The Safety Beacon is for informational purposes. Unit safety officers are encouraged to use the articles in the Beacon as topics for their monthly safety briefings and discussions. Members may also go to LMS, read the Beacon, and take a quiz to receive credit for monthly safety education.

February 2018

New Year's Resolutions?

A great beginning!

George Vogt, CAP/SE

I am looking forward to a great year in CAP Safety! I know that might sound overly optimistic to some, and some might point out that I'm a little late with my New Year's Resolutions. ☺ But, I feel that optimism anyway. It has been a busy start to 2018. We are hard at work with some new initiatives, including cooperative cross-functional teams involving all areas of the National Staff, and spearheaded by the National Command Team. It seems that leadership has never been more supportive of our efforts to make Risk Management a part of everything we do in CAP. All of these cross-functional teams are following methods that take the time to recognize and deal with the risks that face us with our glider operations, our aircrews, our Cadet and AE missions, and even in our budgeting processes. Each of these efforts could be a model for figuring out how to get the mission done while minimizing risk and maximizing teamwork … I personally find it gratifying to be part of the effort.

It also looks like help is on the way! I'm sure some of you saw the on-line ads for volunteer members to be a part of the National Safety Staff. I'm extremely happy to say we received quite a few applications from some very talented and highly experienced members. I am looking through the applications now and will work with our National Commander to make some selections very soon! We'll make a great team!

I can't wait until the full staff is in place and we can really make progress on our Safety Management System, providing all our members with the tools and training and help they need to really make Safety Risk Management a part of all we do in the Civil Air Patrol. The New Year is starting out strong!

What Else is in the Beacon?

We've got a wide variety of features in this month's edition of the Safety Beacon Newsletter. As always, the main focus is Risk Management and how to properly apply it in all we do.

- A few short topics will bring you up to date on some program changes
- We'll take another look at a briefing that provides a great introduction to Risk Management in terms everyone will understand. If you haven't used it for a monthly safety topic, you ought to!
- There is some more information on what to do with those aging tires on your CAP vehicles.
- You'll learn why being a detective and repeatedly using the word WHY is the key to a good mishap review.
- There is a great article from a CAP member on an easy risk control you can use when flying cross country.
- We look at a few minor mishaps that share a common lesson in risk management.
- Take a look at a new change to CAPR 62-2 … when do you make that call to the NOC?

Safety Shorts

George Vogt, CAP/SE

(More) Help is on the Way - We're Hiring!: On the first page I told you we'd be expanding our National Safety Staff with a some very talented members. I'm also extremely happy to announce that help is also on the way to our Safety Office here at NHQ. We are hiring an Assistant Chief of Safety Risk Management. This will dramatically increase our ability to roll out our new Safety Program, as well as providing more tools and training for all our members. The job description is on our webpage and the application period will close-out on 5 March 2018. Interested? Know someone? Spread the word!

Where's the New Safety Regulation??: I've been making a lot of great progress on the new safety program. Let me give you a quick update on the schedule I'm working to meet.

Right now, the focus is on rewriting CAPR 62-1 which will focus on the application of risk management in all we do, following the Safety Management System model. This regulation will provide the context for everything we do in CAP Safety. The schedule? I'm hoping the draft will be complete in late April so I can discuss it with the CSAG and enter the comment process. We're hoping the regulation is near final by the National Conference, and on the streets about a month after that; the new designation will be CAPR 160-1.

Also in the works is the rewrite of CAPR 62-2, which will hopefully make the reporting and review of mishaps a lot easier to accomplish, with much clearer guidance. That regulation is on about the same timetable as CAPR 160-1, and will be called CAPR 160-2.

While those regulations are in coordination, we'll be working on creating new tools, and the training that goes with them, so all our members will know "how" to make the new processes work.

We will be working with IT to make some small changes to SIRS to make it agree with some of the new reporting requirements, and hopefully do a better job of walking members through the process.

Once the new regulations are on the street, we'll continue to upgrade and create new training to help with the safety risk management processes.

We'll also be working with IT on a total rebuild of SIRS. We want to have a robust data base of information about our mishaps so we can analyze trends of types of mishaps and their causes. But, we want to be able to gather that information without increasing the members' workload. That means an intuitive process that will walk you through your reporting and reviews.

Lots to do, but we're looking forward to seeing some improvements soon. I'll keep you posted!

When is NSOC? A lot of people have been asking. NSOC was originally planned as every other year, in odd numbered years. The most recent course was in June of 2017. NSOC is a prerequisite for the Master Rating in the Safety Specialty Track, and I know we've got some members in the Track that are wondering when the next course will be. I'm working hard to expand the attendance opportunities, including looking at how the course is presented. We hope to try a blended learning approach, with webinars, readings, assignments, and some other innovative on-line tools that members can use from the comfort of their own homes. Then the plan would be to have several short weekend face-to-face "in residence" top-off sessions, in various parts of the country, to complete that NSOC experience. I hope we can make this happen late in the year, but keep an eye on the Beacon for more updates.

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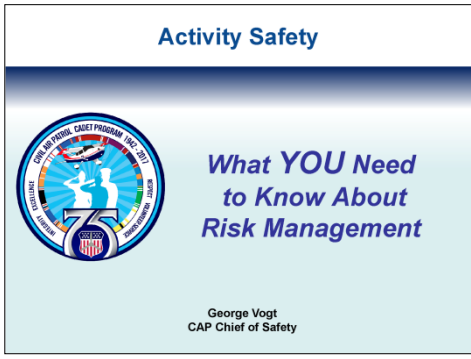
"Basic Risk Management"

I get quite a few requests for a quick briefing on the basics of risk management. Sometimes it is quick review for a group of senior members, or a safety briefing for cadets, or a risk management "initiation" for a group of new members. The Basic, Intermediate and Advanced Risk Management briefings in eServices are a bit dated and don't give a clear (or entertaining) look at how we can and should use risk management in all our activities. Those briefings are on the list of educational tools that will be completely revised. In the mean time…

On the Safety pages of the gocivilairpatrol.com website, there are some tools that we want all NCSAs, Encampments, and other activities to use. Here's the link: NCSA Safety

Click on the Opening Risk Management Briefing . This is the briefing that will take the place of the "Basic" risk management briefing that needs to be given to all NCSA/Encampment participants before the Activity gets under way. This will be the beginning of the NEW "Basic" Risk Management briefing. It is a great briefing to let a new member know about our approach to Risk Management or a great review for long-time members. Maybe even a great topic for your next monthly safety topic.

Follow the notes, and just about anyone can give the presentation. Risk Management doesn't need to be boring!



How Old Are Your Van Tires?

Well, it happened again, not too long ago…

Most of the vehicles in our CAP fleet don't drive nearly as many miles as your family car or vehicles used by commercial companies on a daily basis. Some of our CAP vans, for example, might only be used on weekends or for occasional trips.

In my own car, I drive enough miles per year to know that my tires are going to be replaced when the tread wears down, and that will occur long before those tires need to be changed because they are just too old to be safe. Yes, tires can die from old age, and that's what happened to the tire pictured here. This van tire was installed in 2007, so it was over 10 years old when it blew out doing 60 mph on an Interstate with a senior member and four cadets on board. The senior member carefully steered the vehicle off to the side of the road, but it could have been much worse.

The rubber in a tire breaks down just like the rubber in an old cracked and brittle rubber band. Some auto manufacturers recommend replacing tires at 5-6 years old. Some tire manufacturers recommend between five and eight years depending on usage and environment. Does your squadron or wing have a program to monitor tire age and replace them before they "die of old age?"

CAP/LG is currently working on enhanced guidance on replacement of aging tires, including the proper method for paying for those replacements. Units can get a good head start by checking the age of ALL their vehicle tires.

Just Ask "WHY!"

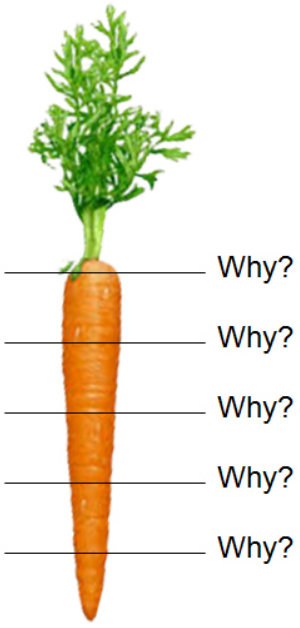
The key to mishap reviews

George Vogt, CAP/SE

One of the most basic ideas behind doing a mishap review is to find out WHY the mishap happened. It is only when we know WHY a mishap happened that we can begin to find out what we can do to prevent similar mishaps. A good mishap review should carefully determine WHAT happened, then look for all the clues about WHY it happened. I see quite a few mishap "reviews" in SIRS that list a sequence of events, but then don't ask the important questions of WHY it occurred and what can we do to reduce the chances of a similar occurrence.

That process of asking WHY is pretty easy. I gave you all a cheat sheet on how to use the "5M" method in the December Beacon. The 5 Ms will guide you through all the areas that might have caused or contributed to the mishap.

Another thing that can help you with the WHY question is something many of you have already heard of … it's called the "root cause" method. There are a lot of techniques and tools available when you're doing a root cause analysis, but one of the best is to repeatedly ask WHY. Some experts say you need to ask the WHY question five times before you really get to the cause, but I think you ought to ask the question as many times as you need to in order to "get to the bottom of it." Here's a little illustration that is a handy reminder:



An example? Let's pick something simple, like a member falling down and scraping their knee. The first thing you do is ask WHY they fell down. They slipped. We've asked WHY one time and don't have much to go on, do we? WHY did they slip? There was a patch of ice on the walkway. This is where the "root" can split.

First, you can ask WHY they didn't see the ice, and perhaps you'll find out they were talking, and not paying attention to where they were going. This knowledge can remind you that's it's important to warn people about the conditions on icy days, and remind people to help each other stay alert.

Next you can ask WHY there was ice on a busy walkway. Sometimes it's hard to remove it all in winter, but you can look at how your squadron removes ice and whether de-icing compound was used. Do you need to improve your ice-control process?

Sometimes it takes a few more WHYs before we really get to where we find a rule, or a process, or a training program that needs to be changed so we can really reduce little mishaps like this.

So what about the quality control on this review process? Well, the Squadron Safety Officers should be knowledgeable in this process, and should be able to help each review officer work through it. The Wing and Region Directors of Safety should definitely look at every review before their commanders see them, and make sure the right questions are answered. The final quality control is with the person who owns the program; the Commander.

I comb over every mishap that comes up to NHQ for closure. Quite a few have a nice account of WHAT happened, but no information on WHY it happened. In many of those cases the Wing Commander will comment that the review "was thorough and factual." Remember, we don't just want the "facts." The review officer is like a detective, trying to find out what's behind the facts. Commanders and Safety Officers should make sure the WHY is being answered.

Remember, the sole purpose of reviewing a mishap is so we can try to reduce the chances of it happening again. We won't accomplish that unless we know, and address, WHY it happened.

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Cross Country Risk Mitigation

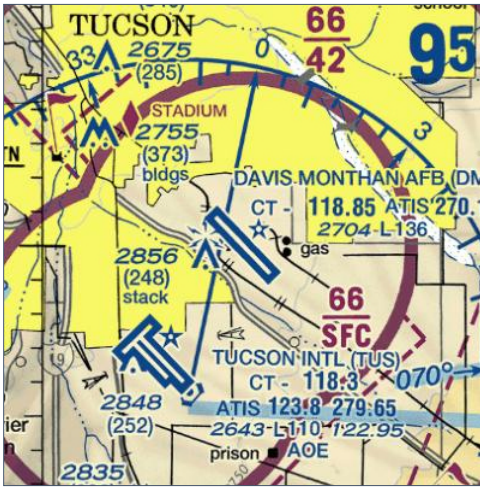
What's Your Altitude??

by: Lt Col Dave Mickle

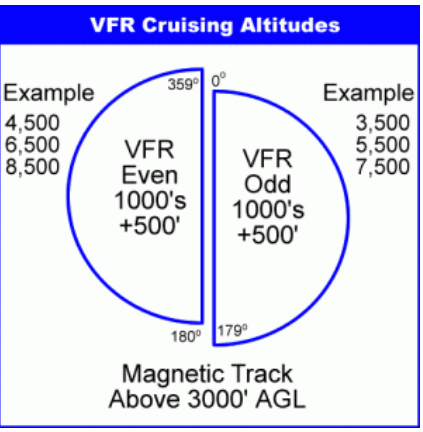
About the Author: *Lt Col Dave Mickle has been a CAP member since 2009, lives in the Phoenix area, and serves as the Assistant Director of Safety for the AZ Wing. I first met Dave when he attended NSOC in 2015. His wife, Capt Dolly Mickle is also a CAP member, joining in 2013. She serves as (among other things) the Wing Director of Professional Development, Group PD Officer, and Assistant Director of Safety for the Wing. I enjoy catching up with Dave and Dolly when I see them at the National Conferences and I thank them for being true friends of CAP Safety. Thanks for sharing this article, Dave!*

Recently I was given an A9 (maintenance transport) mission to pick up a pilot at Tucson Int'l (KTUS) and transport him to Payson (KPAN.) My route to Tucson started at Glendale Muni (KGEU,) direct to Gila Crossing (VPGLX,) direct TOTEC, then V16 to TUS. Along the V16 airway, cruising at 5,500 feet, I was advised by Albuquerque Center of traffic at my 6 o'clock position, same altitude, same direction, overtaking rapidly. The controller suggested that I make a right turn off course and climb a thousand feet. I did so and held that until the controller said I was clear of traffic. I never saw the other aircraft.

I landed at Tucson, picked up my passenger and departed on a direct route to Payson. About half way into the flight, cruising at 8,500 feet, it happened again. The ABQ Center controller advised me of traffic, this time at 12 o'clock, 12 miles, *same altitude, opposite direction*! I asked for and was given avoidance vectors and made a right turn off course. Just moments later we watched the conflicting aircraft pass just off our left wing in the airspace we had just vacated and at the wrong altitude for his direction of flight.



In both cases, Albuquerque Center was not in radio contact with the other aircraft. I wonder, what would have happened if I hadn't been in contact with them either? I might not be sitting here writing this article. And the Arizona Wing might be short one expensive airplane. I know some pilots are reluctant to use flight following, maybe because they think it's a hassle, maybe because they aren't instrument rated and aren't used to talking with approach controls or center radars. But, believe me, for VFR flying, flight following is the best free insurance you will ever have!



CAP's emphasis in Safety now is Risk Management through risk mitigation. "See and avoid" is a fine mitigation technique as far as it goes, but it's rather limited: You can't see what you can't see. Better to be aware of everything that's out there. To that end, nothing is as effective as having a radar controller with a view of the big picture looking out for you. Thanks, Albuquerque Center, for watching out for me!

NOTE: Lt Col Mickle's situation can be pretty common, especially when you are flying on north-south routes when your travel direction is primarily to the south or north but might vary a little between "a little to the east" and "a little to the west." Realize that not everyone is conscientious about always flying the correct VFR hemispheric altitudes. That risk can be controlled through diligent planning, good clearing with your eyes outside the aircraft, and the use of Air Traffic Control Flight Following. Thanks again, Dave!

Mishap Closeouts

Don't Ignore the EASY Risk Controls

George Vogt, CAP/SE

This month we have a common theme brought to our attention by several minor mishaps. To put it very succinctly, risk controls won't control risk if you don't use them.

An example we see in our everyday lives exists in every building that has more than one floor. Every set of stairs has a handrail. Why? One of the most common causes of falling is slipping or tripping on stairs. Something that can very easily control that risk is the use of the handrail. Invariably people will choose not to use the handrail because they have their hands full, or they're checking e-mail, or they just decide not to use it. If they trip, they will not have anything to support them or break the fall. A risk control that isn't used ceases to be a risk control.

Another example occurred when a squadron took their cadets for a nice day of sledding. It was spring-like, so they allowed the cadets to go without jackets and gloves. As you can imagine, one cadet wiped out and got their unprotected hand in between the sliding sled rail and the snow, causing a pretty nasty abrasion on the back of the hand. Anyone who has ever skied in springtime "corn snow" can tell you how painful and abrasive that snow can be if your skin isn't protected when you fall. In this case the gloves don't just provide warmth; they provide protection for the hands. The cadet with the swollen hand will tell you that a risk control that isn't used ceases to be a risk control.

In a couple other minor mishaps, *prospective* cadets were allowed to participate in the mile run while the squadron cadets were doing their CPFT. One cadet had minor problems due to a pre-existing medical condition the squadron leaders didn't know about. The other cadet aggravated a knee injury they had suffered several days earlier. First of all, prospective cadets aren't supposed to participate in rigorous activities during their "trial" period (CAPR 39-2), even if they "want to" … the prospective cadet does not get to make that decision. Why is that restriction in place? Primarily, it acts as a risk control, by ensuring the squadron's leaders of cadets know more about the cadet's capabilities and restrictions, and the cadet is more aware of the squadron's approach to risk management. By ignoring that rule and allowing the prospective cadet to participate in the rigor of a timed mile run, they demonstrated that a risk control that isn't used ceases to be a risk control.

The final example also involved a CPFT, and also happened in the mile run. In this case the cadet forgot his running shoes. Running shoes, as we know, provide traction, cushioning, stability, and offer a "control" over the "risk" of slipping, falling, or twisting. This cadet was allowed to run in street shoes so he wouldn't miss the chance to test. The hard-soled shoes didn't provide the proper support and the cadet limped away with a twisted/sprained ankle, unable to complete the CPFT. A risk control that isn't used ceases to be a risk control.

Granted, there are times when circumstances don't allow the use of a common risk control. If that is the case, then you have to realize that the risk just increased, and you have to decide if the task is still worth the risk. Are there other risk controls you can put in place that will adequately address the risk? That type of thought process needs to be a part of our approach to Everyday Risk Management.

"A risk control that isn't used ceases to be a risk control."

Interim Change Letter to 62-2

When to call the NOC

A new change to 62-2 is going on line about the same time this Beacon is released. The change clarifies when wings and regions should contact the NOC following a mishap or other type of significant event. Following this guidance will ensure that our CAP and CAP-USAF Commanders and their teams are aware of the significant events occurring in the regions and wings. It will also allow the National Staff to provide assistance to commanders, and offer best-practices and precedents on how similar situations have been handled in the past.

Below is the text of the new change, which will be incorporated into the new *Mishap Reporting and Review* regulation when it is completed.

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CAPR 62-2 is amended as follows. Paragraph 3 is deleted in its entirety, and replaced with the following:

3. Reporting Requirements. Following mishaps and other noteworthy events or occurrences (as defined below), it is imperative CAP leadership be informed in a timely manner. In addition to Mishap Reporting requirements in paragraph 4, the following guidance ensures appropriate CAP and CAP-USAF leadership at the wing, region and national levels are informed. Note: The guidelines herein do not usurp or change the death reporting guidance in CAPR 35-2.

a. National Operations Center (NOC) Reporting.

(1) Reporting Accidents and serious mishaps. It is often difficult to determine the extent of damage or injury immediately following a mishap. In the case of a mishap that clearly meets the "Accident" definitions in Attachments 1, 2, or 3, comply with paragraph 4.a. A wing or region leader (i.e., commander, vice commander, activity director, director of operations, director of safety, etc) should also call the NOC at 888-211-1812 x300 to report any mishap where they feel the National leadership team should be informed based on the perceived degree of damage/injury, the possibility of widespread visibility/media attention or any other extenuating circumstances they feel should be brought to the National Command Team's attention.

(2) Additional NOC Reporting Requirements. In addition to the mishap reporting outlined above, additional items which will be reported to the NOC via phone (888-211-1812 x300) include, but are not limited to:

(a) Safety Stand-downs. Report anytime a wing or region decides to suspend operations of any CAP missions, or suspend the operations of CAP aircraft or vehicles, based on mishaps or any safety concerns. This report should be made by the commander initiating the stand-down, or a designated representative, and include a brief summary of the reason for the stand-down.

(b) Report anytime a powered aircraft is required to make an off-airport landing due to mechanical or other issues (weather, fuel planning, etc).

(c) Report anytime a powered aircraft unintentionally departs the prepared surface of a runway or taxiway. Report anytime a glider unintentionally departs the prepared surface of a runway or taxiway, resulting in damage to the aircraft or airport property.

(d) Report any aircraft engine stoppage that occurs while airborne.

(e) Report anytime a CAP aircraft is the subject of an FAA-reported near mid-air.

(f) Report anytime there is a media inquiry regarding a mishap or other safety-related CAP event or occurrence, or the event might reasonably be expected to bring negative media (including social media) attention to CAP. NOC Staff will ensure CAP/PA is notified of the inquiry.

(g) Report anytime there is an inquiry from a General Officer or equivalent civilian of any military or other uniformed service, including the National Guard, Coast Guard and Public Health Service, related to any CAP activity, occurrence or mishap.

(h) Report anytime there is an inquiry from a Federal, State or local government official regarding a specific CAP activity or occurrence. Routine contact from a local FAA Flight Standards District Office is excluded from this requirement.

(i) Report any information the wing or region commander wants to bring to the immediate attention of the CAP and CAP-USAF Command teams.

(3) Information to Include When Calling NOC. Whenever possible, the member should be prepared to provide as much factual information as possible when calling the NOC. Information should include who, what, where, when as well as mission number and whatever other information is available. If possible provide a point of contact who is knowledgeable about the occurrence, and contact information. However, do not delay the call if desired information is not readily available.

b. Internal Mishap Reporting. Each wing will develop local internal mishap-reporting procedures in addition to the minimum mandatory reporting procedures described in this regulation. The procedures will, at a minimum, ensure the region and wing commander and their respective directors of safety are promptly notified of all mishaps within the region/wing. The procedure will also provide for notification of CAP-USAF personnel with oversight of the region/wing. Wing procedures will be published in a supplement to this regulation, coordinated and approved in accordance with CAPR 1-2. Refer to CAPR 1-2(I) for requirements for the protection of Personally Identifiable Information. This internal mishap reporting is in addition to the required eServices SIRS mishap reporting.

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