

Associated Churches Active in Disaster



Field Manual

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Table of Contents

1.0	Purpose.....	3
2.0	What To Expect	3
3.0	Gear.....	4
3.1	Sleeping Gear.....	4
3.1.1	Sleeping Pads	4
3.1.2	Sleeping Bag	6
3.1.3	Cotton Sheet.....	7
3.1.4	Pillow	7
3.2	Clothing.....	7
3.2.1	The Foundation	8
3.2.2	Base layer.....	9
3.2.3	Insulation layer(s)	9
3.2.4	Shell Layer	10
3.3	Rucksacks & Duffle Bags.....	11
3.3.1	Rucksack	11
3.3.2	Main Duffle Bag	11
3.4	Sundry	11
3.4.1	Personal Hygiene	12
3.4.2	Medication	12
3.4.3	Individual First Aid Kit (IFAK).....	12
3.4.4	Miscellaneous	12
3.4.5	In Your Pockets.....	14
4.0	Pre-deployment Check-list.....	14



1.0 PURPOSE

The purpose of this manual is to provide the ACAD field volunteer with useful information to prepare you for your work in the field, to make your time in-field safer, more comfortable, and more rewarding. The information contained in this manual comes from the combined real world experience of people who have spent time in-field and from information researched through the Internet.

2.0 WHAT TO EXPECT

While in some deployments you may be housed in a building with full normal utilities and comforts, in others you may be housed in tents with little in the way of normal comforts. Since it takes little effort to be comfortable under normal conditions much of what is presented here will be based on the lower end of the scale. Pre-deployment briefings should provide you with definitive information on the conditions that you will be living in. But keep in mind that all the conditions can change for the better, but could also change for the worst. The idea should be that you are prepared for whatever environment that you find yourself in. Inquire if you will need to buy anything, such as food while deployed, or if everything will be supplied that you may need.

You may be living and working outdoors and if so, you will become very intimate with nature. You may have to contend with weather extremes; cold, hot, wet, muddy. You may have to contend with bugs that bite; crawl on you; and get into everything, including your food. There may be small mammals (such as rodents) and reptiles (such as poisonous snakes) to contend with. You need to be aware of the possibilities and then takes steps to protect yourself.

You may be sleeping in a small tent with one or several other people, you may be sharing a large tent with dozens of others, it may be inside a building with several people to a small room, or dozens of people in a large room, or you may have your own room.

Bathroom facilities may be shared and may consist of portable johns (out houses), bathroom trailers, or the use of a restroom in a building. Bathing facilities may be a one person shower tent with water not much warmer than air temperature, a shower trailer, or in a building with showers. Or you may have to wash by hand at a sink.

Food may be received outside from a canteen trailer, military meals in a bag (MRE's), dining hall in a building, or in a regular cafeteria. Meals may not be served when you most want them, you will have to conform to servers' feeding schedules, so having a supply of energy bars or snacks bars would be a good idea.

You will be going into an area that has been devastated and the people that live there may have very little left. So don't expect the red carpet treatment or five-star accommodations, but be thankful if you receive them. You are going there to roll up your sleeves and work in what may be rough and rather primitive conditions.



Now that **you** have an idea of what to expect, **we** expect you to be prepared to work and live in that kind of environment safely and for the most part, comfortably. This manual is the start of your preparedness, but it shouldn't be the end of it. Do your own research as well; the Internet is a gold mine of information. Practice with all your gear in primitive conditions and in varied weather. Better you know beforehand what works for you and what doesn't, so you can make changes before being deployed.

3.0 GEAR

Gear, sometimes referred to as kit or equipment, are the “things” that will make your field work safer and more comfortable. But things are of little use if you don't also know and understand how to use them. You will be better off with more knowledge, than with more things. Please keep that in mind.

Also keep in mind that all your gear will need to be packed and carried (most likely by you) for some distance at various points during deployment. Keep all gear as high quality, small, light, and multi-use as possible. Consider carefully each piece of gear. Do you really need it, can its job be done by another piece of gear? Be honest and do trial runs with all your gear to see what you can cull out or you'll end up needing a moving van and pack mule just to move you to the deployment site and back. Taking the kitchen sink will not make you popular with your fellow travelers.

Each deployment may demand a different selection of gear that you take. This will depend on the mission, the location, the duration of the deployment, and the season/weather. Be flexible and pack accordingly. And remember, what follows is just a suggested list of gear to get you started in the right direction. You should change and modify the list as is appropriate for you.

3.1 SLEEPING GEAR

Getting a good night's sleep is extremely important to your ability to function and do so safely. So don't scrimp on your sleeping gear. Sleeping gear is made up of a sleeping pad, sleeping bag, light cotton sheet, and pillow. Expect the worst and choose your sleeping gear that will work even when wet, will dry out easily even in cold, damp weather, and keep YOU comfortable, warm, and dry. Try out your sleeping gear BEFORE you deploy with it. Make sure it works for you. If you find out that you are going to be put up at hotels with real beds and linen service you may not need any of your sleeping gear, but make sure before you leave and if in doubt, take it.

3.1.1 *Sleeping Pads*

We'll start at the foundation, the sleeping pad. It doesn't matter if you are sleeping directly on the ground, or on a folding cot. **YOU WILL NEED A SLEEPING PAD** unless you will be in a real bed. The ground will be hard and will suck the heat out of your body while you sleep. Sleeping on the floor will be somewhat warmer than the ground, but still hard. Sleeping on a folding cot may be softer, more comfortable, but the heat loss can be much greater, especially in a tent. Your body weight will compress your sleeping bag under you, no matter how good the insulation in the sleeping bag is. Compressed insulation is not very effective in insulating you. Plus the sleeping pad helps to some degree in keeping your sleeping bag out of any water that may seep in to your sleeping area if you are sleeping directly on the ground.



If you are young and flexible, you may not need much padding in your sleeping pad to be comfortable. If you are older and stiff (you know who you are!), you *may* need, no... you *will* need more padding for comfort.

There are several types of sleeping pads:

- Air filled (air mattress)
- Air/foam filled
- Open cell foam
- Closed cell foam

Air filled mattresses may be more comfortable than the others, but because they are bladders of air, they tend to be like sleeping on a folding cot and have a lot of heat loss. Plus they are heavy, bulky, require a pump to inflate them (unless you enjoy getting light headed while spending a lengthy amount of time to inflate by mouth), and are prone to punctures. A deflated air mattress has NO insulation or padding qualities at all. Due to your comfort requirements, this may be the only sleeping pad that works for you. If it is, you will also need another sleeping pad to provide insulation from heat loss. The solid closed cell foam pad is probably the best choice for this situation. Air mattresses typically come with a patch kit. Make sure it does and that it goes with you in the field.

Air/foam filled sleeping pads, such as the Therm-a-Rest brand, are probably the best compromise for most people. These pads are made of an air/water tight nylon shell surrounding an open cell foam pad, with an air valve located at one corner. These pads roll up tight with the air valve open, then closing the air valve keeps the pad rolled up so it fits into a nylon storage bag. To use this pad, take it out of its bag, open the air valve and let it lay flat for several minutes to self-inflate. Then blow it up fairly tight by mouth, close the air valve and you are ready to go. These pads come in different lengths, widths, and thickness. Get one that is long enough for your height, wide enough for your size, and the thicker the pad the more comfortable and warmer it will be. These pads are also prone to punctures, but are much tougher than the above air mattresses. They typically come with a patch kit, again make sure it does and take it with you. These are the most expensive of the sleeping pads, but are warm and fairly comfortable.

Open cell foam sleeping pads are made of a non-air tight nylon shell, normally not waterproof, and filled with open cell foam. Open cell foam will absorb water like a sponge, so if you can find one that is waterproof, make sure the seams are sealed too. Once these get wet, they are useless for insulation. Because they are open cell with no air-tight shell, they are very soft, but compress almost completely while you are lying on them. Due to this, they offer little in the way of warmth and comfort. They roll up and sometimes have sewn on tie straps to secure them, other times they come with a storage bag.

Closed cell foam pads are usually fairly thin, but the closed cell foam does a good job of insulating from the cold. Because they are thin, they don't offer as much comfort as some of the other pads, so keep that in mind. They usually come without straps or storage bag, so you will need some means of securing them once rolled up. These would be my second choice for a pad.



3.1.2 Sleeping Bag

Everyone sleeps differently, some warmer, some colder, some toss and turn, some hardly move. You need to know how YOU sleep before buying a sleeping bag. You will need less insulation if you sleep warm, more insulation if you sleep cold. You can use a smaller mummy style bag if you hardly move, but may need a more roomy rectangular style bag if you toss and turn or if you tend to be claustrophobic.

There are many types of sleeping bags with many types of insulation, but two main categories of insulation:

- Goose down
- Synthetic

The lightest weight and most efficient insulation is goose down. Goose down packs down smaller than most if not all synthetic insulation, so it stores in a smaller bag, but also compresses more under your body while sleeping. Goose down is usually the most expensive insulation, but if the bag is not constructed properly the down will shift and create cold spots in the bag and if it gets wet, it will not provide any insulation and will not dry out easily. We suggest staying away from this insulation, but your mileage may vary.

Synthetic insulation tries to match the efficiency of good goose down. Some do a better job than others and it would take a book to describe the types and differences. In general, most synthetic insulation does a fairly efficient job of insulating, does not compress as well as down (good for sleeping on, bad for storage), and insulates well when wet. In fact many/most synthetic insulation will dry out when wet, with just your body heat. One of the authors of this guide has awakened in the morning to find that he was sleeping in a puddle of water and the sleeping bag was warm and dry inside, while the cover was wet.

Choose a sleeping bag that has a nylon shell and not a cotton shell. When cotton gets wet, it stays wet. Plus cotton weights more than nylon and compresses less (takes up more room in storage). In general, the better the quality, the more expensive the price. Get the best bag you can afford. It will last longer, and work better. Oh, and we suggest that you get a bag with an attached hood. In cold weather you'll be glad you did. These hoods typically have draw strings that allow you to snug the hood around your head as needed.

To cover a larger temperature range, you may want to consider a sleeping bag system such as Wiggy's Flexible Temperature Range Sleeping System (FTRSS) which uses a thinner outer sleeping bag and a thicker inner sleeping bag. These bags can be used separately or the inner bag can be zipped inside the outer bag for even colder weather sleeping. These are available in mummy style and rectangular style. Of course these sleeping bag systems are more expensive because you are buying two sleeping bags.

Take good care of your sleeping bag. It can be a big investment and if treated with care and maintained according to manufacture recommendations, it should last for many years.



3.1.3 Cotton Sheet

This is where the rule against cotton is waived, as cotton tends to rule in hot weather. The cotton sheet may be optional in cold weather, but should be mandatory in hot weather. When deployed in 80 plus degree weather with high humidity, you will not want to zip yourself into your sleeping bag no matter how thin it may be. In that kind of hot and humid environment, you may find it best to sleep on top of your sleeping bag and cover yourself with the cotton sheet. You can always unzip your sleeping bag and cover with the cotton sheet, then pull the top cover of the sleeping bag over yourself if you start to get too cool with just the cotton sheet. Remember that you may not have air-conditioning. The best sheet to use is an unfitted top sheet and probably in the twin size.

3.1.4 Pillow

Your regular full-size pillow may not be the best choice due to its size and what it is filled with. Consider the size as it will have to be packed and if it is filled with feathers, it will tend to absorb water in high humidity or if it gets wet. There are camping pillows often made by the sleeping bag manufacturers, which are made with the same nylon shell and filled with the same insulation as the sleeping bag. These camping pillows are about a third the size of normal pillows, so they pack more easily but may not be as comfortable.

Another option is to use a soft garment, such as a fleece jacket as your pillow. Think dual use and light weight. Stuffing that fleece jacket with a fleece vest or other soft garment will make a larger pillow. Experiment to see what may work for you and again, do a trial run with your choice.

3.2 CLOTHING

“There is no such thing as bad weather, only inappropriate clothing.” – by Ranulph Fiennes

For deploying to the field, clothing is your wearable, changeable shell that protects you from the environment. It has nothing to do with fashion. This is so important that we’ll say it again even louder. **IT HAS NOTHING TO DO WITH FASHION!** The only function of field clothing is to protect you and support your work. It needs to function in all types of weather and all ranges of temperature. Clearly one type of clothing will not meet all your needs, so you will need several types on any deployment.

First some general rules:

- Cotton – Cotton is a hot weather material **ONLY**. In cold/wet weather, cotton can get you killed when you are living and working outdoors. When cotton gets wet with water or sweat, it will stay wet for a long time. Body heat does a poor job of drying out cotton while you wear it and you will lose large amounts of body heat, possibly becoming hypothermic. Now **YOU** have become a victim... so much for helping others.
- Cold weather – synthetic and/or wool layers rule. As you get more active you will heat up, as you get less active you cool down. Wearing multiple layers of clothing allows you to take off or add to what you wear to remain comfortable over a wide range of temperatures. One single heavy layer will not allow this type of flexibility. Synthetic material tends to wick sweat (or other water) from the body and out into the outer layers



so you stay dry and warm. If it is windy or wet, the outer layer should be a wind and/or rain proof shell garment.

- Hot, dry weather – loose, thin, light colored cotton garments will provide the most comfort. Covering the skin will go far in preventing sunburn and prevent too rapid evaporation which doesn't cool you as effectively as slow evaporation. Thin and loose garments allow air to move under your clothes and keep you cooler through slow evaporation. Take into consideration any protective clothing that you may need to wear to protect against sharp objects. Keep your head covered with a light-colored, light-weight, wide-brimmed hat.
- Hot, wet weather – same as for hot dry weather with the addition of a light weight, breathable waterproof shell. Stay away from the cheap polyurethane (PU) coated rainwear. They don't breathe at all and you'll be as wet from sweat as you would be from the rain. The breathable films found in many rainwear are much better than the PU items, but cost more. Gore-Tex is probably the best breathable film, but also the most expensive. If you tend to perspire heavily, even Gore-Tex may feel like you are wearing a plastic bag. A military style rain poncho may be the best bet, but consider the loose flapping garment may be a safety issue depending on where you are working, so use with caution.
- Footwear – heavy wool socks, heavy wool socks, heavy wool socks. And sturdy boots. That pretty much sums it up. Keep your feet protected with sturdy boots that also provide ankle support. You will most likely be walking a lot and the ground will most likely be littered with debris and be uneven. Keep your feet dry! Change your socks regularly; wear one pair, have one ready to change into, and have one washed and drying (at a minimum). Take care of your feet!

Basically, in hot weather you want to be slightly wet (for evaporative cooling) and in cold weather you want to be dry (so you don't die from hypothermia). And in any weather you want to be protected from the environment so the clothing should be durable.

3.2.1 The foundation

Your feet are your main means of travel while on site. Due to the nature of the disaster, movement by vehicle may be limited for many reasons. Walking may be difficult due to debris and uneven surfaces. Twisted ankles, sore feet, blisters, and punctures will take you out of the game. This is not a sight-seeing trip and you owe it not only to yourself, but to those you are there to help to remain on your feet and operationally functional.

Your working footwear needs to protect your feet and ankles from injury, so it needs to be sturdy and supportive. Ankle level or higher boots are the only way to go. Find the lightest, sturdiest, best fitting, and most comfortable pair that you can. Make sure they are big enough to wear heavy wool socks in them. Bite the bullet and pay the price as you get what you pay for. Make sure the boots are well broken-in prior to deployment. Then learn how to take care of the boots to maintain them in optimal condition with oils, waxes, and waterproofing. Keep them clean.

When you are off-duty and in a safe area for walking, you should have a second pair of footwear; something light weight and very comfortable to give your feet a break from the long, hard, hot day. Depending on the weather and conditions, sandals may be appropriate. Otherwise, a light



pair of nylon running/walking shoes may work for you or maybe a pair of lightweight boots. But you should have something to change into so your work boots can dry out before your next work shift.

Foot powder is your friend. Powder your feet when you change your socks and anytime your feet start getting too uncomfortable. Take a break during your work shift, take off your boots and socks, let your feet cool off, check them for hot spots (beginning blisters) and attend to them if found, powder your feet, put on clean/dry socks, and put your boots back on. Make sure the boot laces are secured and not loose so they don't get caught on things and trip you. If someone gives you strange looks for doing this, just smile knowingly to yourself as they are a blister waiting to happen.

Your socks should be changed at least daily. At the minimum, you should have three pairs of heavy wool socks for wear with your work boots. That means you will be wearing one pair, have one pair ready to change into, and the third pair will be washed and drying. With only three pair you will have to religiously wash out your dirty pair and dry them so they will be ready to move up to the pair ready to change into. I suggest you take more pairs. You may also wish to wear thin liner socks of synthetic material inside the wool socks for additional comfort and to reduce friction, which is the leading cause of blisters. Again, minimum of three pairs.

Your off-duty socks can be whatever works best for you and the conditions. You should have three pairs of these unless it is a deployment of only 1-3 days.

3.2.2 Base layer

This is the layer against your skin and provides comfort and protection against chafing. This layer should be changed daily.

Hot Weather

In hot weather the prevailing opinion is that it should be cotton underwear and tee shirts. Although some people may have better luck/comfort with silk or synthetic underwear (such as Under Armor). In either case you will generally be better off with loose underwear, although some specially designed synthetic underwear and tee shirts are made to be skin tight and to wick sweat from your body (Under Armor has both loose and tight types). You'll just have to try them to see if they are comfortable for you.

Cold Weather

In cold weather the base layer takes on more importance. This layer should be synthetic long johns, such as polypropylene or other wicking material (again Under Armor has several types). The goal for this layer is to wick the sweat off your body and outward through the next layers so you remain dry. This layer should cover all of your arms and legs, and be a fairly thin layer.

3.2.3 Insulation layer(s)

The goal of the insulation layer(s) is to maintain body warmth. Multiple thin layers are better than one thick layer because you can add or subtract a layer as needed to keep up with your level of activity and comfort. This layer is not needed in hot weather unless it cools down in the evenings.



Synthetic fleece is the best material for this layer, although wool comes in a close second. Stay away from the garments with a shell filled with insulation, as these are bulky and do not offer the ability to add and subtract layers as needed. You'll be much happier with multiple thin layers of fleece or wool. The fleece, and to a lesser extent wool, will take the sweat wicked off your body by the base layer and, driven by body heat, wick the moisture out further away from your body. Included in this layer are hats and gloves for cold weather. A note of caution, fleece will burn easily and quickly, so stay away from open flames with fleece. Wool on the other hand does not burn very easily, but can be scratchy for some people and is more expensive than fleece. Try to find Merino wool as it is more comfortable. As always, your choices have tradeoffs.

Hats

Wool or fleece stocking or watch hats are very useful, as are fleece balaclavas. Balaclavas cover the head and ears and again provide wicking as the head can put out a large amount of perspiration. Fleece tubes, sometimes called neck warmers or head-overs, are also very useful. They are worn on the neck and can be pulled up in the back to cover the head, ears, cheeks, and chin. Insulated bomber-style hats may also be of use for some people, but others may find them too warm.

Gloves/Mittens

This is one of the most difficult areas to insulate well. We have to work with our hands and that means gloves work best, but mittens provide the most warmth. One method is to wear thin fleece gloves inside larger fleece, wool, or insulated mittens. This gives you the benefits of the layering principal for your hands. Insulated gloves or mittens are more restricted in their range of comfort than other garments. Also consider gloves or mittens with Gore-Tex when working in the snow or cold wet weather.

3.2.4 Shell Layer

As the name indicates, this layer provides the protective shell against wind and water for the other layers under it. It can be a one item does it all set-up, or a more versatile multi-item set-up.

In either case, the jacket/coat must be large enough to fit over the base and insulation layers. It should have an attached hood, large enough to pull up over the insulation hat and have a drawstring to close it down as needed. It is helpful for this jacket/coat to have multiple pockets that seal with snaps or Velcro. Underarm zippers (called pit-zips) help to control the temperature, especially in the Gore-Tex type garment, are also very useful.

Sturdy leather work gloves are a must when working outdoors, especially around or with sharp objects. For working in cold weather, thin fleece or wool gloves inside larger leather gloves may be the better way to go. Please try this out before you deploy.

One Item Does It All

The one item does it all route would be an un-insulated Gore-Tex jacket or coat, providing both wind and rain protection. This is more expensive and as stated before, even Gore-Tex can feel like wearing a plastic bag... but your mileage may vary.



Multi-items

The multi-items route would have an un-insulated jacket or coat for wind protection and a separate rain poncho or rain coat for water protection. This can offer more comfort and flexibility and is generally cheaper to purchase. An anorak can also be used, but are less user friendly since you have to pull them on and off over your head.

The military rain poncho is a very good option for rain protection with secondary functions as a shelter or tarp. They are made from reinforced nylon and are large enough to wear over a rucksack. They are much better made than the cheap plastic ones sold in box stores and more comfortable than the plastic or PU coated rain suits. The rain poncho also ventilates easily.

3.3 RUCKSACKS & DUFFLE BAGS

You need some way to carry your gear, some of which you will want to have with you most or all of the time and some will be stored at your base camp or temporarily in a vehicle. Again you are urged to go over your gear to see what you really **need** to take with you. Multi-purpose items reduce your load, so consider this when gathering your gear.

3.3.1 Rucksack

A rucksack (backpack) or single strap shoulder bag is for items that you want to keep with you. The rucksack (ruck for short) or shoulder bag should be rather small, with a volume of around 1000-2000 cubic inches. The rucksack will contain the items you need with you, but can't carry in your pockets. You should carry one or two liters of water, snack/energy bars, leather gloves, foot powder, extra socks, sun screen, bug repellent, rain poncho and such in the rucksack. Make sure this is something that you can easily carry with you to the work site, and consider that depending on security, you may need to wear this while working. There are many different types and brands of rucks and single strap shoulder bags. Just make sure it's well made and comfortable, as it could weigh up to 20 pounds when packed.

Before buying a rucksack, gather all the items you think you want to carry in the rucksack and put them in a pile. That will help you to determine the size of rucksack you will need. Practice wearing your rucksack or shoulder bag, fully loaded, while going on walks to get used to carrying it. This will also help you to fine tune what you carry in it. Nothing like walking around with a too heavy ruck to motivate you to lighten the load.

3.3.2 Main Duffle Bag

This would be the large storage bag for all your other gear, including sleeping bag and spare clothes. An excellent item for this use is the military duffel bag which is basically a very large stuff sack, open on one end. It is large and can be locked with a padlock, should you feel the need. These duffel bags are made out of heavy duty nylon, have shoulder straps to carry them like a rucksack, and have a carry handle. There are also large, well-made nylon zippered duffel bags with carry handles which are easier to load and unload. Some are waterproof and some have shoulder straps. Get one large enough to hold all your supplies.

3.4 SUNDRY

These are all the other items that you may want to take with you. It is certainly not meant to be an all-inclusive list of items you may want to have with you, but will get you thinking.



3.4.1 Personal Hygiene

It will be most helpful to pack most of these small items in a toilet kit that is easily carried to the restroom/shower facility. This goes in your main duffle bag.

- Toothbrush and tooth paste
- Dental floss
- Deodorant (use an un-scented type as the scented ones can draw bugs)
- Small mirror
- Nail clippers
- Razor and shaving cream (do you really need to shave while deployed?)
- Baby wipes (seriously, they come in handy, you can do a quick clean up without water/soap; they have other uses too)
- Small amount of compressed toilet paper (check camping supply stores) or regular TP unrolled from the roll and stored in a zip-lock type plastic bag, because you just never know (see also “baby wipes”)
- Anti-bacterial hand cleaner in small squirt bottle
- Quick drying camp towel
- Quick drying camp wash rag (look for them in camping stores, much different than regular bath towels and wash rags as they are thin, light weight, and absorb a lot of water)

3.4.2 Medication

Take enough of all your daily prescription meds and any other meds you may likely need. Pain meds such as aspirin or Advil are a must. Anti-diarrhea, antihistamine, and anti-nausea meds either over the counter (OTC) or prescription are good to have. Just take small amounts, well-labeled with their instructions and dosages, in an air/water tight container. Make sure at least one person that is deploying with you and in your same work assignment area knows about any serious medical problems that you may have and where the medication is should you need some in an emergency. Those kinds of medications must be carried on your person. All these meds go in your ruck sack, which goes with you.

3.4.3 Individual First Aid Kit (IFAK)

This contains a few medical supplies for minor injuries and is always on your person. Learn when and how to use these items. Find a small nylon pouch to keep them in that can attach to your belt. Items such as:

- six Band-Aid adhesive strips (3/4” is a good general use size)
- six 4x4 gauze pads
- two 4” gauze rolls
- one 1” cloth tape
- one small tube of antibiotic ointment
- six alcohol pads (rotate your stock frequently at home as they dry out)
- one pair of tweezers
- six Advil tablets or equivalent

3.4.4 Miscellaneous

These are an assortment of items, some that may be handy and some that you really should have:

- Sturdy leather work gloves, consider a spare pair as well, carried in ruck.



- You will most likely be working with your hands in an environment strewn with sharp objects. Protect your hands or you are out of action.
- One liter water bottles, suggest two of them – carried in your rucksack means you have two liters of water with you, suggest the wide mouth Nalgene bottles.
 - Having your own water when you need it is important and comforting. You can also clean a wound or wash something out of your eye.
- Para-cord, 20 feet (otherwise known as 550 cord) – this light weight but strong cordage has many uses, carried in ruck.
 - Allows you to tie something up, replace broken boot laces, link several things together, make a clothes line, etc.
- Duct tape, about ten feet, carried in ruck.
 - May be even more useful than para-cord and it stores wrapped around one or both of your liter water bottles.
- Flashlight (such as Mini-Mag) and/or head lamp (such as Black Diamond), two cell LED (CR123 or AA battery type recommended) and spare batteries for each, all carried in ruck.
 - A good quality LED light is durable and most are very bright. The head lamp means both your hands are free while wearing the light. You may be working and living without normal lighting, so flashlights are very valuable. Consider having all your flashlights use the same batteries.
- Small digital camera (if none on your cell phone), carried in ruck.
 - You want to document your adventure don't you? (just do not let it interfere with your job, and consider other's privacy).
- Small am/fm radio and/or digital music player (if not built into your cell phone), with ear phones/buds so you don't disturb others, carried in your ruck.
 - Use during your down time for information and entertainment.
- Two or more bandanas, one in your pocket and the rest in the ruck.
 - They pack small and have multiple uses, such as worn on your head to keep the sun off (because you forgot your hat), or to keep the sweat out of your eyes, clean cloth to wipe your face with, hot pad, wrap up small objects, and even blow your nose with.
- Folding camp stool (not chair) such as the Walkstool, carried in either your ruck or the duffle bag, depending on your needs.
 - Depending on the situation you may find having your own place to sit down other than the wet/muddy ground is very handy. Just make sure it is sturdy, light, and collapses into a small package.
- Water filter, such as the LifeStraw emergency water filter. Carried in the ruck.
 - If there is any doubt about the quality of the drinking water, filter it. Hopefully you won't need something like this, but given where you may be working it may be useful.
- Eating utensil(s) such as the CRKT Eat'N Tool, Eat'N Tool XL, or other metal camping type utensils carried in ruck.
 - You will always have utensils to eat with if you carry your own. Some of these, like the Eat'N Tool have multiple uses.
- Cell phone, if you have/use one, carried on your person. Don't forget the charger.



- Just understand that you may not have cell phone coverage due to the towers being down or the system being overwhelmed.
- Paperback book for your downtime entertainment, carried in your duffle bag.
- Deck of playing cards, ditto.

Again this is a list to get you started. Think about your personal needs and change or add to as you see fit. Just don't get carried away as you will have to pack and carry all of this "stuff".

3.4.5 In Your Pockets

No really, male or female you should have pants with pockets and the ones that have thigh pockets with flaps secured by Velcro or buttons are very useful, such as cargo pants or military style pants. They even make those in short pants for your down time!

- Driver's license
- Cash and credit card (credit card for emergency use, cash for everything else; suggest between \$50-\$100 per week of deployment; research your potential needs/costs prior to deployment)
- Insurance cards, medical and dental (automotive if driving your own vehicle)
- ID card from you organization (if one is provided), probably on a lanyard
- Pen and small notepad
- Folding knife (omit if flying!)
- Multi-tool (omit if flying!)
- Lip balm (such as Burt's Bees)
- Small LED flashlight, one or two cell (CR123 or AA battery type, same as your other lights)
- Epi-pen, if you have life threatening allergic reactions to something like bee stings, if you do, never go anywhere without one on your person! Always tell those around you about your allergy, where the epi-pen is, and what must be done if you have an allergic reaction. May want to carry a note from your doctor as proof that it was prescribed for you. If flying, call ahead to make sure TSA will let you bring it with you.
- One bandana

4.0 PRE-DEPLOYMENT CHECK-LIST

Once you have determined what equipment/supplies you will take on deployments, you should make a check-list to make sure you don't leave something behind. You may want a separate check-list depending on the season, environment, or mission type. Use the check-list every time! Finding out that you forgot something once you reach your deployment location is both disheartening and a little too late to correct.