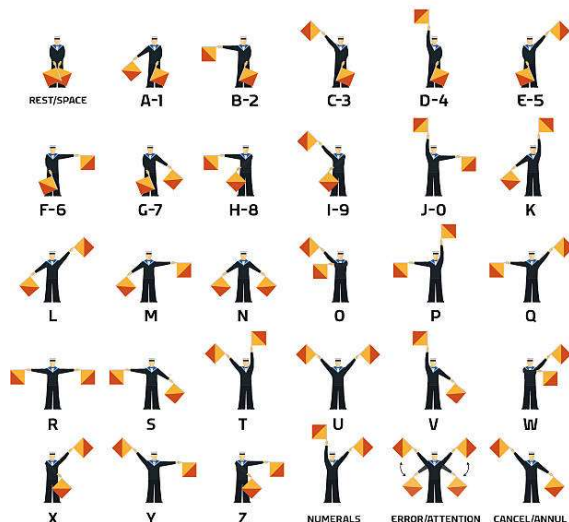
After being stranded for 128 days on Elephant Island, the crew of the Endurance were losing hope. Wishfully Frank Wild had estimated their rescue would take around four or five weeks. But four and a half months later their food was running low, many of the men were ill and had frostbite. Each day men were assigned to watch out for approaching ships, which at this point must have seemed fruitless. But on this day George Marston was on lookout when he spotted the approaching ship. He ran to the camp and the men frantically signalled to the ship!

Imagine the scenes of the island when Shackleton and Crean responded from the ship that they were indeed here to rescue them!!



Semaphore was one of the most common signalling systems in the navy during Crean's time. They could convey long messages in seconds.

SEMAPHORE ALPHABET



Task for Patrols.

Patrols must communicate with each other using semaphore signals to answer the questions provided.



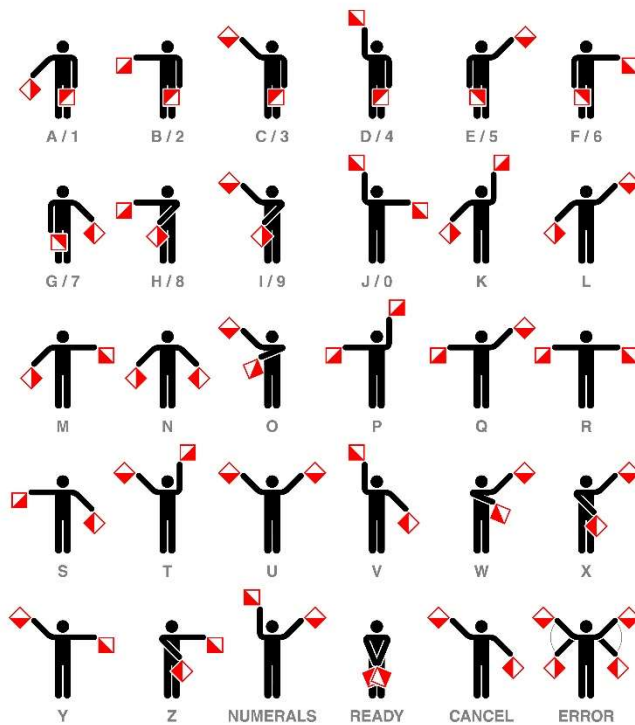
Scouter Notes:

Each patrol is divided in two and set up a decent distance apart. Group A is given the solution page and Group B are given the Questions. He group must ask each other the questions and return the answers through the medium of semaphore.

Some patrols may struggle with this if they have not attempted it before. Some patrols may need extra help to get started.

Marking Guidelines:

Teamwork	40	Are all the team involved? Are they working together? Is everyone trying to understand and contribute?
Leadership	30	Is there a defined PL/Base Lead? Are instructions Correct? Do all scouts have a task? Is the base lead delegating or taking over?
Task	30	Do the patrol understand how semaphore works? Are the patrols able to communicate the questions? Can the patrols answer the questions?
Total	100	



Equipment:

Flags	Four visible semaphore flags
Printouts	Question and Answer sheet & Semaphore keys
Chalk boards	To write notes

Risk assessment:

Minimal

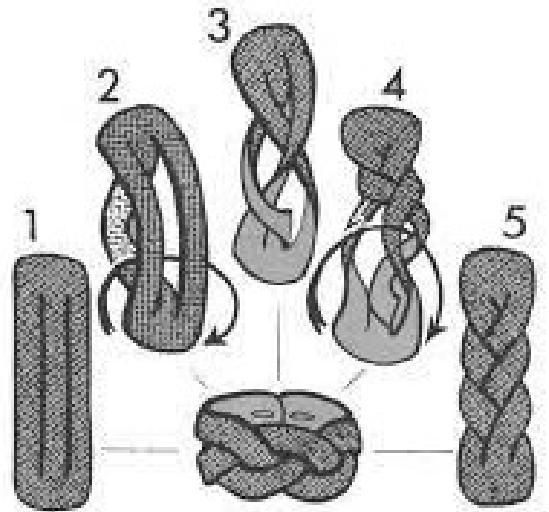


DIY WOGGLES

While on the sea and in camp in Antarctica Crean and his crewmates were hundreds of miles away from the nearest hardware store. They were constantly making repairs and fashioning items from the materials they had at hand. If they needed an item, they only had the resources at hand to make them .



Every scout needs a woggle for their neckerchief!!



Task for patrols:

Patrols must make plaited woggles from the materials provided. Each scout needs to attempt their own woggle.

Scouts can keep their woggle once they are made.



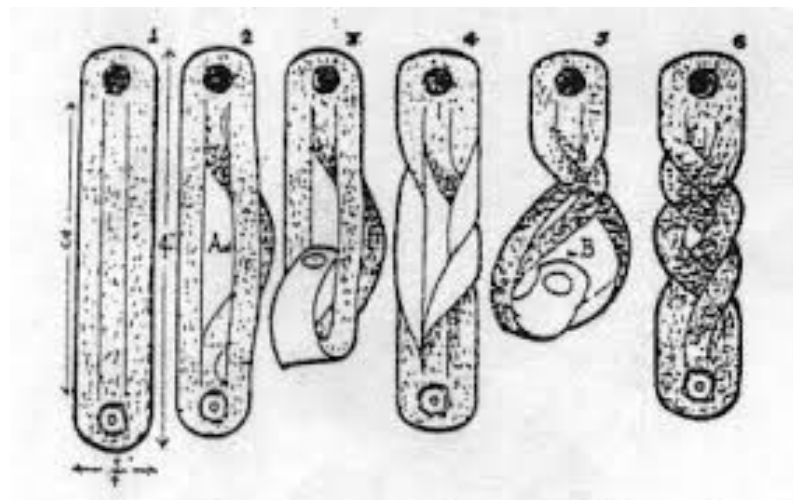
Scouter Notes:

Some patrols will find this easier than others. Each scout will be given a rough leather strap with the lines pre-cut (To avoid knives). Scouts will be tasked with trimming the woggle to size, plaiting the woggle and adding a button clasp.

If scouts manage it very quickly you can get them to try plaiting it blindfolded.

Marking Guidelines:

Teamwork	40	Are all the team involved? Are they working together? Is everyone trying to understand and contribute?
Leadership	30	Is there a defined PL/Base Lead? Are instructions Correct? Is the PL helping those struggling? Is the base lead delegating or taking over?
Task	30	Did the patrol attempt woggles? Did the patrol complete woggles?
Total	100	



Equipment:

Leather straps	Enough for one per scout and spares if needed.
Printouts	Plaited woggle instructions
Button press	Button press pliers and buttons

Risk assessment:

Minimal



CROSSING THE VOID

While exploring the Antarctic, Crean and his crew encountered many obstacles. One of the most dangerous were crevasses. Crevasses are deep fissures in the ice that can often be hidden. Falling into these crevasses could lead to severe injury and death. Great care had to be taken crossing these natural obstacles.



To cross crevasses these polar explorers would use ladders, timber frames and anything useful to make bridges.



Task for Patrols:

Using the few pioneering spars provided the patrol must construct a friction bridge and pass all the patrol safely to the other side of the "crevasse".



Scouter Notes:

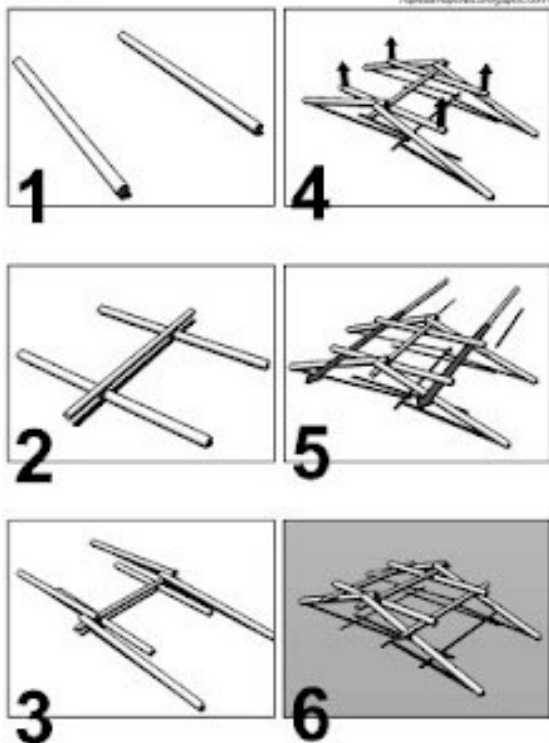
The scouters must create a 1-meter wide “crevasse” That the patrols cannot cross. Let the scouts attempt the bridge without the printout first. If they struggle give them the Sheet. If the scouts complete it easily get each member of the patrol to demonstrate it.

Marking Guidelines:

Teamwork	40	Are all the team involved? Are they working together? Is everyone trying to understand and contribute? Are they being safe on bridge?
Leadership	30	Is there a defined PL/Base Lead? Are instructions Correct? Is the PL helping those struggling? Is the base lead delegating or taking over?
Task	30	Did the patrol understand the concept? Did the patrol build a sturdy bridge? Did the bridge hold the patrol member crossing?
Total	100	

Friction lock bridge

step-by-step



Equipment:

Strong Spars	6 Long spars & 3 short spars
Printouts	Bridge instructions

Risk assessment:

Scouts need to be careful on the bridge and very ready to jump if the bridge collapses. If the weather is wet the bridge will struggle to stay up. There is danger of the spars breaking so check after each patrol.



SNOW BLINDNESS

Antarctica is the coldest continent on Earth. The average temperature in the interior throughout the year is about -57°C , with the minimum temperature being -90°C during the winter season. Although the coast is warmer and temperatures can reach a maximum of between -2°C and 8°C during the summer. The winds in Antarctica are extremely strong. The mixture of freezing temperatures, snow and ice and strong winds can make hiking in very Hazardous.



Even in calm weather Snow Blindness can be a dangerous problem. This is when UV rays from the sun reflect off the snow and cause temporary blindness!!



Task for Patrol:

With the patrol afflicted by 'snow blindness' (Blindfolds) the PL must guide the patrol to find the various parts of the cooking stove strewn around the snow field. The scouts must return these to base where the stove must be assembled by another 'snow blind' patrol member.



Scouter Notes:

Parts of the Trangia should be spread in a wide area but not too hidden so as to get lost! The blindfolded the scouts will be given litter pickers. This base is a good test for PL leadership and patrol management. Keep the PL out of the area with the Trangia parts but let them get a good vantage point if they wish.

Marking Guidelines:

Teamwork	40	Are all the team involved? Are the taking instruction? Is everyone trying to contribute? Are they being safe with litter pickers?
Leadership	30	Is the PL keeping all the patrol engaged? Does the PL have an organised plan? Is the PL helping those struggling?
Task	30	Did the patrol find all the parts? Did the patrol bring them back to base? Did the patrol construct the Trangia?
Total	100	



Equipment:

Litter pickers	7 pickers one per scout
Blindfolds	Proper blindfolds to avoid using neckerchiefs
Complete Trangia Stove	To find the parts of and construct

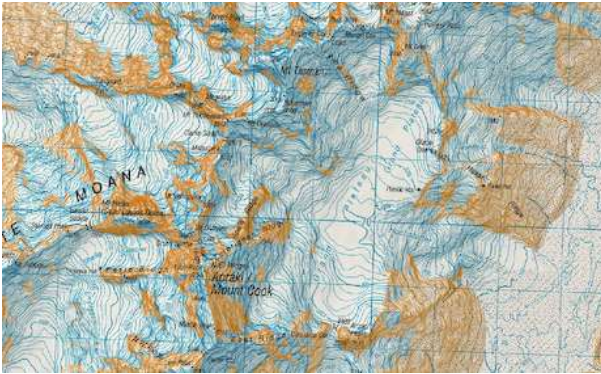
Risk assessment:

Scouts need to be careful of their step and avoid obstacles while blindfolded. The PL/Scouters need to ensure scouts do not stray out of bounds. Scouts also need to use pickers correctly and be told to act appropriately. The picker claws have a strong sharp grip.

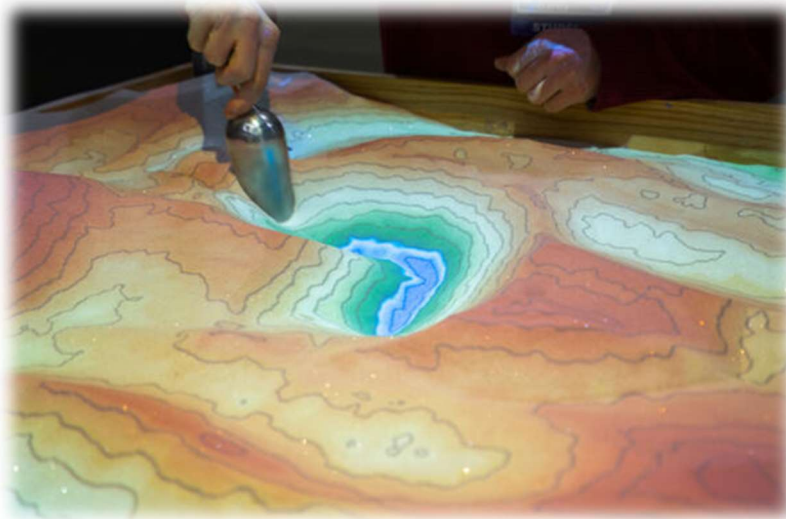


FROZEN LANDSCAPE

One of the main scientific tasks of the Discovery, Terra Nova and Endurance expeditions was to accurately map the vast continent. High peaks, vast lakes, glaciers and Ice sheets made the Antarctic terrain very rugged and distinctive.

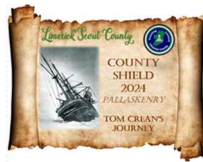


Sand tables were used by the Navy cartographers to gain a better 3D picture of the terrain around the South Pole.



Task for Patrol:

From the map excerpts provided patrols need to construct the terrain on the sandtables provided. Taking special care to include geographical features such as bays, peaks, valleys and plateaus. Contour lines will be very helpful for this task.



Scouter Notes:

Divide the patrol into two groups. There will be two sand boxes to give as many scouts as possible a chance to get hands on. There will be simple shapes for scouts practise with first and get used to creating gradients. Once they are comfortable with the simple shapes, challenge the scouts to create excerpts of the real map and get the other patrol/scouter to guess which one they have created.

Marking Guidelines:

Teamwork	40	Are all the team involved? Are they working together? Is everyone trying to understand and contribute?
Leadership	30	Is there a defined PL/Base Lead? Are instructions Correct? Is the PL helping those struggling? Is the base lead delegating or taking over?
Task	30	Did the patrol create the practise shapes? Did the patrol complete the map extracts? Were these accurate enough to recognise?
Total	100	



Equipment

Sand box	Two per patrol
Sand	Enough for two boxes and spare
Printouts	Map excerpts and shape diagrams

Risk assessment:

Low risk. Scouters be careful lifting the sand boxes and sand bags.