



# CALIFORNIA WING CIVIL AIR PATROL QUARTERLY SAFETY BULLETIN

SECOND QUARTER, 2005

JUNE 2005

## WING COMMANDER'S CORNER By COLONEL VIRGINIA M. NELSON

The Sentinel is Civil Air Patrol national safety newsletter. CAWG has not had a safety newsletter for over a year. Welcome to the California Wing Quarterly Safety Bulletin. We hope to be able to produce this CAWG safety newsletter on a quarterly basis. Thanks go to Chief Master Sergeant Bob Rodemeyer, editor and 1Lt. Maile Bloxson, production and layout.

At the winter National Board meeting, Major General Dwight Wheless, our national commander, introduced CAP's new safety pledge. He has asked that the safety pledge be repeated at all CAP activities. Doing so is a reminder that we must think and act in a safe manner to protect us, those around us and CAP assets. We are all responsible for creating a safe environment in which to operate - be it in the air, on the flight line, on the road, on a drill pad or squadron meeting place.

The Air Force also stresses safety for its members. The Air Force Safety Center (AFSC) has created an Operational Risk Management (ORM) University. There are four computer based training programs that CAP members may participate in. You can access these programs through the National CAP web site by clicking on members and scrolling down to safety. While you are on the safety page, take a minute to look at the other resources that are available. I encourage all squadron commanders and safety officers to take the "ORM Fundamentals" online course. It is designed for Air Force members but applies to Civil Air Patrol also. Several CAWG members have told me that they have completed one or more of these classes and found them helpful. Cadets as well as seniors may participate.

Again, welcome to the premier issue of California Wing Quarterly Safety Bulletin. Look for it again next quarter with more information and ideas regarding safety.

## WHY ACCIDENTS ARE INVESTIGATED By Chief Master Sergeant Bob Rodemeyer

When viewed as an integral part of the total safety program, accident investigation is especially important to determine direct causes, uncover contributing accident causes, prevent similar accidents from occurring, document facts, provide information on costs, and promote the safety culture within an organization. Accident investigation concentrates on gathering all information about the factors leading to the accident.

**Determine direct causes.** Accident investigation determines the direct and contributing, or root causes, of incidents. The key questions asked by the investigator are: at what points did the hazard control system break down? Were rules and regulations violated? Did defective equipment or factors in the environment contribute to the accident?

Poor equipment layout, the very design of a job process, operation or task can contribute to an undesirable situation. Three primary sources of accidents have been identified after years of research: human error (on the part of the victim or others, including supervision), situational or poor process & operational design, function, or employee training, and environmental factors that include weather, location, time, etc.

**Uncover contributing accident causes.** Thorough accident investigation is very likely to uncover problems that indirectly contributed to the accident. Such information benefits accident-reduction efforts. For example, an individual slips on spilled oil on the floor of a hangar and is injured. The oil spill is the direct cause of the accident, but a thorough investigation might reveal other contributing factors or what is sometimes called the root causes: poor housekeeping, failure to follow maintenance schedule, inadequate supervision, lack of training or management emphasis on safety, or faulty equipment (such as a vehicle or aircraft leaking oil).

**Prevent similar accidents.** Accident investigation identifies what actions and improvements will prevent similar accidents from occurring in the future. The results of the investigation is a positive tool to help educate others in necessary preventative action and to help reinforce the safety culture in an organization. In simple terms, it is an example of what not to do again.

**Document the facts.** Accident investigation documents the facts involved in an incident for use in future education & prevention programs, and any compensation and litigation that may arise. The report produced at the conclusion of an investigation becomes the permanent record of facts about an accident. It may become necessary to reconstruct an accident situation long after the occurrence. To do so, the details of the accident will have to be recorded properly, accurately and thoroughly. Never guess or provide personal opinions when

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Please submit safety-related articles to:  
[Cheifrodey@comcast.net](mailto:Cheifrodey@comcast.net)

Submit safety-related events and other  
announcements to:  
[Songja@comcast.net](mailto:Songja@comcast.net)

SAFETY RESOURCE:  
[HTTP://LEVEL2.CAP.GOV/VISITORS/PROGRAMS/  
SAFETY/PRESENTATIONS.CFM](http://LEVEL2.CAP.GOV/VISITORS/PROGRAMS/SAFETY/PRESENTATIONS.CFM)

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conducting an investigation. Keep an open mind and document what is observed. What ever is written down must be factual, because it may be used later as a legal document, and your name will be on the report.

**Provide information on costs.** Accident investigation provides information on both direct and indirect costs of accidents. This information may be used to help develop compensation and recovery claims at the Corporate level. Cost data will be used to help in the education process, however, think about this question: What is life worth? A little safety and prevention up front will go a long way towards helping to never have to answer the question.

**Promote safety.** Accident investigation yields psychological as well as material benefits. The investigation demonstrates the organization's interest in member safety and health. It promotes a sense of accountability for accident prevention and shows commitment to a safe environment. A program where all members voluntarily participate promotes interest in the safety program, and develops an environment in which investigations most likely will not be needed, because of a lack of accidents and incidents.

Accident investigation is a fact-finding, not faultfinding, process. When attempting to determine the cause of an accident, the novice investigator may be tempted to conclude that the person involved in the accident was at fault. However, if human error is not the real cause, the hazard that produced the accident will go undiscovered and uncontrolled. Also, the person falsely blamed for causing the accident will resent the unjustified accusation and any disciplinary action. The member will be less cooperative in the future and will feel less respect for the organization's safety program. Investigators should always stress that the intent of an accident investigation is to pinpoint causes of error or defects so future accidents can be prevented.

Conducting an accident investigation is not simple. It can be difficult to look beyond the incident to uncover causal factors, determine the true loss potential of the occurrence, and develop practical recommendations to prevent recurrence. A weakness of many accident investigations is the failure to establish and consider all factors – human, situational, and environmental – that contributed to the accident. Reasons for this failure include:

- Inexperienced or uninformed investigator
- Reluctance of the investigator to accept full responsibility for the job.
- Narrow interpretation of environmental factors
- Erroneous emphasis on a single cause
- Judging the effect of the accident to be the cause
- Arriving at conclusions before all factors are considered
- Poor interviewing techniques
- Delay in investigation accidents

The trained investigator must be ready to acknowledge as contributing causes any and all factors that may have led, in any way, to the accident. What at first may appear to be a simple, uninvolved incident can, in fact, have numerous contributing factors that become more complex as analyses are completed. Immediate, on-the-scene accident investigation provides the most accurate and useful information. Also, don't be afraid to ask for help from a more experienced investigator. A second set of eyes can be very helpful. If you aren't trained or lack the necessary experience, make it a priority to seek out training and get it.

## It Works Both Ways!

Lt. Greg L. Williams

SQ 121 Safety Officer, Group 6 Safety Officer

One of the things that enable an organization like Civil Air Patrol to be so successful is that we all bring knowledge and skills acquired through occupational and life experiences to the program. Likewise, skills and knowledge acquired through CAP involvement can and should be utilized at home. Concepts like situational awareness, operational risk management (ORM), safety checklists, the I-M-S-A-F-E criteria, sterile cockpit, have application in every day life. These concepts can be applied; regardless of which hat you are wearing at the time.

Situational awareness means having a high level of awareness and alertness to surroundings regarding any hazards or dangers. Whether driving a vehicle, standing at an ATM machine, walking across a parking lot, entering a hotel room or your home, you should be keenly aware of any potential risks to your life or health. We are easily distracted by many things, and can overlook hazards or walk right into them. Stay alert and keep your situational awareness high.

ORM is a tool that we use to identify potential hazards, develop counter-measures to mitigate risks, and effectively implement the countermeasures to protect ourselves. There are three levels of ORM - strategic, deliberate, and time-critical. The time-critical level can and should be used routinely; it only takes a few seconds. You can use ORM principles to quickly assess the situation, review your options, and choose the best option to ensure safety.

CAP commonly uses safety checklists. Examples include pre-flight and post-flight checklists, ground team checklists, vehicle and airplane safety inspection sheets. Using checklists ensures that process steps critical to the safety of an operation are not missed. Do you have a mental checklist that you go through before driving your car? Is there sufficient fuel? Are tires in good condition? Are mirrors set correctly? Are objects or children out of my line of sight in front of or behind the vehicle? Sometimes, overlooking a simple task could lead to a tragedy.

The I-M-S-A-F-E checklist can be used routinely. Before you begin an activity, ask a few questions. Do I feel well enough to do the activity (Illness)? Am I taking medications that could compromise safety (Medications)? Am I under a high level of stress, compromising my level of concentration (Stress)? Have I consumed alcohol (Alcohol)? Am I too tired to perform the task (Fatigue)? Am I too upset about something to be able to concentrate (Emotion)? These questions help you to review levels of readiness to safely perform a task.

There are many distractions that compromise our ability to concentrate. A technique used by pilots is the "sterile cockpit". Certain phases of aircraft operation require a pilot's undivided attention. In these phases of operation, passengers should not distract the pilot in any way unless absolutely necessary. Many tasks require undivided attention in order to be done safely. Don't hesitate to tell others that full attention needs to be kept on the current task and you will be with them momentarily. Eliminate sources of distraction as much as possible (radio, cell phone). These are only a few of the tools and techniques utilized by CAP that can be put to use at home for the safety of you and your family. Safety is a full-time job. We want all of you to be safe at home, at work, at play, and at CAP.

### Safety Events:

16-17 Jul 2005 Standard First Aid & CPR for the Professional Rescuer (\$25)  
Bracket Airport, Laverne, CA – Contact Denise Edwards - flygal1@earthlink.net

8 Oct 2005 Group 7 Safety Seminar  
Amy Reserve Center Camp Pendleton  
Contact Dee O'Sargent – ladsyarg@adelphia.net