

THE SENTINEL



OFFICIAL SAFETY NEWSLETTER OF CIVIL AIR PATROL

Aircraft Ground Handling

This article will give you some of the correct aircraft ground handling procedures for our Civil Air Patrol (CAP) aircraft. It is incumbent on us to give utmost care during these procedures and as such each person involved to be trained in safe ground handling operations.

Extracting the aircraft from the hangar – If you are a solo pilot, get help from the FBO or leave the aircraft in the hangar. Before the operation begins, it is crucial to conduct an Operational Risk Management (ORM) process and it is absolutely essential to a safe operation. Former CAP National Commander BGen Richard Anderson relates this process to a cash register. Would you be willing pay for any damage incurred to an aircraft you were moving? Would this affect the care you give to this operation?

Always assure the hangar doors are fully open. Have someone monitor each wingtip and another the vertical stabilizer for their proximity to danger. These monitors will call out if there is any danger for a strike and the team will immediately stop the aircraft. With this procedure, you are assured a safe extraction from the hangar.

Returning the aircraft to the hangar – If you are a solo pilot replacing the aircraft into the hangar, get help from

the FBO or tie the aircraft down on the flight line. Do not attempt to place the aircraft into the hangar alone.

Use the same procedure as for extracting the aircraft. Perform an ORM, ascertain that the doors are fully open and have a monitor for each wingtip and for the vertical stabilizer.

If this is a T-hangar, paint a line inside the hangar above which nothing will be placed, giving clearer space for the tail surfaces and wings. On the outside, paint three lines on the pavement that extend into the hangar so location and direction of each tire can be assured.

The bottom line message of this article is for the safe handling of CAP aircraft on the ground. It is absolutely essential that you take great care of this precious national resource, this largest fleet of Cessna aircraft in the world that is entrusted to our safe-keeping. No matter what your rank or position, unit of assignment, whether you are the pilot or non-pilot, officer or cadet, you are responsible for the safe ground handling of the CAP aircraft.

And as Gen Anderson states, “And Don’t You Forget It.”

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The Mission Safety

In another safety role, I represent the Helicopter industry and we are preparing a comprehensive safety round table that will include safety experts from the FAA, NTSB, manufacturers, universities, insurance companies, operators, and many other specialists that deal with aviation safety and risk management. While we are putting together this important safety round table meeting, I am reminded of why the industry is looking to answers for the recent rash of Emergency Medical Helicopter accidents and how the mission profile and sense of urgency (desire) is similar in many ways to what we do in the CAP.

As with any other organization that is highly trained for a community service such as search and rescue, medical airlift, or disaster preparedness, we must not lose sight of the safety issues and always stay on top of managing the risk and expect the unexpected. Similar to the Helicopter Emergency Medical Service (HEMS), we are trained to provide a service through our mission responsibilities and to complete that obligation in a safe and successful manner. We have a responsibility and are obligated to our crew members as well as the equipment we are entrusted, to operate in a constant vigil towards safe application and accident free completion of our mission duties. As pilots we are to maintain our focus of the mission objectives to fly the airplane according to all regulations, procedures and in a safe operation that is to the level of your experience and proficiency, no more. When we exceed our abilities we endanger the crew and the completion of a successful mission. When we do not follow procedures or

the regulations we endanger the crew and the mission completion. When we are not prepared or in the right physical/mental condition we endanger our crew and the mission objectives.

Desire or the will to complete the mission can also jeopardize the safety responsibilities of the pilot in command. We have learned in many of the HEMS accidents the pilot was concerned for the patient they were flying to the hospital for the medical care in saving the patient's life. Pilots have let down their guard and disregarded their safety training to complete the mission only to end up in a tragic accident. Many HEMS operators have gone as far as to keep the pilot removed from knowing who or what is the patient profile in order to keep the pilot's decision making process objective to the safe carriage of all onboard. There should be no difference in this safety practice for our mission pilots to learn and operate safely. If we keep the desire to complete a mission and disregard the risk management factors, we can easily end up as a tragic addition to the original mission request. This is the challenge of every pilot flying the mission profile so that others may live or be rescued.

After I attend as one of the safety facilitators at the HEMS safety round table in November, I am sure I will have additional thoughts and safety information to share with the CAP. We are trained to provide a community service and to save lives, but the hardest part of what we do is keeping that desire in check so that the first lives we protect is that of our own and of the crew.

Lt Col Larry Mattiello, CAP
Assistant National Safety Officer

Don't Take Your Hearing For Granted

Most of us go through life taking our senses for granted. Like touching, tasting, smelling, and seeing; hearing is something we do automatically, without giving it much thought. However, when something goes wrong with any of our senses, including our hearing, we expect that medical science has a miracle to offer. Unfortunately, medicine offers only moderate improvement for people with hearing loss. Hearing loss cannot be restored for most people. Lots of people suffer some degree of hearing loss. Anyone whose work or hobby involves loud noise is susceptible to hearing loss - it can be prevented.

Exposure to normal noise levels doesn't cause hearing loss. Hearing loss occurs due to overexposure to high noise levels. Noise is measured in units called "decibels." (abbreviated as dBA) The higher the decibel, the louder the noise. To help you see the difference in the decibel scale, look at these examples of various noise levels:

- 20 dBA - soft whisper
- 40 dBA - quiet office or library
- 60 dBA - normal conversation
- 85 dBA - noisy restaurant
- 90 dBA - tractor or garbage disposal

- 100 dBA - motorcycle or snowmobile
- 115 dBA - loud music or leaf blower
- 125 dBA - chainsaw
- 140 dBA - aircraft taking off
- 170 dBA - shotgun blast

In the workplace, hearing protection must be used to reduce noise exposure for anyone who is generally exposed to 90 decibels or more over the course of their workday. Hearing protection may be used at lower levels, particularly for people who are very close to the 90 decibel exposure level. Sounds above 120 decibels can cause hearing damage after only a brief exposure and should be avoided unless hearing protection is worn. Noise levels above 140 decibels can cause damage to hearing after just one exposure.

Think of those sounds you take for granted and imagine life without them. Don't let unnecessary exposure to noise take them away. You can do something to help protect your hearing. Take the time to know when protection is required and use it faithfully - if you do, your hearing can last a lifetime.

Have a Nice Trip – See You Next Fall

Did you know that slips, trips, and falls are second only to automobile accidents in causing personal injury? In CAP, they are typically the most common bodily injury cause. On stairways alone, falls result in almost two million disabling injuries yearly. There are thousands more minor injuries caused by slips, trips, and falls each year. Most alarming of all is the fact that industrial falls cause over 1000

deaths each year.

Slips occur when there is too little friction between a person's feet and the walking surface. Many factors can cause a slip; ice, oil, water, cleaning fluids, and other slippery substances are probably the most obvious causes. However, the flooring may be inappropriate - perhaps it is a slick material - or the person who slips may not be wearing proper shoes. To

prevent slips, avoid walking in areas which pose slipping hazards if at all possible. Always promptly clean up spills of slippery substances. Better yet, prevent the spills in the first place. If an area is a chronic problem, re-route foot traffic in order to avoid it. If flooring is a problem, replace it or coat it with a non-slip surfacing material.

Trips occur when a person's foot contacts an object, and they are thrown off balance. The main cause of tripping is obvious - anytime something is in a walkway it can cause someone to trip. Another culprit is an object which projects into the walkway - perhaps material stored low on a shelf. Poor lighting and uneven walking surfaces also cause tripping. Prevention of trips is simple but does require diligence. Keep objects that could cause someone to trip out of the way. Repair uneven flooring

and install proper lighting if required.

Falls can be caused by a number of things. Slips and trips frequently result in a fall. Falls also occur for other reasons. Improper use of ladders and scaffolding can result in a fall-usually a very serious one. Falls also happen when people climb objects without using fall protection equipment. Don't risk serious injury by taking shortcuts. If you are working on a ladder, scaffold, or other elevated platform, make sure you know the requirements for using them safely.

Slips, trips, and falls cause numerous injuries every day. However, they are among the easiest hazards to correct. Take the time to look around your activity site for these hazards and work to prevent them. Don't let a slip, trip, or fall keep you from enjoying all that life has to offer.

Summary of Form 78 Accidents and Incidents Received for August 2008
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Aircraft

Aircrew noted damage to the right side of the horizontal stabilizer during preflight.

Left elevator contacted a fire hydrant.

Dent in elevator when aircraft struck wood shelves in hangar.

Rudder stop bent, oil cooler crack and spinner dent.

Beacon light caught the hangar door.

Vehicle

Pheasant hit the middle of the grill, breaking the grill and penetrating the air conditioner radiator.

Undercarriage damage.

Right front tire tread separated from tire. Turning off of one road on to another road and hit another vehicle.

While moving van, lost brakes and rolled over a tree stump.

Bodily Injury

Cadet cut left hand opening an "MRE".

Cadet struck above right ankle by knife.

SM slipped and fell on dead tree injuring his chest.

SM eye scratched by a tree limb.

Top rail of fence fell on cadet's back

Cadet fell off top bunk.

Cadet pushed on glass door and cut arm.