

NORTH CENTRAL REGION HAWK

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Civil Air Patrol

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To Be Ready, Responsive, and Relevant

This form of electronic information will be published on a bi-monthly basis to share emergency services information across the North Central Region of the Civil Air Patrol. It is my hope that each of our seven Wings will share information with each other through this format. The intent is to locate and disseminate the best practices we see from the Wings so others can benefit from the wealth of experience and knowledge that the North Central Region has within its ranks. This electronic publication will contain various tidbits of knowledge and procedures to try. It is in no way intended to force each Wing to comply with what is presented. The information presented represents the 'best practices' I and others have seen, but does not necessarily mean it is the 'best practice' out there. If you know of a special practice or procedure that should be included in the next issue, please send it to my attention either electronically or by mail for consideration.

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

Semper Vi

Terrorist Target Vulnerability

In planning for emergency response to a terrorist attack, it is important to conduct a vulnerability analysis of potential targets. A terrorist organization needs to keep their opponent guessing as to where they will attack next. It adds to the anxiety of the people. If the government cannot anticipate where the next attack will occur and the terrorists can seemingly attack at will, this will lead to overt fear within the populace, moral decay and a potential collapse of social infrastructure. It will be rare that a terrorist cell will attack defensive strongholds. Terrorists will attack where their enemy is weakest, the least prepared, and at a time when their enemy least expects it. The credo of a terrorist cell is, "why attack a tiger, when you can attack a lamb." Terrorists are least likely to attack a military post, as you would expect during a war. Terrorism more often than not is an unconventional attack on people and society, and not against a military objective or facility.

1. The primary targets for the terrorists will be in large metropolitan areas, focusing on high visibility targets that will gain the most media attention from public assembly, or symbolic significance with an expectation of mass casualties. When the government moves to shore up the defense of highly populated areas, with the idea of protecting the most people, the terrorist will then plan for attacks on areas that are not as well defended.

- Public assembly areas with media coverage
- Public buildings
- Mass transit systems
- Places of high economic impact
- Telecommunications centers
- Places with historical or symbolic significance

2. When the government moves to shore up the defenses of high visibility targets, the terrorists will focus on those areas that are not defended but have social significance. These targets will likely be infrastructure related, with an expectation of considerable destruction to facilities and the idea of replacing routine activity with overt fear.

- Civilian and/or military installations
- Financial institutions

Industries that manufacture 'sensitive' material
Infrastructure facilities for water, electricity and gas
Aviation transport

3. After the government resources are extended to defend targets of high visibility and social significance, the terrorist will focus on targets where a defense is not justified but will have significant psychological impact. Targets with psychological impact are designed to create chaos in the minds of the people to quickly bring down morale, which is intended to lead to social collapse.

Sports arenas
Parks
Schools
Hospitals
Shopping centers
Live stock feedlots
Food production facilities

4. When the government realizes that it cannot continue to expend resources to defend all potential targets, it will defend those it can as determined by the will of the people. This is when the terrorists will attack targets of opportunity, to prove that they can attack at will wherever they want, whenever they want and the government is powerless to stop them. With targets of this nature, the more society believes the target is improbable, the more probable it becomes as a target to the terrorists.

Highway bridges, tunnels, and exchange systems
Railway exchange centers and bridges
Electrical power and relay stations
Airports
Water reservoirs

There are a few things that can be done by the CAP to minimize the potential for such an attack:

Awareness- the CAP needs to remain aware and vigilant of the potential for an attack and assist emergency response agencies in identifying potential targets for further analysis and planning for protection or emergency response.

Due Diligence- the CAP needs to develop a situational awareness with their surroundings and activities to be able to identify key indicators of a terrorist attack from their routine/daily operations, with a mechanism for reporting what is seen.

Presence- the CAP needs to provide a security presence for potential targets, by incorporating potential targets as part of their training plans and exercise sorties, which in turn disrupts terrorist plans that rely on the lack of security.

Crew's Control

Human Causal Factors in Safety

There are many human factors that can contribute heavily to any situation, resulting in an unsafe practice or condition. Emotions, diminished awareness, and attention spans are those leading causal factors for unsafe acts. Most safety violations occur because an individual is too focused with the situation or incident to realize a safety issue has risen outside of the focus zone. Here are a few of those factors that misdirect attention:

- Task Saturation- personnel have too much to do, and not enough time to do it. Concerns for safety usually take a secondary role.
- Distraction- this is an interruption of conscious attention, due to a non-task related event. The personnel have their focus diverted by a seemingly innocent event, opening a door for potential disaster.
- Channelized Attention- the attention span of personnel is re-directed to a less hazard event, and away from the greater potential for danger. This can be from external or internal sources of sights, smells or sound.
- Inattention- inattention to detail is the greatest violation of a safe operation. This usually occurs when there is boredom or a lack of a challenge.
- Habituation- any process or procedure that has been adapted to after long exposure, is usually the process or procedure that will be over-looked, causing an unsafe condition.
- Negative Transfer- this occurs when something is learned so well it is performed subconsciously. But, when a different situation occurs, the learned response is not appropriate but is used anyway.

While on a mission, the safest act is to become totally aware of your surroundings, adapt to the changing situation, but never put the situation before the safety of the team.

Survival Sense

The 'Golden Hour'

In long-term situations of survival and acute traumatic accidents, there is a time element called the 'golden hour' where an individual anticipates an end of the situation after seeing a rescue plane, ship, or first responder. This was first noticed several years back in hospital emergency rooms where for reasons unknown an inordinate number of injured patients died within an hour of arriving at the health care facility. This was also noticed in emergency situations where the in-bound ambulances exceeded an hour from the time the injured person was picked up, triaged, stabilized and transport began. Medical professionals have surmised that victims have a tendency to quit the fight, because they feel help is just around the next corner and minutes away. Many accident victims (particularly injured) have been known to die within an hour after they anticipate their 'rescue'. It will be within this hour that the victims will relax their focus and do things that are contrary to what got them to the point of being 'rescued'. They will do something foolish that will worsen their situation. For the victim, the best advice is to keep fighting the fight until he/she is 100% back into routine and normal activity. A sprinter in a race, does not race to the tape. The sprinter races to a point 10 meters beyond the tape. This also applies to the search, location and rescue of missing persons. The moment the site is identified, the clock starts and there is less than an hour to locate and rescue the victim on the ground, before handing the victim off to the next chain of emergency medical care. For the searchers, the most critical time for the victim starts the moment the site is identified and 'help' is on the way. Let us hope that it arrives before sixty minutes is up. Time is always of the essence, particularly to the victims, so it is important in all survival situations to respect the 'golden hour'.

Mission Ready

Radio-Out Air-Ground Guidance Procedure

One of the more difficult aspects of a search and rescue mission is the air-ground navigation/ guidance sortie, when it is necessary for an aircrew to lead a ground team from a staging point to a rescue and recovery site. The sortie is complicated by the inability of the aircraft to fly as slow as a vehicle can safely drive, and the ground team is not aware of where the site is located.

Various methods have been used over the years, and the following is a suggested procedure to follow if there is no radio communications between the aircrew and the ground team, although visual contact can be maintained. It can also be used to limit unnecessary radio traffic that can sometimes lead to confusion between the aircrew and ground team. It is effective, and with practice it can be very efficient.

Aircrew Instructions-

The mobile ground team should be staged at a pre-arranged access point close to the search area. After the aircrew has located the target area, the crew will need to determine the desired return route for the mobile ground team to take. Once the mobile team is enroute, the aircrew should use the following techniques:

- Fly at an altitude of 1000 feet AGL ahead of and to the right of the mobile team, along the selected route of travel.
- Fly the route as many times as necessary so the mobile team will not lose sight of your aircraft.
 - When flying the return track to lead the mobile team, it is important to fly back towards them on their **left**, before again leading them on their **right** along the selected route. The track is a counter-clockwise pattern, leading the team from their right and returning on their left.
- When the mobile team is to be approaching an intersection where a turn is to be made, encircle the intersection as tightly and safely as possible to signal the mobile team of the upcoming turn.
 - A **right-banking turn** will indicate to the mobile team that they will be turning to the right at the intersection.
 - A **left-banking turn** will indicate to the mobile team that they will be turning to the left at the intersection.
- Once the mobile team has correctly negotiated the turn at the proper intersection, continue the flight along the selected route ahead of and to the right of the mobile team at 1000 feet AGL.
 - If the mobile team has made an incorrect turn or is traveling down the wrong road, the aircrew should maintain the 1000 feet AGL and fly directly down the road the mobile team is on towards the vehicle with the landing lights '**ON**'. This will indicate to the mobile team that they should stop and reverse direction.
- When the mobile team is close enough to the site for a dismounted search, the aircrew should maintain 1000 feet AGL and fly directly down the road towards the vehicle with the landing lights blinking '**ON/OFF**', indicating that the team should stop and dismount.
- While the ground team is dismounting, the aircrew should fly directly over the assembling team in the direction the team should begin the dismounted search.
 - This should be done as many times as possible until the team reaches the site on foot. When the aircrew returns they should fly towards the team about a quarter to half mile to their **left** and then fly over the top of the team in the direction they should maintain to the site.
- When the dismounted team is close to the site, the aircrew should begin a tight figure-eight pattern, with the cross of the eight directly over the target.
 - The extent of the tight figure-eight pattern should be consistent with giving the dismounted ground team a good visual representation of where the target may be. Extending the pattern a mile or so out from the cross over the target can lead to confusion on the ground.
- When the ground team has reached the site, the aircrew should remain over the sight in a circular pattern to assist the team until assistance and communications relays are no longer needed.
 - When the aircrew is no longer needed by the ground team, signal panels in the form of an '**H**' will be used to indicate a 'return to base' for the aircrew.

Ground Team Instructions-

When an aircrew sights a target, it is necessary for the mobile ground team to reach a pre-determined spot for guidance to the site. The selected spot should be at a roadway intersection as an access point to a variety of directions the vehicle may have to travel.

- Make sure your vehicle and team members are visible from the air.
 - Be prepared to catch the attention of the aircrew with signal mirrors, strobe lights, spotlights, and/or panels.
- After contact with the aircrew has been made, do not lose sight of the aircraft.
 - The aircraft will be flying **ahead and to the right** of your vehicle's projected route at 1000 feet AGL so that a majority of the mobile team's observers can keep track of the aircraft without disrupting the vehicle driver's focus.
- Always travel within the established speed limits, maintaining the safety of the mobile team at all times.
 - It is the responsibility of the aircrew to maintain contact with the vehicle, not the role of the vehicle to keep up with the aircraft.
- If the aircrew has traveled too far ahead of the vehicle, it will fly back towards your position down the **left** side of the road.
 - When the aircraft is back over your position they will again assume a leading position to the front and right of your projected route.
- While enroute, it is important that the mobile team navigators monitor the route and maintain an exact location of the vehicle relative to an appropriate map and monitor progress.
 - This will be important to anticipate where the route will take the team and potential changes in direction the aircraft may signal ahead.
- A **right-banking turn** by the aircraft indicates they are circling over an intersection that your vehicle will turn to the right on.
- A **left-banking turn** by the aircraft indicates they are circling over an intersection that your vehicle will turn to the left on.
- Once the mobile team has negotiated the proper intersection, the aircraft will continue to the right and ahead of the projected route.
 - If the mobile team has made the wrong turn or is traveling down the wrong road, the aircrew will fly directly down the road towards the vehicle with the landing lights **'ON'** indicating you vehicle is to stop and reverse direction.
- When the mobile team is close to the site requiring a dismounted search, the aircrew will fly directly down the road towards the vehicle with the landing lights **blinking 'ON/OFF'**.
 - This will indicate the team is to stop and assemble for a dismounted search.
- When the team has dismounted and assembled, the aircrew will fly directly over the team position in the direction the dismounted team is to follow to the site.
 - It may be necessary for the aircrew to make several passes overhead before the team gets to the site. When this is necessary, the aircrew will fly back towards the team to the **left** of the team's route, before again flying directly overhead in the direction the team is to maintain.
- When the dismounted team gets close to the site, the aircrew will begin to fly a tight figure-eight pattern directly over the site.
 - The extent of the figure-eight pattern may extend out a ways, but the crossover point should be directly over the site.
- When the dismounted team arrives on the site, the aircrew will switch to a circular pattern of the target to maintain visual contact with the on-site ground team.
 - Communications between the aircrew and ground team should be maintained with the use of signal panels or body signals.
- The aircrew will remain on-site to assist until released by the ground team, or in case safety considerations prevent further contact.
 - The on-site team will release the aircrew with a signal panel **'H'** to indicate the aircrew can 'return to base'.

Air to Ground Guidance Procedures Summary of Signals:

- **Aircraft counter-clockwise race track pattern over the projected route-** The aircraft leads from the right and returns down the left
- **Left-banking turn over an intersection-** The vehicle will be taking a left turn at the intersection
- **Right-banking turn over an intersection-** The vehicle will be taking a right turn at the intersection
- **Aircraft flying directly down the road towards the vehicle with the landing lights on-** The vehicle is going the wrong way, must stop and reverse direction
- **Aircraft flying directly down the road towards the vehicle with the landing lights blinking on and off-** The vehicle must stop and the mobile team must stop, dismount and begin the search on foot
- **Aircraft flying directly overhead of the dismounted search team-** The search team must continue in the direction of the aircraft to the site
- **Aircraft flying in a tight figure-eight pattern-** The site is directly below the crossover point of the figure-eight pattern
- **Aircraft flying in a circular pattern over the site-** The aircrew is awaiting to be of assistance to the on-site ground team
- **Ground team laying out a signal panel 'H'-** Aircrew assistance is no longer needed and they are to return to base ('go home')

Going From Good To Great

Operational Leadership-

The most important aspect of a mission is competent, confident and effective leadership. In the Civil Air Patrol, the role of a Sortie Commander or Team Leader is to provide purpose and direction to volunteers working to accomplish difficult tasks, under stressful conditions. In sorties where the situation is clouded by uncertainty, an operational leader will do the following:

- **Motivate** the team with a 'can do safely' attitude
- **Communicate** specific instructions and seek feedback
- **Manage** assigned resources efficiently
- **Demonstrate** initiative in the absence of specific orders
- **Coordinate** effort in support of the mission sortie

A good operational leader must:

- Be technically and tactically proficient
 - Take charge when in charge
 - Adhere to established operational procedures
 - Develop a plan of action to accomplish the sortie
- Be responsible for your actions
 - Accept responsibility for team performance
 - Credit team members for good performance
 - Take full responsibility for and correct poor performance
- Know yourself and seek self-improvement
 - Know the strengths/weaknesses in your character and skill level
 - Ask questions of peers and superiors
 - Actively listen to feedback from team members

- Know your team and look out for their well-being
 - Put the safety of your team above all else
 - Take care of your team's physical, mental, and psychological needs
 - Resolve conflicts between team members quickly and fairly

- Set the example
 - Share the hazards and hardships with your team
 - Do not get discouraged when faced with setbacks
 - Choose the difficult right over the easy wrong

Did You Know?

Lightning strikes approximately 1,000 people each year in the United States. Of those, between 75 and 100 are killed. Sharks by comparison kill two or three people per year. If you are outdoors and lightning threatens, crouch down or curl up so you will be the smallest target possible. Do not hide under tall or isolated trees. (Outdoor Life, October 2002)

Check It Out!

For those of you who have attended the Civil Air Patrol's National Staff College, you are very much aware of the Meyers-Briggs personality-profiling test. I believe that this test is important for all Mission Coordinators/Incident Commanders, those mission staff wishing to be one someday. Well, if you have not yet had the opportunity to do so, or you feel that is important for staff members to take this test, check out the web sites below. There are two sites I recommend, with the first one a quick and simple means of taking the test and getting an almost instant personality type, along with a brief explanation. The second website goes into more depth as to the meaning of the various types and how they interact with other personality types. Both tests are easy to take and are free on-line.

Site One: www.humanmetrics.com/cgi-win/Jtype2.asp

Site Two: www.meyers-briggs.com/

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-Dec-2002. Please have information you would like to be considered in that issue to my attention no later than 01-Dec-2002.