

Imagine you are on an adventure and you get into difficulties. Write a short story that describes how you used Skystreme to get safe.

Type 'Skystreme' into a search engine and find out how you can buy it on the Internet.

research

question



Skystreme has been issued to the Royal Navy and has a NATO stock number. Celebrity users endorse it. During Richard Branson's attempt to circumnavigate the globe each pilot's land survival kit contained a Skystreme and beacon. Richard with Skystreme feature in promotional photographs.

- The list of potential users is long:
- mountaineers
 - skiers
 - trekkers
 - ramblers
 - divers
 - yachtsmen
 - canoeists
 - sail boarders
 - paragliders
 - hang gliders
 - pilots
 - surveyors
 - paramedics
 - school and adventure groups



The market for Skystreme is global because it can be used in such a wide range of conditions on land or sea. All those who engage in outdoor pursuits, whether as a professional or as a hobby, can find themselves at risk and Skystreme provides a useful and easy to use device that enables them to be seen by support or rescue teams should any emergency arise.

3 who buys skystreme?

CS 5 skystreme location marker



Skystreme is an effective visual personal location marker that stays airborne in a wide variety of weather conditions. It is the world's first radar reflective location marker for outdoor pursuits, an emergency survival tool.



Inflated by mouth it has a self-sealing valve and can fly in wind speeds from 4 mph to Force 10 in rain or snow. It comes in a pocket-sized pouch weighing only 43 grams and has three emergency uses. It is to be distributed in the UK by Simpson Lawrence of Glasgow who supply most marine chandlers and outdoor activity shops. It costs £24.99.

MILLENNIUM PRODUCTS

CASE STUDY

1 three ways to use skystreme

Inflatable rescue kite

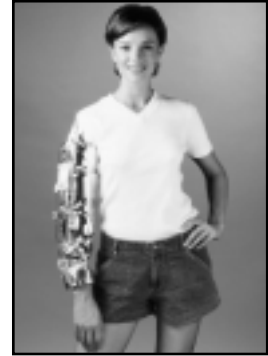
Skystreme is usually used as a personal location marker as it flies just like a kite even in extreme weather conditions. Its mirror bright surface reflects sunlight so well that it can be seen at a distance of greater than 2 kilometres with the naked eye. At night it reflects light shone from any angle. An aeroplane has detected Skystreme from a distance of 17 kilometres by using radar.

Inflatable body warmer

Keeping warm is essential for survival in cold conditions. People in trouble can use Skystreme as a thermal vest by tucking it inside their clothing. It works by reflecting back the body's own heat.

Inflatable air splint

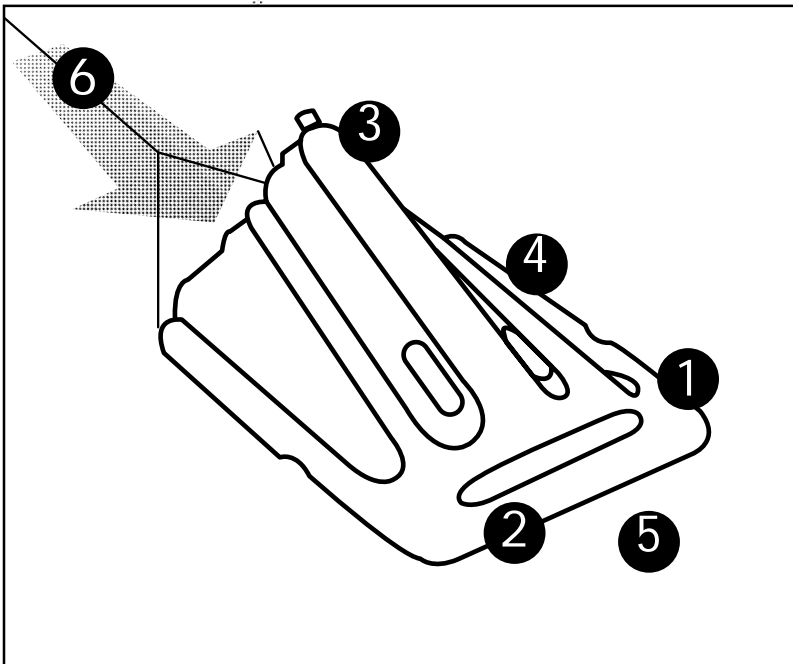
Broken or sprained limbs need to be kept immobile until medical help arrives. Injured people can use Skystreme as a first aid air splint to protect damaged limbs.



research

Kites are now flown mainly for fun but in the past they have had many different uses. Find out about the attempts to lift people into the air with kites. Describe the design of a people-lifting kite using drawings and notes.

2 how does skystreme work?



Skystreme can lift off unaided. It is shaped like a wedge. The inflatable tubes (1, 2, 3 and 4) provide the stiffness of the edges of the wedge shape. Until these tubes are inflated by blowing up, the Skystreme is completely flat. Air flows into the wide open end and forms a 'ram air pocket' inside the wedge shape until it leaves the Skystreme through a slot at the narrow end (5). The high pressure inside the wedge causes the Skystreme to lift off unaided. The tether brings the Skystreme into the wind (6). Skystreme is part kite and part wing. This combination gives extra stability and lift.

For Skystreme to fly the lift force on the Skystreme has to overcome the weight of the Skystreme and the tether. This lift force depends on the air pressure. At high altitudes the air pressure is low so if Skystreme is used on mountain tops it needs stronger winds for lift off.

? question

Discuss with others in your class why air pressure decreases with altitude. Present your answer using diagrams and notes.