

NORTH CENTRAL REGION HAWK

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Civil Air Patrol

February 2003

To Be Ready, Responsive, and Relevant

UPCOMING EVENTS:

AFRCC SAR Management Course

The IAWG will be hosting an AFRCC SAR Management Course the weekend of 21-22 June 2003 at Camp Dodge, Iowa (near Des Moines). The billeting costs will be minimal and the primary contact person for information and registration will be LTC Ralph Tomlinson (do@iawg.cap.gov).

SEMPER VI

Tool Time

Although there is no substitute for knowledge and experience in emergency services operations, it will be our equipment that can enhance or hinder an operation. There are a few concerns that must be dealt with:

- Not having the right equipment
- Having an excess amount of equipment
- Not knowing how to use the equipment

Your first concern is outfitting each member with the proper equipment. Need, size, and weight are of importance when selecting the right equipment to be used by members of the team. I encourage all new team members, whether they are on an aircrew or ground team to carry only the essential equipment to complete a mission.

Aircrew members have a disadvantage in that the amount of payload they can carry with them is restricted in size and weight. Most of the aircrew team equipment is pre-set and readily available in the aircraft. Aircrew members must keep in mind that there may be time when the airplane is involved in a remote site landing, requiring the crew to remain in less than a controlled environment until they are located or can safely RTB. You may agree or disagree but the following list is compiled from several years' experience as a crew dog, which does not necessarily match current regulations for content:

Aircrew Member Personal Equipment (to be carried on person or in small flight bag):

Lightweight Jacket	UV/Polarizing Sunglasses	Earplugs
Pencils/Pens/Notebook	Clear Plastic Straight Edge	Gridded Sectionals
Small Flashlight (red filter)	2-3 Chocolate Candy Bars	Bottled Water
Small Cassette Tape Recorder	Clean Handkerchief	Small Pocket Knife
Small lap/knee board		

Aircrew Survival Equipment (secured within the airplane):

Flashlight/Batteries	Small 'Camping' First Aid Kit	Signal Mirror
Space Blanket/Crew Members	Sealed, Water-proof Matches	Strobe Light
Sealed Dehydrated Food	Breakdown Saw	Small Deck of Cards
Orange Vests/Crew Member	Area Topographical Map Book	Small Compass

Ground Teams- Your first concern is outfitting each member with the proper equipment. Need, size, and weight are of importance when selecting the right equipment to be used. I encourage all

new ground team members to carry only the essential equipment to complete a mission. The list I propose is compiled from many years as a ground-pounder. You may agree or disagree. Try walking several miles in a wooded area, or up and down canyon land, or on shadeless, sun-baked sand hills humping a full pack. It will not take you long to determine what equipment you should have left home.

Ground Team Member Equipment (to be carried on the person, not the pack):

Footwear for Rugged Terrain	Signal Mirror	Highly Visible Vests
Whistle	Appropriate Field Jacket	Compass
Pocket Knife (small)	Handkerchief	Lip Balm
Hard Candy or Gum	UV/Polarizing Sunglasses	Appropriate CAP Cards

Ground Team Member Equipment (to be carried in the personal pack):

First-Aid Kit (small)	Water (Canteen)	Small Flashlight
Gloves	Sealed Waterproof Matches	Stocking Cap
Extra T-shirt	Extra Socks	2 'Ace' Bandages
20 feet of cord	Foul Weather Poncho	Fingernail Clippers
Blood Borne Pathogens Latex Gloves		

Rations: (enough for 24 hours)

Hard Candy	Chocolate Bars	Granola Breakfast Bars
Trail Mix	Beef Jerky	Dehydrated Packets of Soup

Your next concern is the right ground team equipment. Select and use only the equipment your team is trained and qualified to use. Depending on the experience and training of the Ground Team, the team may want to establish and store away 'situational equipment packs', such as Rescue, Advanced Medical, or Hazmat Response.

Vehicle Equipment- the equipment maintained for use in the vehicle by the Ground Team:

State Driver's Manual	Proof of Insurance Form	Hydraulic Jack
Tire Lug Wrench	Highway Warning Device	Fire Extinguisher
Battery Jumper Cables	Spot Light	First-Aid Kit
Chain	Flashlight	Signal Mirror
Entrenching Tool	Tire Chocks	Spare Batteries
Appropriate Maps	GPS	Compass
Appropriate Radios	Notebook/Pencils/Pens	Appropriate CAP Forms
Appropriate CAP Manuals	Extra Water	Extra Rations

Dismounted Team Equipment- the equipment packaged and maintained for use in the field by the Ground Team:

Signal Panels	Signal Mirror	Handheld VHF/FM
Radio	Field Medical Pack	Binoculars
Pocket Strobe Light	Area Topographical Maps	ELT/DF Equipment

On-Site Equipment- the equipment maintained for use on-site by the Ground Team:

Disposable Camera/Film	Notebook/Pencils/Pens	Stretcher/Litter
Backboard	Mass Casualty Medical Kit	Blankets
Entrenching Tools	Extrication Tools	Reserve Water
Reserve Rations	Blood Borne Pathogens Kit	Rope
Visible Protective Hard-hats		

When selecting equipment, the needs of the crew or team will be based on the potential situations they find themselves in. Common sense and experience will tell you what you will need.

It is important to understand that it is not necessary to stuff all your equipment into the confined space of an airplane cockpit or hump all of your equipment into the field, if there is no chance you will need it. Knowing how to make a 'stretcher' from two coats and two large sticks may eliminate the need to carry a heavy stretcher into the field several miles. The most experienced crews and teams will be seen carrying the fewest pieces of extraneous equipment, and only what they will need. Whatever equipment you choose, make sure all members know how to use it and it is just not along for a fashion statement or to seemingly impress others. This includes knowing how to change a flat tire on the vehicle.

The best piece of equipment you can carry with you is your brain. At any time you can be separated from your equipment, but rarely have I seen anyone separated from his or her brain. But then.....back in 'ought 2' I remember this ground team that tossed out the vehicle tire jack and lug wrench to make room for their personal equipment. Guess what happened to their vehicle enroute to their search area? So, even with that piece of equipment, you have to know how to use it.....

ALCYONEUS NOW

Weapons of Mass Destruction

Weapons of mass destruction (WMD) are intended to cause a large number of casualties. The release of a WMD will be either by explosive delivery or a 'without notice' timed release. With the exception of a nuclear device, WMD are designed to release and spread hazardous material. The routes of exposure will likely be inhalation, ingestion, and absorption through the mucous membranes. An explosive device has the added benefit of injection of the hazardous material from flying debris.

In order to be effective, the hazardous material must be of a high enough concentration for its desired lethal effect as a weapon. An outdoor release is subject to weather and associated winds sunlight, or moisture that can widely disperse the material, while also diluting out or degrading the concentration and potency. An indoor release is more efficient because the enclosed environment with forced ventilation minimizes the amount of material needed to deliver a lethal concentration of the material. The effects of material dispersed by a WMD can have an immediate or delayed effect on the populace.

With the exception of a nuclear device, responders to an emergency may not know that a WMD and its associated hazardous material is involved. There are certain signs that can be associated with the spread of hazardous material:

- Clouds or Plumes- Unusual mists, clouds, or drifting plumes in the air around the incident site are indicative of some aerosol chemical or biological agents.
- Odors or Tastes- Unusual odors or tastes are also indicative of some aerosol chemical or biological agents.
- Fires- Fires that display unusual behavior or with unique colored smoke are indicative of some aerosol chemical and biological agents.
- Illnesses or Death- Unexplained patterns or increased numbers of illness or deaths, with no logical reason are often associated with hazardous material contamination.

It is not likely that the Civil Air Patrol will be involved with first responder activity associated with a response to the aftermath of a WMD. However, with 60,000 members nation-wide, it is possible that we could be caught up in such an attack. The more we know about the spread of hazardous material, the more we can assist others also within the attack zone.

CREW'S CONTROL

Motivational Safety Violations

Often an unsafe condition can arise from group interactions, motivations and perception. Personnel are sometimes forced into unsafe practices from misdirected peer or supervisory pressure within group interaction. A common motivational problem that occurs in individuals or small groups is the violation of good safe practice by pressing or insisting on continuation of a 'bad' situation.

Perception Mind-sets Resulting in Unsafe Acts:

- Temporal Distortion- a temporal distortion occurs when the mind has focused too long and hard, with a resultant battle of perception and reality. It is a normal response to high stress over a period of time. Their reactions are slower and perceptions become distorted.
- Expectancy- this is focused anticipation, where an experienced person in an operation has already perceived the outcome. This expectancy can lead to pressing and inattention, which in turn leads to safety violations.
- Trouble-shooting Errors- it is common for experienced personnel to develop programmed logic and responses to a given situation. This can lead to safety violations from a combination of expectancy and Channelized attention. When dealing with safety, it is good to also plan for the exception.
- Fatigue- fatigue is the leading cause of safety concerns in an emergency services operation. A well-rested mind and body will make better and safer decisions.

Mission accidents or incidents commonly occur within the first fifteen minutes of the sortie, when the crew is anxious to begin the sortie. There is a perception that for the 'welfare of the victims', time is of the essence so safety concerns can get pushed aside. Another motivational problem is 'get-home-it is', where after the sortie or operation has concluded; there is a relaxing of safety policies and procedures in order to get home quickly. In mission operations, safety is a 24/7 concern. No perception or mind-set is justification for violation of the three-Rs of safety; Rules, Requirements, and Regulations.

SURVIVAL SENSE

Survival Sense- Setting Priorities

Every survival situation is a small scale Emergency Management Incident. In this particular incident, it is you (as well as others in your group) that is the victim. There are four quick mental steps to establish control over your survival destiny: **Stop, Think, Observe, and Plan (STOP)**.

Stop- Set aside the fear, and face the realities of the situation. Fear, panic and a negative attitude will not change the situation you are in. If you survive, it will not be a matter of luck. It will take a positive mental attitude, skill, and a plan of action to make things happen.

Think- Evaluate your situation realistically regarding the essential threats to your survival. If you do not work towards what is important and right, you may be working towards the wrong thing that will worsen your situation. The main elements of setting your priorities to support your plan of action are to include:

- Immediate injuries, illness, or physical health concerns of you and your group
- Short, intermediate, and long-term threats to life
- Mental, psychological, and emotional condition of you and your group
- Immediate and projected weather that will affect your situation
- Available resources for shelter, fire, water, and food

- Available equipment to help your situation
- Location, terrain and surrounding environment that will affect your situation and plans

Observe- Observe your surroundings and assess the threat level, to determine how it all impacts you and your group. The following is a list of life essentials and survival time to assist in determining the threat level:

- Serious threats to life such as fire, falling, or drowning can kill immediately
- Lack of oxygen can limit survival time to 3-6 minutes
- Life-threatening injuries can limit survival time to 30-60 minutes
- A lack of shelter from the elements can limit survival time to 3-4 hours
- Dehydration from a lack of water can limit survival time to 3 days in extremes
- Starvation from a lack of food can limit survival time to 3 weeks

The threat level you observe will determine your immediate priorities in establishing your plan of action.

Plan- A plan of action is essential to survival. However, the first thing you must do before sitting down and making plans is to take care of the most essential threat to your survival; removing you and your group from immediate danger, then stabilizing life-threatening injuries. Once the immediate threats are removed, you can establish your group 'goal for survival'. Openly discuss your situation with a focus on what you know, what you do not know, and what you need to know. When that is essentially done, it is important to evaluate the available resources at hand that can help you meet your survival goals. But, it is important that you do not dwell too long on the initial discussion and plan of action. It is more important that you establish the other essentials for life:

- Seek shelter to protect you and your group from the elements.
- Build a fire (if necessary) to remain warm and dry, also to be used as a signal.
- Rest is necessary to find out how you and the group are doing, to establish a baseline of what your body is capable of doing.
- Obtain a water source to limit the effects of dehydration.
- Establish a positive mental attitude, by some form of normalcy that is contrary to the situation you are in. Tell a story, make a joke, or do something you would normally do in your day-to-day routine.
- Activate your plan of action.

Since survival is nearly 100% psychological challenge, the greatest hurdle the victim must clear is overcoming mental attitude. The brain becomes the greatest resource for survival.

MISSION READY

Locating Objects in a Debris Field

All search and rescue operations proceed through four phases. The search function consists of the 'locate' and 'reach' phases, with the rescue function containing the 'stabilize' and 'recovery' phases. During the recovery phase, the unit may be called upon to help locate vital objects needed for the investigative process. So, locating these objects in a debris field may be necessary. The probability that searchers in the area will find the objects is never certain, but good search techniques within a debris field can improve the likelihood of locating objects of investigative interest.

In order to assure a high probability of detection for the objects, it is important to take into consideration the following:

- The size and shape of the search objective(s)
- The number of search personnel available
- The size of the search area

- The weather conditions
- The terrain and ground cover

Searcher Spacing:

Search formations are established for visual probability of detection based on the searcher spacing and area conditions. The correct visual distance spacing between searchers will enhance the efficiency and effectiveness of the search. This visual distance spacing is called '**Critical Separation**'. Critical separation is the maximum distance at which a searcher can recognize an object on the ground. The searchers will set their spacing to twice that distance. Maintaining critical separation will place a high probability of detection for the objects you are looking for. A small search object in tall grass or wooded and hilly terrain may require a substantially closer separation than would be required for a large object in short grass and unobstructed flat terrain.

* Note: It is more efficient to search an area twice with wide spacing than once with narrow spacing.

Required Equipment:

- Topographical detailed map of the search area
- Global Positioning System Receiving Unit
- Marker Flags (Lime Green)
- Marker Flags (Hunter Orange)
- Marker Tape (Hunter Orange)
- Orienteering Compass
- Notebook and Pencils/Pens
- Camera with appropriate film (digital cameras are suggested)
- Handheld Radios

Guidelines for Searching a Debris Field:

- The average trained search team will search a one-mile distance in 3.5 hours
- In a debris field, a routine line search pattern is effective as long as members can maintain critical separation and visual contact with each other
- The number of searchers managed by one ground team leader should be between 6-12
- Stay alert and maintain a positive mental attitude for effective searching
- Be able to recognize when you are no longer effective as a searcher
- Develop a habit of aggressively looking around while searching
- Periodically look back in the direction from which you came
- Carefully chart all searched areas
- Never touch an object in the debris field; document it, mark the position and move on
- All repeat searches within the same area should be at 90 degrees to the initial search
- The most experienced personnel should maintain the outside positions as navigation leads
- The safety of the searchers is more important than the mission itself

Search Procedures:

1. The Team Leader will identify the starting corner of the search area by GPS, marking the position on the topographical map.
2. Based on the contour of the terrain and natural barriers, the Team Leader will determine the search grid to be searched.
3. The projected search grid will be sketched onto the map.
4. All turning points within the grid will be identified with latitude/longitude coordinates to be entered into the GPS unit as 'way points'.
5. Based on the established grid on the map, the Team Leader will set a magnetic compass direction for each sweep of the grid.

6. The Team Leader will determine the 'critical separation' for the area conditions and search objectives, lining up the searchers accordingly, with the most experienced members on the outside of the search pattern for team navigation.
7. The outside search team members will monitor the direction of the team using the compass directions.
8. Each outside search team member will place a green marker flag at their starting positions.
9. The Team Leader will maintain a position towards the middle and behind the team to monitor and document the search of the debris field. *
* If there are enough personnel on the team, a member should be assigned to the Team Leader to assist in documentation.
10. As the team sweeps through the grid, the outside navigation members will periodically place (about every 20-30 meters) a green marker flag to mark the searched perimeter, with a final flag at the end point of the grid.
11. After the initial sweep, the Team Leader will establish a new magnetic compass heading and realign the search team according to 'critical separation' extending out from the last green flag on the inside of the sweep.
12. The team will proceed to sweep again through the field. On a second sweep, one of the outside navigation members will be traveling along the line formed by the previous sweep's green marker flags. The navigation member should pick up the flags as the team sweeps through the grid for use as the search expands.
13. This process is continued until the entire mapped out grid has been searched.
14. To increase the probability of detection, a second search can be conducted at right angles to the first search within the same grid.

The following procedures will be used if the search object is located within the grid:

1. The member locating the object will mark the spot with an orange marker flag, as close as possible to the object without touching it. *
* The object must not be touched or disturbed for safety and investigative purposes by any member of the team.
2. The Team Leader will be notified and move to the location to complete the following investigative tasks:
 - Photograph the object as it was found.
 - Take a GPS reading to establish the coordinates of the object.
 - Document the object in a notebook with a short written descriptor, the GPS coordinates, and a number of the picture on the film for future reference
3. If the object is significant to the investigative search objective, mission base should be contacted immediately to notify the 'investigation team'.

Editor's Comment: As in all procedures presented in this section, the above represents a point of view as a 'best practice' of many good practices. It is up to the reader to determine if the procedure should or should not be used in their operations. At the very least, an inexperienced crew and/or team can benefit from trying them out.

GOING FROM GOOD TO GREAT

Why Customers Leave

We in the Civil Air Patrol are a 'service to the community' business. We are in business to serve the community, with our whole emergency services existence dedicated to that. It is important that we market our capabilities to the agencies that may or may not know how much they need us. In our nation's post-September 11 domestic agenda, our services are in a transition to an extreme element of disaster relief and consequence management. It will be these services the community will expect to have from our organization, if we are to be of service.

A Company that has a focus of 'service to the community', whether it is non-profit or for profit, needs to know how to attract new customers and retain existing customers. Without a solid customer base or the ability to expand that base, the Company will soon die a slow agonizing community service death, or a quick and brutal business execution with monetary losses. In the world of business management, companies do not survive on good will alone, nor thrive on good intentions. Customer loyalty is only as strong as the next company that comes along that offers a better service or product. Maintaining customer loyalty is not necessarily related to price, but statistics have shown it is related to quality of service related to price.

Once we have a client interested in our CAP services, how can we keep them so we can thrive as an organization? It has been determined that customers leave because of the following eight categories:

- Core-service failures- this is related to being unable to provide the offered service
- Service-encounter failures- this is defined as failures in the personal interactions between customers and providers. This is directly related to misconduct, uncaring, impoliteness, or being unknowing.
- Price- a customer will leave over high prices, price increases, unfair pricing strategies, and deceptive pricing practices.
- Inconvenience- difficulty in obtaining the service or delays in service.
- Employee response to service failure- reluctance in providing the service, no response to requests for service, or contrary (negative) response to requests for service.
- Ethical problems- incidents of dishonest or intimidating behavior will drive customers away.
- Attraction to competitors- a customer is more likely to switch to a better provider than they are to leave an unsatisfactory one. A customer is attracted to quality service.
- Involuntary- incidents beyond the control of the provider can contribute to customer loss.

It is important to note that the provider controls the first six categories. If we in the Civil Air Patrol can control those, the last two will have little impact on the mission we can provide to the customer.

It was also determined that a majority of the time a customer leaves for a combination of two or more of the above reasons. Studies have shown that when a customer leaves a provider they are inclined to tell on an average of 20 other people why they were dissatisfied and left. However, statistics also have shown that when a customer is satisfied with a service, they are only inclined to share that 'good' news with only 4 other people. What this means is that every time we screw up and make a client or customer unhappy with our service, they are going to tell five times as many people why they are unhappy (think potential customers), compared to the number they will tell if they are happy with the service. Relying on a 'word of mouth' marketing strategy in drawing new customers will in the long run have a negative impact on your customer base. Also, it was discovered that an unhappy customer would inform their former 'provider' why they left only about 7% of the time. Only one in fourteen dissatisfied customers will tell you why they are dissatisfied and no longer want your service. A service organization that does not routinely solicit feedback from a customer is likely to lose that customer to a provider that does.

With the above in mind, the creed that we must adopt to market our services, develop and maintain a customer base is as follows:

- We will offer a service to our customers only after we have demonstrated we can provide a quality service with consistent results.

- We will work closely with the customer to clarify and document all their needs.
- We will do whatever is possible to meet the needs of the customer in providing that service.
- We will do whatever is possible to adapt our services to the customer's needs, instead of modifying the customer's needs to meet our services.
- If we fail in providing a service, we will make every attempt possible to help the customer in meeting their needs.
- We will not offer excuses, but will choose instead to offer options to the customer for fulfilling their needs.
- When we provide a service to a customer, our members will be expected to dress and act like professionals, demonstrating knowledge and confidence about the service that they are providing.
- When a service is requested we will provide that service in a timely manner.
- For all available services we will provide our customers with appropriate names and contact information of members who will act as the liaison between the customer's needs and our service.
- We will periodically evaluate our services to make sure the customer is provided the best available services, using proven technology with competent training.

The essence of the 'Customer's Creed' is that we will do whatever we can to provide the customer with our best people, using our best equipment, with our proven techniques and procedures in a timely manner to fulfill their needs. If we can do that, our customer base will grow along with the demand for our services.

COMMENTARY

To all Directors of Emergency Services and Operations: We in the Civil Air Patrol have an identity crisis. For many, many years we have practiced our procedures and techniques at length, and participated in a few missions here and there. At times of state, regional, or national disaster or emergencies we often wonder why we were not called on to perform our duty and apply our trade to help others in need. Instead of a marketing concern, I want to address this as an emergency services' concern, because we can change this right now. We are like an adolescent in athletics. We are sitting around and wondering why we are not playing in an athletic contest. We are sitting on the bench and wondering what it is going to take to get into the game. Just as any coach would tell you, I will share with you the secret. There are few, if any gifted athletes who can walk out on the field of play and gain superstar status based on press clippings or verbalized self-worth. The athlete must demonstrate the skills on the field of play. A good athlete has to practice hard on the basics and develop consistent skills that can be used by a team. Then, the athlete must show an interest in playing as a team member to apply those skills for the good of the team. The athlete that trains hard and plays well as a team member will get the attention of the coach. Once the coach has noticed that the athlete has a skill level that fits in well with the team, it is likely the athlete will get a chance to play. How much the athlete plays is based on how well the athlete performs in game conditions. The better athletes will get the most opportunity to play. It is that simple. So, what we need to do as Directors of Emergency Services and Operations is to get our people well trained in the skills that can be applied in the team effort as described by our customers. We must practice those skills harder than the next person to be the professionals that will get noticed by our customers. We need to demonstrate those skills consistently to the customer in our practice exercises and evaluations. When we get the opportunity to perform for our customers, we need to take advantage of the opportunity and make sure that we are the very best at what we do. We must perform to the customer's expectations so that there is never any

doubt or disappointment, and the customer's team has the best chance of winning. In simple terms we must stop complaining, practice hard, show the coach what we can do, do it better than anybody else, get off the bench and get into the damned game.

Bruce Marxsen, Col-CAP
Director of Emergency Services
North Central Region

DID YOU KNOW?

Snow Blindness

Polarizing sunglasses are the easiest solution to prevent snow blindness. But, in case you do not have any available, you can fashion a funky set of eye protection by cutting a slit in a piece of cardboard, plastic or other material. In the absence of any material to block out the bright glare, the use of a natural eye black like mud, grease or soot can do. Smear some under your eyes to cut down on the glare and look like you are ready to play in the next Super Bowl.

CHECK IT OUT!

Check out this website from EMI for FEMA. It is another home-study on-line course that you can take on line, or download and submit your answers to a final exam at a more convenient time. With a submission of the final exam and a passing grade of 70% or greater you will earn a FEMA Certificate at no cost. This particular course is an excellent home study to learn efficient and effective ways for decision-making and problem solving for the emergency response leader.

<http://training.fema.gov/EMIWeb/is241.htm>

'Decision Making and Problem Solving'

Words of Wisdom- Coffee Cup Advice from the Military Pros

If everyone is thinking alike, nobody is really thinking.

Not forcing a bad situation is good.

Victory in battle will depend on execution, not plans.

If you are riding ahead of the troops, stop every now and then to make sure they are still there with you. (from an old U.S. Cavalry saying)

FAMOUS QUOTES

Battles may be fought with weapons, but they are won with men. (Gen. Omar Bradley)

SUBMISSIONS

Queries, suggestions, and news items are welcome. Please submit to the following addresses:

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The next issue of the 'North Central Region Hawk' will be sent out on or about 15-Apr-2003. Please have information you would like to be considered in that issue to my attention no later than 01-Apr-2003.