

The Rescue Pack *by Walter Picket*

One of the first questions anyone new to SAR asks is "What should I carry in my pack?" There is no set answer to that question since every callout is different in nature from the rest. Some SAR team's policy on Rescue packs has been to sustain the rescuer for 24 hours in the field without resupply. It sounds simple, but what if you find the victim (something we all want to find) & he's not equipped & has hypothermia? What happens now is that you must take care of the victim out of your pack until help arrives with extra gear. Obviously, you might not be able to do a very good job caring for the victim with just a fanny pack. Rescuers are depended on to carry the proper equipment to be effective as well as keep up with the other rescuers.

There are few people who can carry a 40 lb+ pack & be effective in the mountains. Experience can make a big difference as to what is carried in the pack. Also, sudden weather changes, difficult terrain & victims with serious injuries can place the rescuer in a rather awkward position. One way the rescuer can keep out of that position is to be prepared to cope with any situation that could come up before it happens. Assistance can not always be called in or it might take them a long time getting there so a rescuer should be completely self-sufficient for the duration of the mission.

That does not mean you carry everything but the kitchen sink in your pack. Rather, ask yourself What kind of rescue person am I? Only if you know yourself as a SAR member, can you buy equipment without wasting money. equipment is relative. There is no perfect gear. no one backpack can fit everyone's back. some gear is especially suited for an individual's need (or is it wants)

Going out & getting the most expensive hi-tech, hi-quality equipment without first sitting down & figuring out what you need is wasteful, expensive, over burdening & downright dumb. Before you run up the credit on the plastic, ask yourself the following questions:

- 1) What are my goals in SAR for the next 3-5 years?
- 2) How much time can I give or commit to SAR missions?
- 3) What time of the year are the majority of SAR's missions?
- 4) In what area or terrain does your team do most of it's missions & what is the area your Team is responsible for?
- 5) How frequently is your team called by another agency (another County sheriff or another Wilderness SAR team) to participate in Wilderness SAR operations?
- 6) How long does the typical mission lasts?

Answer these questions honestly & be specific; i.e. temperature, weather & terrain types. Once you've answered these questions & maybe have a couple of missions under your belt, you have a better idea what your needs are in the way of gear.

Almost every Wilderness SAR team in this country has a New member's training class or classes. Nine times out of Ten, one of those classes there will be a presentation on what that team considers the minimum required gear for their Wilderness SAR Team or that team will have a list of the minimum gear required in their training manuals. Take notes, ask questions. Make friends with one of the more experienced members of the Team you are joining, make friends with them, Take them out to lunch or go get some coffee & pick their brains on what works, what not works,

what's acceptable to the group & what's not. Find out why they use a certain piece of gear over another. The lists included here contain minimum required field equipment, a recommended list & an optional list. not all this equipment is needed on every callout. The rescuer packs according to the callout & one's estimation of the situation while keeping in mind one's ability to carry the load & need to complete the mission as effectively & easily as possible:

- *Rescue Pack
- *Sunglasses
- *Signal mirror
- *Pencil/notebook
- *Headlamp
- *at least two heavy duty trash bags
- *Appropriate clothes for weather & terrain
- *Three sources of light (including your headlamp & extra bulbs & batteries)
- *Helmet
- *Hiking Boots
- *Pocket knife
- *waterproof matches
- *food for 24 hrs
- *Hat
- *Whistle
- *Space blanket
- *Firestarter
- *Water (1 gal min.)
- *First Aid Kit
- *Rain wear
- *Trail tape
- *Map/compass
- *Goggles/earplugs

The recommended list below contains equipment that can be carried or left behind depending on the situation or mission since it's not always needed. Experience, other team members or operations leader's can tell you when they're not needed.

- *Chemical Light sticks
- *Folding saw
- *Fire starter
- *Extra food & water
- *Binoculars
- *Stove/cook kit
- *40' nylon webbing
- *Ensolite pad
- *Extra clothes
- *Backpack tent or bivy bag
- *Sleeping bag
- *Technical gear

The optional list represents equipment which has been useful on a number of callouts. Some of the equipment is seasonal in nature (winter callouts) since demands are different. They involve searches in snow & freezing rain. Temperatures can be as low as 5 degrees in the mountains A five mile hike in the summer is an easy day hike, but with two to three feet of new snow on the ground can make the same hike a possible bivouac. the following list of additional equipment, plus equipment from the Rescue pack, might prove valuable for a winter callout:

- *Wool or pile pants & shirt
- *2 pr gloves or mittens
- *Snowshoes or skis
- *Gaiters
- *Overmitts
- *Ski poles
- *Down or synthetic jacket
- *Extra socks

Remember, summer time in the desert means an extreme shift in temperatures. Average daytime temperatures in the desert can get as high as 110 degrees & nighttime lows around 70 degrees. Sleeping out in just regular clothes is not as comfortable as it might sound. However, as the temperature rises, so does the need for more water for your body. the hotter it is, the more water is needed since water is the primary medium used to get rid of excessive heat (sweating). recent studies by the government indicate that people need more water then it was previously thought. In a desert environment, a person engaged in heavy labor (stokes evacuation) would need 10 to 12 quarts of water. Please remember that you as a rescuer might have to use your water on the victim as well.

In theory, a list like those above would be all a person just starting out in Wilderness Search & Rescue would need to get going. But this type of thing actually opens a sometimes ugly can of

worms that sort of looks like Malaria germs: Can I use my the pack I use for school? Can I use my Cycling helmet? What do I put in my first aid kit? What do you mean I can't wear my Nike Light weights? Ever see a person show up for a mission above Timberline with just one of those Plastic Emergency rain wear suits that come in a packet the size of a pack of cigarettes. My worst experience is responding to a callout in a desert region & one the members of the team (who says he's ex-SEAL team member) has only 2 quarts of water for 24 hours. (His water supply did not make it) Let's look at a couple of items that you need:

Rescue Pack-There are two choices: External or Internal frame (also known as soft packs). The majority of Wilderness SAR Personal use Internal frame packs. They seem to carry the load more effectively & have a lower center of gravity than external frames. They allow more freedom of movement than do external frames. Outside pockets are really appreciated. Some people tend to buy an Internal frame a little bit bigger than what they need so that they will be able to carry Tech kits, blanket bags, ropes, & Medical kits into the field without having to tie them onto your pack. Also remember that winter gear (extra clothes, stoves, etc.) are a little more bulky, so keep it in mind when you shop for a pack. A good way to find out what fits is to take the stuff that you are going to put in the pack with you to the store. stuff it into the candidate & try it on.

Helmet- The helmet is one of the most important pieces of gear you'll need in wilderness SAR. The question is what kind of helmet: climbing, biking, construction worker's model or a fireman's helmet. All were designed for specific purposes & are tested against safety standards applicable to what they are intended for. Out of all types, the climbing helmet suits the purposes of Wilderness SAR. I remember being involved with training Air Force Fire fighters at NORAD in confined space technical rescue operations. Our helmets gave us no problems while their firefighter's helmets were banging into everything & giving them all sorts of fits. It's a good idea to affix reflective tape onto your helmet (you are only limited by your imagination). Be sure to put your name, address, phone number, blood type & any allergies to medications/special medical conditions you might have somewhere on the back of the helmet.

Goggles & ear plugs-Very handy to have when working around, near, or in helicopters.

Boots- Medium sturdy-lug sole mountaineering (vibram type) boots, not lightweights that fit well work in almost any type of terrain. they should be waterproof or have an application of an after market waterproofing solution.

Rain wear- A variety of light weight & compact rain wear are available. Gore-Tex materials work fairly well but are expensive; coated nylon fabrics are waterproof & compact; plastic is cheap & tears easily; rubberized fabrics are waterproof but very heavy. remember to choose bright colors.

First Aid Kit-This is essential for personal use. The size, quality & quantity depends on your medical qualification & experience. You could also have more than one so that it can be expanded for a wider range of situations.

Map & Compass-They are a very good idea to have if you need to know where you are or to tell the Rescue Coordinator where you are.

Signal mirror- Probably the best reusable signaling device ever made. The military glass signal mirrors with a built in sighting device are the best ones to have.

Trail tape- Why do I need tape for the trail? Is it broken? No, this plastic flagging is great to mark trails for others to follow (like the team bringing the stokes in from off the trail), to mark off areas where clues have been found & to use as wind indicators for helicopters.

Food & water-This depends on personal preference & the situation of the mission. You should be able to eat your food without cooking. with water, it depends a lot on the season and/pr availability of it in the field. Two liter plastic coke bottles work very well as water containers & are cheap too.

Space blankets- The reusable (plastic on one side, silver on the other) kind can be used not only as a blanket for the victim, but as a sun shade, wind break, or to signal aircraft.

Headlamp/light sources- This is another essential item that is unique to wilderness SAR. A headlamp frees your hands to do other things like answer the radio, or hold on for dear life from a wet greasy, slippery hold one night. To those who are familiar with Murphy's law can understand. things can easily go wrong & light at night is a big advantage. not only have your headlamp with extra batteries & spare bulbs but have 2 other sources of light that can take a beating should your head lamp goes out. another good idea is to have all 3 sources of light use the same type of battery.

Chemical light sticks (Cyclume)-these are lightweight, use no batteries, maintenance free & can be stored indefinitely. they can be used to mark landing zones, belay stations, rescue personnel at night, or even a trail. A cyclume stick at the end of a 2-3 foot length of string, twirled around the head at night has the same effect as a signal mirror in the day time.

40' of 1" tubular webbing- this can be worth its weight in gold when the webbing in the tech kit does not reach far enough or when you don't have the tech kit.

Ensolite pad- It's used for as planned/unplanned bivy. It can be used for extra padding, or to splint broken arms & legs.

Technical gear- Your own personal tech kit. It can be just enough to do a safe rappel, set up a lower, anchor, or enough to lead 5.10 free climbing. Just be sure you know how to use it safely & properly before the mission.

folding saw/brush knife- For clearing brush for a helispot, or clearing a trail for a Stokes, there is no better way. (except maybe a flame thrower or a D-8 Cat!)

Bivy sack- This is for the planned/unplanned bivy.

2 Heavy duty trash bags- You might not think of yourselves as trash or trash bags as rescue equipment but they can be used as pack covers, emergency rain gear, bivouac sacks, ground cloths, liners for packs & even as trash bags.

Whistle- a plastic police type whistle will travel a lot farther than the human voice & a lot longer in all types of terrain. Great for a signaling device & getting the attention of others.

Extra Clothing (warmies)- This is extra warm clothes just in case the temperature drops or the victim needs some extra clothes

firestarter- Used to help start fires when wood & kindling is hard to ignite. heximine tablets, fire ribbon, or candles work well.

Binoculars- They are very effective on desert & mountain searches, particularly from a high point. Small light ones are very easy around the neck.

Stove/cook kit- for those times where you might have to bivy & want some hot food or the victim needs some hot liquids or food.

Extra food/water- If you see a callout requiring more food & water than you already have in your pack or the victim may be needing food or water, you won't have to go farther than your duffle bag to get it.

Extra clothing (warmies)- This is extra warm clothes just in case the temperature drops or the victim needs some extra clothes.

Winter gear- Includes warm clothes, snow travel equipment & winter camping gear. wool or pile clothing, long gaiters, snow proof boots & windproof clothing really make winter search & rescue a lot easier & safer for the rescuer.

So now what do you do. You have a burning feeling in your wallet & you swear that you'll be doing Wilderness SAR volunteer work until The Lord Jesus comes back. No problem, let's talk

about how to acquire this equipment as well as keeping the weight down. The first step of identifying what you need is already covered. We may need to do some more research. A good way is to collect catalogues. Most Outdoor gear manufacturers put out some sort of hi-powered, hi-tech, large glossy catalog that describes the gear they sell, to do research at home, write to those companies from their catalogues. Most companies will send you their catalogues free, some ask for a small fee. The idea of this approach is to get reference material to understand all about outdoor gear so you can make a wise decision. Check out bookstores & libraries for books & magazines that explain the designs & characteristics of different materials used in outdoor gear as well as equipment designs. REI Co-op publishes many small pamphlets about various pieces of outdoor gear & provide a wealth of information.

When you're putting together your rescue pack, take an approach of "Functional Redundancy". That is, choosing gear with multiple uses whenever possible. An example would be the use of coated rain gear on a sleeping bag in the summer or a vapor barrier in a sleeping bag that will add extra warmth without extra weight. A Nalgene water bottle or a small pot can also serve as a cup, a poncho with some candles makes a more effective bivy sack, or an improvised litter. A reusable space blanket can not only be used as a space blanket but as a ground cloth, shelter or to signal aircraft.

Just as important as functionality is the selection of gear appropriate for conditions you would be facing. Why purchase an expensive rain jacket & bib overalls that would be great above timberline when a backpacker's poncho might suit the needs better as well as being lighter in your pack as well as having multiple uses. Why carry two or three when one will do? I know a guy who uses to carry 5 reusable space blankets. Remember, be resourceful. Methodically evaluate & re-evaluate what you carry in your pack. One of the best ways I know of to lighten my pack is to dump out everything on the floor & pick up each item by the ears & look directly into its eyes & demand, "Do I need you or Do I want You?" (if it answers, you need professional help) Separate them into two piles according to the answer & repack the "need" items back into the pack & stuff the rest into a duffel bag.

One more piece of advice on equipment: Please don't go overboard & buy the gear all at once. Constantly evaluate yourself. Learn something about design & materials of the equipment, ask questions & most importantly, learn how to use your equipment before you go out on a mission. The time to learn survival skills is not on a callout, but during recreational hikes or Team trainings.