

SURVIVAL

A Scouting Ireland challenge

Aircraft Crash



Survival scenarios

Imagine yourself with a walking party. There is a blast of wind, a lot of noise and you are engulfed in an avalanche of snow. You are sailing in a yacht a heavy wind blows, you lose your mast and are set adrift. How do you cope?

These situations are ones which people have found themselves in on occasions in the past and will, doubtless, find themselves in the future. For this reason a knowledge of survival can be as useful as a knowledge of first aid.

Although we live in a relatively civilised environment the ease of modern travel, coupled with the fact that Scouts are going to more remote areas, maintains the need for a knowledge of survival skills.

Before going further it may be as well to define the term 'survival' - 'Survival is the art of remaining alive in and escaping from a hostile environment, without full facilities.' This needs a few words of explanation. If you camp in the hills in winter with a good mountain tent, a warm sleeping bag, a stove with plenty of fuel and no shortage of food, this is camping not survival. Survival begins when some relatively essential item is missing and becomes more acute the less one has.

The American Rescue Service has said that country people or city people who

have had a lot of Scout training are the best survivors.

To stay alive the following must be considered

Food

Without it one will eventually die although not as rapidly as one might think. In her book, *Hey I'm Alive*, Helen Klaben describes how she stayed alive for forty nine days on virtually nothing.

Water

With no water available a man, even in a cool climate and doing no work, is unlikely to survive more than fifteen days.

Shelter and Warmth

Without these the physical condition of the survivor will deteriorate.

Medical

Untreated injuries or sickness will undermine the body to some extent especially if allied to a lack of shelter and food. Additionally the ability to escape on foot will be inhibited.

Communication

A person is a very small object and the earth is a very big place. Some means of attracting attention is vital for anyone in need of help. A mobile phone is excellent

if a signal is available if not then traditional means of communication will need to be used.

Movement

How to move, when to move, etc. now become vital questions to be answered.

Navigation

This may not be to one-degree accuracy but in many types of terrain it is quite an effort to keep going in a constant compass direction without veering well off course.

Load-carrying

Too big a load will reduce your chances of reaching help but too small a load may mean vital items are abandoned.



Aircraft Crash

You have been in a plane crash - while traveling in a small aircraft flying over Northern Canada to visit a relative in a remote location. During the flight the engine developed a mechanical problem which forced the pilot to crash land the plane. In the crash both the pilot and his co-pilot have died and you and your fellow passengers just managed to jump off the plane's wreckage before it burst into flame. On the ground and in the wreckage you have gathered together a number of items.

Mid-January is the coldest time of year in Northern Canada. The first problem survivors face is the preservation of body heat and the protection against its loss. This problem can be solved by building a fire, minimizing movement and exertion, using as much insulation as possible, and constructing a shelter.

The participants have just crash-landed. Many individuals tend to overlook the enormous shock reaction this has on the human body decision-making under such circumstances is extremely difficult.

Before taking off, the pilot file a flight plan which contains vital information such as the course, speed, estimated time of arrival, type of aircraft, and number of passengers. Once it becomes apparent that the plane is missing search-and-rescue operations will begin.

It is 20 miles to the nearest town is a long walk under even ideal conditions, particularly if one is not used to walking such distances. In this situation, the walk is even more difficult due to shock, snow, dress, and water barriers. It would mean almost certain death from freezing and exhaustion. At temperatures of minus 25 to minus 40, the loss of body heat through exertion is a very serious matter.

Once the survivors have found ways to keep warm, their next task is to attract the attention of search planes. Thus, all the items the group has salvaged must be assessed for their value in surviving this ordeal.

The ranking of the survivors items was made by Mark Wanvig, a former instructor in survival training for the Reconnaissance School of the 101st Division of the U.S. Army. This survival simulation game is used in military training classrooms.

Newspapers (one per person)
20 x 20 foot piece of canvas
Loaded .45-caliber pistol
Cigarette lighter (without fluid)
Sectional air map made of plastic
Extra shirt and pants for each survivor
Can of Crisco shortening
Small ax
Quart of 100 proof whiskey
Ball of steel wool
Compass
Family size chocolate bars (one per person)



Answers - survival knowledge

Aircraft crash

How to score:

Each team should list its top 5 choices in order prior to seeing the answer sheet. To award points, look at the ranking numbers on this answer sheet. Award points to each team's top choices according to the numbers here. For example, the map would earn 12 points, while the steel wool would earn 2 points. Lowest score wins (and survives).

Rankings

1. Cigarette lighter (without fluid).

The gravest danger facing the group is exposure to cold. The greatest need is for a source of warmth and the second greatest need is for signaling devices. This makes building a fire the first order of business. Without matches, something is needed to produce sparks, and even without fluid, a cigarette lighter can do that.

2. Ball of steel wool.

To make a fire, the survivors need a means of catching the sparks made by the cigarette lighter. This is the best substance for catching a spark and supporting a flame, even if the steel wool is a little wet.

3. Extra shirt and pants for each survivor

Besides adding warmth to the body, clothes can also be used for shelter, signaling, bedding, bandages, string (when unraveled), and fuel for the fire.

4. Can of Crisco shortening.

This has many uses. A mirror-like signaling device can be made from the lid. After

shining the lid with steel wool, it will reflect sunlight and generate 5 to 7 million candlepower. This is bright enough to be seen beyond the horizon. While this could be limited somewhat by the trees, a member of the group could climb a tree and use the mirrored lid to signal search planes. If they had no other means of signaling than this, they would have a better than 80% chance of being rescued within the first day.

There are other uses for this item. It can be rubbed on exposed skin for protection against the cold. When melted into oil, the shortening is helpful as fuel. When soaked into a piece of cloth, melted shortening will act like a candle. The empty can is useful in melting snow for drinking water. It is much safer to drink warmed water than to eat snow, since warm water will help retain body heat. Water is important because dehydration will affect decision-making. The can is also useful as a cup.

5. 20 x 20 foot piece of canvas

The cold makes shelter necessary, and canvas would protect against wind and snow (canvas is used in making tents). Spread on a frame made of trees, it could be used as a tent or a wind screen. It might also be used as a ground cover to keep the survivors dry. Its shape, when contrasted with the surrounding terrain, makes it a signaling device.

6. Small ax

Survivors need a constant supply of wood in order to maintain the fire. The ax could be used for this as well as for clearing a sheltered campsite, cutting tree branches for ground insulation, and constructing a frame for the canvas tent.

7. Family size chocolate bars (one per person)

Chocolate will provide some food energy. Since it contains mostly carbohydrates, it supplies the energy without making digestive demands on the body.

8. Newspapers (one per person)

These are useful in starting a fire. They can also be used as insulation under clothing when rolled up and placed around a person's arms and legs. A newspaper can also be used as a verbal signaling device when rolled up in a megaphone-shape. It could also provide reading material for recreation.

9. Loaded .45-caliber pistol.

The pistol provides a sound-signaling device. (The international distress signal is 3 shots fired in rapid succession). There have been numerous cases of survivors going undetected because they were too weak to make a loud enough noise to attract attention. The butt of the pistol could be used as a hammer, and the powder from the shells will assist in fire building. By placing a small bit of cloth in a cartridge emptied of its bullet, one can start a fire by firing the gun at dry wood on the ground. The pistol also has some serious disadvantages. Although a pistol could be used in hunting, it would take an expert marksman to kill an animal with it. Then the animal would have to be transported to the crash site, which could prove difficult to impossible depending on its size.

10. Quart of 100 proof whiskey.

The only uses of whiskey are as an aid in fire building and as a fuel for a torch (made

by soaking a piece of clothing in the whiskey and attaching it to a tree branch). The empty bottle could be used for storing water. The danger of whiskey is that someone might drink it, thinking it would bring warmth. Alcohol takes on the temperature it is exposed to, and at minus 1 or 2 degrees whiskey would freeze a person's esophagus and stomach. Alcohol also dilates the blood vessels in the skin, resulting in chilled blood being carried back to the heart, resulting in a rapid loss of body heat. Thus, a drunken person is more likely to get hypothermia than a sober person is.

11. Compass.

Because a compass might encourage someone to try to walk to the nearest town, it is a dangerous item. Its only redeeming feature is that it could be used as a reflector of sunlight (due to its glass top).

12. Sectional air map made of plastic.

This is also among the least desirable of the items because it will encourage individuals to try to walk to the nearest town. Its only useful feature is as a ground cover to keep someone dry.