



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 current Beacon, and take a quiz to receive credit for monthly safety education.

December 2019



***Happy
Holidays!***

What's In the Beacon?

We've got some quick updates for everyone as we work hard to bring the new Safety Program on board with more training and tools. Keep the suggestions and questions coming ... that helps us understand where we can improve our training and make risk management easier for everyone.

Here are the highlights:

- Updates on NSOC, the Annual Safety Risk Management Day, the Safety Specialty Track, and other training
- A great article on how dehydration can still be a major risk, even in the cold winter months
- A welcome for our new CAP Assistant Chief of Safety

safety@capnhq.gov

Update on Annual Safety Risk Management Day

CAPR 160-1, paragraph 5.2.1.4., directs every CAP unit to set aside one full meeting day, sometime during the months of January through March, to focus solely on safety and risk management.

Here at CAP Safety we are hard at work coming up with some training for this year's Safety/RM Day, and you can anticipate that the Safety/RM Day webpage will be updated with that new training before the Holidays so it will be available to everyone before January. As a hint, everyone will have a chance to take part in a risk assessment using the CAPF 160. It might be a good idea for unit commanders and all safety officers to take a look at the training the covers that process. You can find the forms and the training ("Intermediate Risk Management") on the [Risk Assessments and RA Worksheets](#) webpage.

Wing and Region Directors of Safety should also be working on emphasis items and topics to provide to their units.

Is the Safety Specialty Track Being Updated?

YES!!!!

With the introduction of the new safety regulations and the new Safety Assurance pamphlet, the Safety Specialty Track (CAPP 217) is in need of an update. We're forming a team to tackle that project, with a goal including references and training that will provide members in the Safety track to learn what they need to know, when they need to know it, to advance through the track.

Until that revision is complete we encourage all members in the specialty track, and their mentors, to replace the old regulation references with the new regulation references, and dive into the new online training to ensure they have a good handle on the new guidance. Remember, the goal of any specialty track is to help you be a "specialist" in that area, so focus on learning all you can about the new program and not only about the "requirements" in CAPP 217.

If you are currently going through the Technician, Senior, or Master ratings in the Specialty Track, I ask that you PLEASE drop us a line and let us know what improvements you would like to see and anything you would like added to the track. More information? More outside reading? More how-to activities? Let us hear your ideas. Thanks!

safety@capnhq.gov

Don't Skip the Water When Temperatures Drop!

By: Mark Dulaney, CAP Assistant Chief of Safety

Exercising during the cooler months shouldn't mean that you skip your normal hydration routine. In fact, you may even be more likely to become dehydrated when the temps start to drop. Why?

In cold weather, the body's thirst response is diminished by up to 40 percent (even when dehydrated). This happens because our blood vessels constrict when we're cold to prevent blood from flowing freely to the extremities. (If you've ever had cold hands in winter, you know the feeling.) This enables the body to conserve heat by drawing more blood to its core.

But because of this, the body is fooled into thinking it's properly hydrated, e.g. *you don't feel as thirsty* and *your body doesn't conserve water*. Thus, in cold weather, we are less likely to drink water voluntarily, and additionally, our kidneys aren't signaled by hormones to conserve water and urine production increases, a condition call [cold-induced urinary diuresis](#).

Diminished thirst response and increased urine production are two contributing factors. Yet, there are several others that can lead to winter dehydration, including:

- *Wearing extra clothing*. Heavy jackets, long underwear and other pieces of warm clothing help your body conserve heat. But the added weight is one factor that makes the body work between 10 and 40 percent harder. By working harder, the body produces more sweat, contributing to fluid loss.

- *Increased respiratory fluid loss*. In cold weather, we lose more fluids through respiratory water loss. For example, when you can see your own breath, that's actually water vapor that your body is losing. The colder the temperature and the more intense the exercise, the more vapor you lose when you breathe.

- *Sweat evaporates more quickly in cold air*. We often think we aren't sweating in cold, dry weather, because it tends to evaporate so quickly. This is another factor that can contribute to a diminished thirst response.

Use these tips to stay hydrated this winter:

Wear Layers. Sweat can reduce your body temperature and force your heart to work harder to maintain blood flow and body temperature. Wear layers of clothing that will absorb perspiration.

Replace What You Lose. Water exits the body through exhalation, perspiration and urination. If your urine is pale and plentiful, you're well-hydrated. If it's dark and scant in volume, you need to drink more fluids.

Match Your Drink to the Duration of Your Activity. If you're exercising for up to 1 hour, you can rehydrate with water alone. However, after an hour, add electrolytes and carbohydrates. If you're doing a sport at higher altitudes, increase your fluid requirements.

Hydrate with Room-Temperature Beverages. Cold liquids are absorbed quicker. Warmer or room temperature drinks, on the other hand, are better at keeping your internal temperature optimal. Choose the latter when you're exercising in cold temperatures.

Kenefick RW;Castellani J.W., Young A.J., Ducharme M.B., Giesbrecht G.G., Glickman E., Sallis R.E. (n.d.). *Winter Hydration: Can You Get Dehydrated in Cold Weather?* Retrieved from Dripdrop.com: <https://dripdrop.com/blogs/news/winter-hydration-can-you-get-dehydrated-in-cold-weather>

Stoler, F. (n.d.). *8 Tips for Hydrating in Cold Weather.* Retrieved from Active.com: <https://www.active.com/nutrition/articles/8-tips-for-hydrating-in-cold-weather>

Welcome, Mark!!

The article you just read was written by the newest addition to our Civil Air Patrol Safety Team. I am very pleased to welcome Mr. Mark Dulaney as the new CAP Assistant Chief of Safety.

Mark is a retired U.S. Air Force Safety Specialist, a Certified Safety Professional, and was an Environmental Health and Safety Engineer for a multinational company focused on electrical and digital energy solutions before coming to CAP.

Mark brings a wealth of experience in the technical aspects of hazard assessments, risk management, and mishap reviews. He also appreciates the subtleties of the risk management process and enjoys helping our members learn and appreciate how to use risk management in all their activities and their daily lives.

He'll be a great asset to the team!!

safety@capnhq.gov

Safety Shorts

George Vogt, CAP/SE

“Normal Wear and Tear” – Is That a Mishap?

Recently we got a good question about some damage to one of our CAP Balloons. The question also applies to powered aircraft, gliders, vehicles or any piece of equipment. During a preflight, the crew found a spot where two pieces appear to have been rubbing together for an extended period of time, and that had eventually resulted in a small rip in the balloon fabric. Does this need to be written up as mishap like other damage or is it just “normal wear and tear.” The easiest way of answering is to say if it isn’t normal, and you consider it “damage” then you should enter it in SIRS the same way you would enter a dent or crack or broken window you found during a preflight. You enter it because you would like to do a review to find out how it occurred and how it can be prevented.

We know that “normal wear and tear” will occur. Parts wear out. That’s why regularly scheduled inspections of aircraft and vehicles check on the condition of many components. If that normal wear and tear continues, unnoticed, until it becomes “damage,” then we need to find out why. Was an inspection skipped? Was that step missed? If we find out why it happened, we can put controls in place to prevent it from happening.

Normal wear and tear can reach a point where it isn’t “normal” anymore.

Old Tube with a New Tire?

Occasionally we see a mishap involving a flat tire on an aircraft. It surprises us when we see a picture of the tire and it looks relatively new. Then we see a picture of the inner tube, and it looks worn and older than the tire. In one recent case, the mishap review officer did a fine job of checking the maintenance records to find out when the tire was replaced, but there was no record of when the tube was last replaced.

Replace the inner tube every time you replace the tire! If an aircraft tire is worn to the point of needing to be replaced, it means the tube has had just as much “wear” by moving slightly inside the tire. This wear is worse in cases where the tire isn’t fully inflated. Rubber gets old. All these factors reduce the reliability of the inner tube, which increases the risk of a flat tire due to tube failure or leakage. CAP/LG has a policy of paying for and sending a new tube with every tire replacement. There is no reason why units shouldn’t take advantage of this and make it their practice to replace the tube EVERY time the tire is replaced.

15 Minute Briefing?

We’ve received a few questions about how long unit safety education briefings need to be. If you recall, the old CAPR 62-1 said that each safety education briefing needed to be at least 15 minutes long. Everyone has seen awful briefings that lasted 20 minutes and wonderful briefings that lasted 10. Time is not the measure of a great safety education topic. It should cover an interesting topic. It should include a discussion of that topic in the context of risk management. It should include discussion and participation. It should result in each member (including the presenter) having a better appreciation of how they are personally involved in the risk management effort. If you’re doing that, you’re giving a darn good safety education briefing regardless of how long it lasts.

Mishap Reviews ... Training? Worksheets? Templates?:

It's nice to see some of our review officers trying to use the new mishap review templates offered on the [Safety Mishap Review](#) webpage. Let me take give a couple quick tips on how to use the tools on that page.

If you are assigned to be a mishap review officer, you definitely need to take the Mishap Review Course that's linked on that page. Hit the link and it will take you to LMS. On LMS you hit the link to AXIS. Review the briefing and take the quiz, and you'll even get monthly safety education credit for it!

The 5 M worksheets on that page are specifically set up to help you with the types of questions you should be asking for various common types of mishaps. Remember that no two mishaps are the same and you need to ask the questions that will help you determined what contributed to *your* mishap.

The mishap review template is what you use to actually write your mishap review. Follow the template, with some help from CAPR 160-2, and you'll end up with a nice review that includes a description of what happened, your conclusions about what contributed to the mishap (from your worksheets) and your recommendations on what improvements can be made to address those contributing factors. They don't have to be long, and most won't be too complicated, but they should all follow the same format.

Take the training and use the tools, so you can let us know what you think about them and how we can improve them.

Activity Safety Officer Training

This is just a reminder about the new requirement in CAPR 160-1 that all Activity Safety Officers, for activities lasting longer than 48 hours, or spanning 2 nights, **MUST** take the Activity Safety Officer course. In order to show you have taken the course, you will need to go to eServices and enter the Learning Management System. Then follow the link at the top of the LMS page to enter "AXIS." That's where you'll find the Activity Safety Officer Course in the Course Catalog. Passing the quiz that goes with the course will give you credit in eServices and commanders will be able to verify you have taken the Activity Safety Officer course.

This course is open to all members and will provide a refresher on risk management for activities, give a quick review of how to work with the CAPF 160, and help members understand the requirements for active real-time risk management throughout the activity.

ALL safety officers, commanders, activity staffs, and leaders at every level are encouraged to take the short course so everyone has the same common understanding of the expectations for activity safety. It also provides some insights that will help with the planning of unit outings or activities.

And remember, you get monthly safety education credit when you take the quiz!

safety@capnhq.gov