

## Survival kit

From Wikipedia, the free encyclopedia

A **survival kit** is a package of basic tools and supplies prepared in advance as an aid to survival in an emergency. Civil and military aircraft, lifeboats, and spacecraft are equipped with survival kits.

Survival kits, in a variety of sizes, contain supplies and tools to provide a survivor with basic shelter against the elements, help him or her to keep warm, meet basic health and first aid needs, provide food and water, signal to rescuers, and assist in finding the way back to help. Supplies in a survival kit normally contain a knife (often a Swiss army knife or a multi-tool), matches, tinder, first aid kit, bandana, fish hooks, sewing kit, and a flashlight.

Civilians such as forestry workers, surveyors, or bush pilots, who work in remote locations or in regions with extreme climate conditions may also be equipped with survival kits. Disaster supplies are also kept on hand by those who live in areas prone to earthquakes or other natural disasters. For the average citizen to practice disaster preparedness, some towns will have survival stores to keep survival supplies in stock.

The American Red Cross recommends an emergency preparedness kit that is easy to carry and use in the event of an emergency or disaster.<sup>[1]</sup>

Contents
<ul style="list-style-type: none"> <li>▪ 1 General contents <ul style="list-style-type: none"> <li>▪ 1.1 Shelter and warmth</li> <li>▪ 1.2 Health and first aid</li> <li>▪ 1.3 Food and water</li> <li>▪ 1.4 Signaling, navigation and reference</li> <li>▪ 1.5 Multipurpose tools or materials</li> </ul> </li> <li>▪ 2 Lifeboat survival kits</li> <li>▪ 3 Military kits</li> <li>▪ 4 Spacecraft kits</li> <li>▪ 5 Mini survival kits</li> <li>▪ 6 Vehicle kits</li> <li>▪ 7 Natural disasters <ul style="list-style-type: none"> <li>▪ 7.1 Earthquake</li> <li>▪ 7.2 Hurricane</li> </ul> </li> <li>▪ 8 Bug-out bags</li> <li>▪ 9 See also</li> <li>▪ 10 References</li> <li>▪ 11 Further reading</li> <li>▪ 12 External links</li> </ul>



Cosmonaut's survival kit in Polytechnical Museum, Moscow



Sailors take inventory of a C-2A Greyhound's life raft kit in USS *Kitty Hawk* (CV 63) para loft shop

### General contents

The general contents of an emergency survival kit depend on the location. Basic components in a survival kit address the needs of first aid, food, water, shelter, navigation, and signalling.

#### Shelter and warmth

A variety of materials are recommended for emergency shelters, and vary between geographic regions. Options often included in survival kits may consist of:

- Reflective "aluminized" (Mylar coated) space blanket or survival blanket to retain body heat (and signal)
- Lightweight poncho for protection against wind and rain
- "Tube tent" or bivvy bag
- Tarp with grommets or tie-tapes (best if nylon or polyester)
- Large plastic trash bag as poncho or expedient shelter roof
- Ferrocerium rod (AKA "Metal match", "Hot Spark", "Firesteel", "Magnesium fire starter") and fire striker for fire-starting, Fire piston or Solar Spark Lighter
- Waterproof matches or lighter
- Cotton balls or pads smeared with petroleum jelly for fire starting (can be carried in 35 mm film container, zip lock baggie or heat-sealed inside large diameter plastic straw)
- Catalytic heater and bottled gas fuel
- Emergency sleeping bag great for shelter and warmth

#### Health and first aid

First aid kits will often include a combination of the following:

- Bandages
  - Sterile combine dressing, and gauze pads
- Adhesive tape, and gauze tape
  - Disinfectant pads

- A 30-day supply of personal prescription medication
- Antibiotic cream
  - Rubbing alcohol
- Burn cream
- Aspirin
- Sunscreen (where appropriate, above 30 SPF)
- 100% UV protective sunglasses ("UV 400") (protects eyes from harmful UV radiation. Polarized glasses are not necessarily UV protective, but aid with glare only)

## Food and water

Most survival kits involve sustenance for short periods of time, to be used and replenished before contents spoil.

- Water in sealed containers for dry areas, or water purification tablets or household bleach in areas where water is available but may be contaminated. For emergency water purification see: water purification techniques
- Canteen full of water, and a filter if needed
- Heavy duty aluminum foil to create a distillation tube to remove salt from salt water during boiling/condensation. Must have another receptacle to collect condensate.
- Canned food, Meals Ready-to-Eat (MRE), high-energy foods such as chocolate or emergency food bars, or dry food items such as dried fruits, cereals, nuts or roasted grams
- Fishing line and gear (fish hooks, lures, and split shot leads)
- Snare wire
- Gillnetting (for emergency fishing)

## Signaling, navigation and reference

Since the primary goal of a survival kit for lost or injured persons is rescue, this part of the kit may be considered the most essential. Key elements for rescue include:

- Distress radiobeacon
- Whistle
- Signal mirror
- High power LED light (able to have batteries replaced, and carry an extra battery), white lens, with signaling capabilities. Strobe versions are available for some lights. Use lithium cells only, due to superior shelf life.
- Flare: three fires in a triangle is the international distress signal
- Laser pointer with lithium batteries, for superior signaling range. Laser pointers have resulted in at least one rescue: during the night in August 2010 two men and a boy were rescued from marshland after their red laser pen was spotted by rescue teams.<sup>[2]</sup>
- Surveyor's tape - orange or chartreuse for marking location for rescuers
- Pen/pencil and paper for leaving notes to rescuers about direction of travel
- Compass. Analog watch can also be used to determine orientation when the sun is visible - *See direction finding using a watch*
- Trail maps/charts (if location is known in advance)
- Survival manual for technique reference
- Glow stick

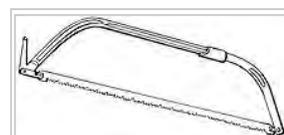


A U.S. Marine signalling an aircraft with a signal mirror.

## Multipurpose tools or materials

Survival kit tools emphasize portability and versatility. Tools recommended for many types of survival kit include:

- Fixed-blade knife, or multitool such as a Swiss Army knife.
- Can opener such as the P-38 or the P-51
- Heavy-duty needle and thread for repairing clothing and equipment
- Red or orange plastic bag(s) or trash bags
- Sturdy cord or "550" parachute cord for setting up a tarpaulin and snaring small animals
- Hatchet with sheath for cold conditions, or machete for tropical conditions (shelter and fire)
- Camp stove or some type of gas burner and fuel such as bottled propane or Liquefied petroleum gas (LPG)
- Candles for light, signaling, fire-starting
- Metal billycan or "water bottle" for water storage, boiling, purification, cooking
- Compact saw such as Japanese style backsaw with coarse teeth (folding models available). Bow saws can quickly cut larger diameter limbs and small to medium thick trees, and Folding saws can be small enough to fit into a kit, but big enough to cut small to medium diameter limbs, and possibly smaller trees.
- Solar charger
- Helmet
- Bandanna or scarf



Bow saws about 24 inches (61 cm) in length are lightweight and fast-cutting.



A small Snow Peak portable stove running on MSR gas and the stove's carrying case

## Lifeboat survival kits

Lifeboat survival kits are stowed in inflatable or rigid lifeboats or life rafts; the contents of these kits are mandated by coast guard or maritime regulations. These kits provide basic survival tools and supplies to enable passengers to survive until they are rescued. In addition to relying on lifeboat survival kits, many mariners will assemble a "ditch bag" or "abandon ship bag" containing additional survival supplies. Lifeboat survival kit items typically include:

### Safety equipment

- Life jackets
- First aid kit
- Fire extinguisher
  - Bucket

#### Communications and navigation

- Compass
- Distress beacons or (EPIRBs) to alert the Cospas-Sarsat rescue consortium, an international satellite-based search and rescue distress alert agency and identify the registered beacon owner's specific information from their registration file
- Red flare, rocket parachute flare, and/or smoke signal flare
- Laser pointer for signaling aircraft (red is color of distress, but green color is higher power and will be seen farther), with lithium cells, in double waterproof plastic pouch (pointers of high power are a theoretical hazard to eyes of low-flying pilots at night)
- Radar reflector (to help rescuers locate the raft)
- Lighter
- Lantern and fuel, the fuel doubles as firestarter
- Radio transceiver, standard VHF marine when operating near inland shore, 121.5 MHz AM VHF guard channel capable aircraft band transceiver to contact rescuers and high overflying commercial and military aircraft visible by contrails, an optional amateur radio if a licensed radio amateur, (see Ham Radio) or an AM/FM/Weather/Shortwave radio receiver to receive precise time for celestial navigation as well as weather information
- GPS navigation device

#### Food and water

- A knife, multi-tool, and/or Swiss army knife <sup>[3]</sup>
- Fishing kit
- Rainwater collection equipment
- Seawater desalination kit
- Water (typically 3 liters/person/day)
- Emergency high-calorie rations/food (not as important as water). Chocolate has a superior calorie/weight ratio
- Hatchet

#### Other tools and boating items

- Waterproof flashlight
- Heaving line
- Ladder
- Bailer
- Bilge pump
- Boat hook
- Sea anchor (also called a "sea drogue")

## Military kits

Survival kits for military aviators are often modified according to the environment of operations:

- In desert areas, survival kits may have more water and sunscreen, and have additional items such as shade hats, a compass, a whistle, medical equipment, tinder, matches, and sun glasses.
- In tropical areas, a survival kit may have mosquito head netting, additional insect repellent, anti-fungal cream, a machete, water purification tablets, foot powder, matches, a flint strike, a compass, a wire saw, a space blanket, medical equipment (gauze pads, elastic gauze bandage, antiseptic creams, anti-malaria tablets, anti-infection tablets, bandages, etc.), salt tablets, a fishing kit, snare wire, extra socks, a candle, a signal mirror, flares, a sewing kit, safety pins, tinder, tape, a whistle, and rations.
- In arctic or alpine areas, survival kits may have additional cold weather clothing (winter hats and gloves), sleeping bags, chemical "hand warmer" packets, sun glasses/snow goggles, snowshoes, a collapsible shovel, a snare wire for small animals, a frying pan, a camp stove, camp stove fuel, a space blanket, matches, a whistle, a compass, tinder, medical equipment, a flint strike, a wire saw, extra socks and a tent designed for arctic use.
- For personnel who are flying over large bodies of water, in addition to wearing a survival suit over cold water, a survival kit may have additional items such as flotation vests, sea anchor, fishing nets, fishing equipment, fluorescent sea marking dye, pyrotechnical signals, a survival radio and/or radio-beacon, formerly a distress marker light replaced by a flashing strobe, formerly a seawater still<sup>[4]</sup> or chemical desalinator kit now replaced by a hand pumped reverse osmosis desalinator (MROD) for desalinating seawater, a raft repair kit, a paddle, a bailer and sponge, sunscreen, medical equipment, a whistle, a compass, and a sun shade hat.

The US Army uses several basic survival kits, mainly for aviators, some of which are stored in carrying bags. Aviators in planes with ejection seats have survival kits in a vest and the seat pan, the survival vest worn by US helicopter crews also contains some basic survival items.

## Spacecraft kits

Astronauts are provided with survival kits due to the difficulty of predicting where a spacecraft will land on its return to earth, especially in the case of an equipment failure. In early US space flights, the kit was optimised for survival at sea; the one provided for John Glenn on the first American space flight in Friendship 7 contained "a life raft, pocket knife, signaling mirror, shark repellent, seawater desalting tablets, sunscreen, soap, first aid kit, and other items".<sup>[5]</sup> A survival kit was provided for the Apollo program which was "...designed to provide a 48-hour postlanding (water or land) survival capability for three crewmen between 40 degrees North and South latitudes".<sup>[6]</sup> It contained "a survival radio, a survival light assembly, desalter kits, a machete, sunglasses, water cans, sun lotion, a blanket, a pocket knife, netting and foam pads".<sup>[7]</sup>

The kits provided for Soviet and Russian Cosmonauts are optimised for survival in the temperate and sub-arctic mountains, forests and grasslands in the east of the country. Soyuz spacecraft kits include "food rations, water bottles, warm clothing, rope for making a shelter using the capsule's parachute, fish hooks and miscellaneous other survival gear". A specially designed pistol, the TP-82, was provided to defend against predators such as wolves or bears. It was able to fire conventional bullets, shotgun cartridges and flares; the folding stock could be used as a shovel and it also had a fold-out machete.<sup>[8]</sup>

## Mini survival kits

"Mini survival kits" or "Altoids tin" survival kits are small kits that contain a few basic survival tools. These kits often include a small compass, waterproof matches, minimum fishing tackle, large plastic bag, small candle, jigsaw blade, craft knife or scalpel blade, and/or a safety pin/s. Pre-packaged survival kits may also include instructions in survival techniques, including fire-starting or first aid methods. In addition, parachute cord can be wrapped around the tin. The parachute cord can be used for setting up an emergency shelter or snaring small animals. They are designed to fit within a container roughly the size of a mint tin.

Other small kits are wearable and built in to everyday carry survival bracelets or belts. Most often these are paracord bracelets with tools woven inside. Several tools such as firestarter, buckles, whistles and compass are on the exterior of the gear and smaller tools are woven inside the jewelry or belt and only accessible by taking the bracelet apart.

## Vehicle kits

Another level in some preparedness plans are Vehicle Kits. In some cases, supplies and equipment may be loaded into vehicle such as a van or truck with bicycle racks and an extra "reserve" gas tank. Some survivalists also carry a small (e.g., 250 cc) off-road-capable motorcycle in the van or truck.

Food supplies in a bug-out vehicle include hundreds of pounds of wheat, rice, and beans, and enough honey, powdered milk, canned goods, bottled fruit, vitamins, dehydrated fruits and vegetables, salt, pepper, spices, and oil for several months. In addition, the kits often contain high-calorie energy bars, a cooking kit, utensils, liquid soap, and towels. The water supplies may include bottled water, filtering kit, bottles, collapsible water containers, and chlorine bleach for water purification. Food preparation and washing equipment may include items such as a grain grinder, a bread mixer, a strainer, a manual can opener, a steam canner with canning jars and O-rings, cutlery, knives, an electric 12-volt cooler/icebox, kerosene lamps and heaters, kerosene or propane stoves, extra fuel, a clothes wringer, a foot-operated treadle sewing machine, and an electric hot plate (which would require an inverter to operate off a car battery).

The medical supplies may include a blood pressure gauge, stethoscope, scissors, tweezers, forceps, disposable scalpels, two thermometers (oral and rectal), inflatable splints, bandages, sutures, adhesive tape, gauze, burn ointment, antibiotic ointment, aspirin, rubbing alcohol, ipecac syrup, sterile water, cotton rags, soap, and cotton swabs.

The transportation items may include bicycles with off-road tires and suspension, emergency tools and spare auto parts (e.g., fuses, fan belts, light bulbs, head light, tire pump, etc.), and an inflatable raft with paddles.

In addition, the kits may contain typical individual "survival kit" items, such as nylon tarps, extra clothes and coats, blankets, sleeping bags, matches or other fire starting equipment, a compass and maps, flashlights, toilet paper, soap, a pocket knife and bowie knife, a fishing kit, a portable camping stove, a power inverter, backpack, paper and pencil, a signaling mirror, whistle, cable saw, bleach, insect repellent, magnifying glass, rope and nylon cord, pulleys, and a pistol and ammunition.

The communications equipment may include a multi-band receiver/scanner, a citizens band (CB) radio, portable "walkie-talkies" with rechargeable batteries, and a portable battery-powered television. The power supplies may include a diesel or gasoline generator with a one-month fuel supply, an auto battery and charger, extension cord, flashlights, rechargeable batteries (with recharger), an electric multi meter, and a test light. Defense items include a revolver, semi-automatic pistol, rifle, shotgun, ammunition, mace or pepper spray, and a large knife such as a KA-BAR or a bowie knife.

Tools may include cutting tools such as saws, axes and hatchets; mechanical advantage aids such as a pry bar or wrecking bar, ropes, pulleys, or a "come-a-long" hand-operated winch; construction tools such as pliers, chisels, a hammer, screwdrivers, a hand-operated twist drill, vise grip pliers, glue, nails, nuts, bolts, and screws; mechanical repair tools such as an arc welder, an oxy-acetylene torch, a propane torch with a spark lighter, a solder iron and flux, wrench set, a nut driver, a tap and die set, a socket set, and a fire extinguisher. As well, some survivalists bring barterable items such as fishing line, liquid soap, insect repellent, light bulbs, can openers, extra fuels, motor oil, and ammunition.

## Natural disasters

The US government's Homeland Security website provides a list of in-home emergency kit items.<sup>[9]</sup> The list focuses on the basics of survival: fresh water, food, clean air and materials to maintain body warmth. These basic survival items comprised into a kit are known as a Bug-out bag. The recommended basic emergency kit items include:

- Water, at least one gallon of water per person for each day for drinking & sanitation (should be rotated every 3 months)
- Food, non-perishable food for at least three days which is not required to be cooked or refrigerated
- Emergency food bars, preferably products with 2,400 or 3,600 calories and contain no coconut or tropical oils to which many people may have an allergic reaction, in addition to non-perishable food which does not require cooking or refrigeration
- Battery- or hand-powered radio with the Weather band
- LED type flashlight (battery- or hand-powered)
- Extra batteries for anything needing them, lithium type is preferred for shelf life
- First aid kit
- Copies of any medical prescriptions
- Whistle to signal
- Dust mask, plastic sheeting and duct tape to shelter in place
- Moist towelettes, garbage bags and plastic ties for personal sanitation
- Wrench or pliers to turn off water valves
- Can opener for canned food
- Local maps



Fire making kit contained in tin

- Spare keys for household & motor vehicles
- Sturdy, comfortable shoes & lightweight rain gear
- Contact & meeting place information for the household

## Earthquake

Below is list of commonly recommended items for an emergency earthquake kit:

- Food and water to last at least three to five days<sup>[10][11]</sup>
- Water purification tablets/portable water filter
- Heavy-duty gloves
- A first aid kit
- A minimum of \$100 in cash, at least half of which should be in small denominations
- Family photos and descriptions (to aid emergency personnel in finding missing people)
- Copies of personal identification and important papers such as insurance documents, driver's license, etc.
- A flashlight (LED type for greatest efficiency) and radio
- Extra batteries (lithium type for longest shelf life).
- Goggles and dust mask
- A personal commode with sanitary bags
- Water: one gallon per person, per day

## Hurricane

For hurricanes, National Oceanic and Atmospheric Administration (NOAA) recommends that the 'disaster bag' include:<sup>[12]</sup>

- A flashlight with spare batteries and
- A battery operated portable radio (and spare batteries);
- A battery operated NOAA weather radio (and spare batteries);
- A "Self Powered Radio" and a "Self Powered Flashlight". One, "Eton" model has the Weather Band and it is "self powered". Some of these will keep your cell phone charged
- First aid kit and manual;
- Prescription medicines (be sure to refill them once they expire);
- Cash and a credit card;
- A cell phone with a fully charged spare battery;
- Spare keys;
- High energy non-perishable food;
- One warm blanket or sleeping bag per person;
- Special items for infant, elderly or disabled family members;
- Change of clothing.

## Bug-out bags

The term "survival kit" may also refer to the larger, portable survival kits prepared by survivalists, called "bug-out bags" (BOBs), "Personal Emergency Relocation Kits" (PERKs) or "get out of Dodge" (GOOD) kits, which are packed into backpacks, or even duffel bags. These kits are designed specifically to be more easily carried by the individual in case alternate forms of transportation are unavailable or impossible to use.

These bags contain supplies such as food, water purification equipment, clothing, medical equipment, communications gear, and tools.

## See also

- Bothy bag
- Community Emergency Response Team
- 1972 Andes flight disaster
- Firearm (tool)
- Hiking equipment
- Mini survival kit
- Survival skills
- Survivalism
- Ten essentials

## References

- ↑ "Be Red Cross Ready - Get a kit. Make a plan. Be informed". Redcross.org. Archived from the original on 2011-11-18. Retrieved 2011-11-26.
- ↑ "UK Marine and Coastguard Agency". Nds.coi.gov.uk. Archived from the original on 2011-12-29. Retrieved 2011-11-26.
- ↑ "Doomsday Prepping". www.doomsdaynews.com. September 23, 2013. Retrieved 2013-12-25.
- ↑ "Sea Water Still." (https://books.google.com/books?id=8dwDAAAAMBAJ&pg=PA113&dq=1954+Popular+Mechanics+January&hl=en&sa=X&ei=IYK0T7T1Es2dgQe5iMgH&ved=0CDoQ6AEwAjgy#v=onepage&q&f=true) *Popular Mechanics*, February 1952, p. 113.
- ↑ "Survival Kit, Friendship 7 (MA-6)". *airandspace.si.edu*. Smithsonian National Air and Space Museum. Retrieved 10 December. Check date values in: |access-date= (help)
- ↑ "Apollo 11 Lunar Landing Mission Press Kit" (PDF). *www.hq.nasa.gov*. NASA. Retrieved 10 December 2016. (p. 135)
- ↑ "Rucksack #1, Survival Kit, Apollo 15". *airandspace.si.edu*. Smithsonian National Air and Space Museum. Retrieved 10 December. Check date values in: |access-date= (help)
- ↑ Oberg, James (12 February 2012). "Russia has the corner on guns in space". *www.nbcnews.com*. NBC News. Retrieved 10 December 2016.
- ↑ Basic Disaster Supplies Kit (https://www.ready.gov/kit)

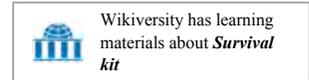
10. County of Sonoma Emergency Preparedness (<http://sonomacounty.ca.gov/FES/Emergency-Management/Emergency-Preparedness/>) "Emergency Responders may be unable to reach all citizens for various reasons and therefore it is essential that individuals and neighborhoods be prepared to be on their own for a minimum of 3 to 5 days."
11. GetReadyBerkeley (<http://www.ci.berkeley.ca.us/getready/>) "Experts tell us that each household should plan to be without outside resources for 3-5 days in a major catastrophe."
12. "Supply Kit". Nhc.noaa.gov. Retrieved 2011-11-26.

## Further reading

- *Mountaineering: The Freedom of the Hills*; 8th Ed; Mountaineers Books; 596 pages; 1960 to 2010; ISBN 978-1594851384.

## External links

- Prepare for Disasters Before they Strike: Build A Disaster Supplies Kit (<http://www.redcross.org/portal/site/en/menuitem.d229a5f06620c6052b1ecfbf43181aa0/?vgnextoid=354c2aebdaadb110VgnVCM10000089f0870aRCRD>) by the American Red Cross
- Assemble a Disaster Supplies Kit (<http://www.ready.gov/build-a-kit>) by the U.S. Federal Emergency Management Agency (FEMA)



Retrieved from "[https://en.wikipedia.org/w/index.php?title=Survival\\_kit&oldid=754960798](https://en.wikipedia.org/w/index.php?title=Survival_kit&oldid=754960798)"

Categories: Survival equipment | Disaster preparedness

- 
- This page was last modified on 15 December 2016, at 13:05.
  - Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.