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Safety Culture By Lt Col Al Matson, MN Wing DOV


A Safety Culture is dependent on how members of an organization perceive safety and how that safety is valued in that organization. Much of this perception is formed by observing the behavior of others in the organization. There has to be a strong, well-demonstrated, safety commitment from company leaders, who will then influence the behavior of others. At Civil Air Patrol, we have a very strong safety commitment from our organizational leaders. This can be seen in the number of safety programs either in place or under development at Civil Air Patrol. Also, other leaders can influence behavior. These leaders are those that influence others through both word and deed. They induce others to emulate them because they are perceived to have the answers. While the pilot in a cockpit is the designated leader, Mission Observers and Mission Scanners can also exhibit leadership when they influence behavior in a positive manner. All of us influence others at times, so we have to ensure that we make the right decisions and take appropriate actions that contribute to safety. Otherwise, our Safety Culture slowly weakens.

A Safety Culture is made up of a number of components:

Commitment is necessary from all levels of the organization, not just top management.

Involvement is demonstrated when members of the organization take part in safety discussions and volunteer information about hazards. When was the last time you filed a safety report?

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Responsibility is recognizing that we are all a part of this process. There is no “opt-out.”

Open Communications is critical to a Safety Culture, and is strengthened by ensuring that an organization has a non-punitive, fair, and just safety management system. Civil Air Patrol believes strongly in these principles.

Observing & Reporting hazards are necessary for the organization. No IG inspector or safety program can uncover every hazard. Many methods are available for reporting hazards and unsafe acts at Civil Air Patrol. Please use them.

Training must take place that addresses the recognized hazards.

Takeaway thoughts:

- *Our Safety Culture is defined by how you act when no one is watching.*
- *Every member at Civil Air Patrol needs to be a Safety Leader!*



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**Approach and Landing
Safety Tip
December 2010**

Hydroplaning is a condition that can exist when an airplane is landed on a runway surface contaminated with standing water, slush, and/or wet snow. Hydroplaning can have serious adverse effects on ground controllability and braking efficiency and can render an airplane partially or totally uncontrollable anytime during the landing roll.

When confronted with the possibility of hydroplaning, it is best to land on a grooved runway (if available). Touchdown speed should be as slow as is consistent with safety. After the nose wheel is lowered to the runway, moderate braking should be applied. If you don't notice deceleration and hydroplaning is suspected, the nose should be raised and use aerodynamic drag to slow to the point that the brakes do become effective.

Do you want to know more? The Airplane Flying Handbook and other FAA manuals are available [here](#).

*This notice is being sent to you because you selected "**General Information**" in your preferences on FAASafety.gov. If you wish to adjust your selections, log into <https://www.faasafety.gov/Users/pub/preferences.aspx> where you can update your preferences.*

The new WINGS–Pilot Proficiency Program is great! Check it out now!

Don't Fly While Sick or Medicating by Gary K. Woodsmall – Sep 00 – CAP Sentinel

THIS IS A REPRINTED ARTICLE FROM THE SEP 2000 CAP SAFETY NEWSLETTER

NTSB Final Report – Middleborough, MA: The National Transportation Safety Board (NTSB) recently released the final report on the Middleborough, MA aircraft accident that occurred on 25 May 98. This accident involved two senior members flying a C-182R during an instrument proficiency flight in conjunction with a flight clinic earlier that day. The flight was briefed to be a one-hour, IFR sortie. However, after approximately 30 minutes the IFR clearance was cancelled. About 15 minutes later, the aircraft was observed

flying a low approach to a private airport followed by a climbing right turn. During the climb, the bank increased and the aircraft descended into trees with no change in engine power. The aircraft was destroyed and both pilots were fatally injured.

The investigation revealed no mechanical failure or malfunction. The pilot in command (PIC) had been treated for migraine headaches since 1988 by his personal physician. The PIC was routinely taking about 100 tablets of Tylenol #3 (acetaminophen and codeine) per month. The pilot's personal physician had later changed the prescription to a barbiturate named Fiorinal (butalbital, aspirin and caffeine). A review of past applications for medical certificates revealed that under question 18a, "Medical History, Frequent or severe headaches", the pilot had checked the NO block. In addition, question 19, "Visits to Health Professionals Within Last 3 Years", showed only visits to the Aviation Medical Examiner (AME). The visits to the doctor who prescribed the Fiorinal were not listed.

Toxicological tests, after the accident, revealed that the PIC had a toxic level of morphine in his blood. By examining the rate at which the morphine was metabolized, one can conclude that the drug was probably taken in flight, apparently for emergency relief from a migraine headache. The source of the morphine is unknown, as neither of the pilot's physicians had prescribed it.

According to the FAA Guide for Aviation Medical Examiners, a history or presence of migraine headaches, migraine equivalent, cluster headaches, chronic tension headache or conversion headaches would preclude the issuance of a medical certificate. The reason for this policy is that these types of headaches can be so painful as to be acutely incapacitating. Additionally, these types of headaches often require medications for relief that can greatly diminish a pilot's ability to control an aircraft. Impairment due to ingested morphine was definitely a factor in this pilot's failure to maintain control of the aircraft during a VFR go-around. For more details on this accident, you can read the report in its entirety at - http://www.nts.gov/aviation/NYC/lnarr_98A113.htm.

Drugs Found In General Aviation: I recently had the privilege to hear a presentation by Dr. Dennis Canfield, Manager of the Toxicology and Accident Research Laboratory, which is part of the FAA's Civil Aeromedical Institute (CAMI). CAMI studies the factors that influence human performance in the aviation environment, finds ways to understand them, and communicates that understanding to the aviation community. Dr. Canfield spoke on CAMI's capability to perform state-of-the-art toxicological tests and the recently published results of a study of drugs in fatal aircraft accidents. This study examined the positive drug rate based on the medical classification of the pilot, the type of pilot certificate held, and the type of operation being flown. The results were both surprising and alarming.

Under the cooperative efforts of the FAA and the NTSB, specimens from pilots who were fatally injured in aviation accidents were analyzed for drugs and alcohol as part of the investigation into the cause of the accident. Controlled dangerous substances were found in 8% of the pilots analyzed. Prescription drugs were found in 14%. Over-the-counter (OTC) drugs were most common at 18%. Alcohol was found in 7% of the pilots. As you might guess, all classes of medical certificates were represented; third-class holders were the most abusive and first-class holders were least represented. Approximately 54% of the pilots that tested positive held an Airline Transport Pilot certificate! Commercial Pilots represented 38%. Private Pilots came in at 6% and Student Pilots were least abusive at 1%. Additionally, pilots operating under part 91 accounted for approximately 90% of all the drug and alcohol fatalities studied.

The most commonly found impairing drugs during this study were OTC antihistamines followed by prescription antidepressants. Marijuana was the most frequently found illegal drug. A commonly held belief is that medicine cures all that ails. Some pilots feel that they can effectively operate an aircraft while taking OTC drugs. After all, if they were dangerous, they would be prescription-only drugs - right? Wrong! As we have seen in this study, many pilots self-medicate. Many of these pilots will get away with it, for a while. As long as the flight is normal, routine, and unchallenging, chances are the pilot will be successful. But, when the pilot becomes challenged by aircraft malfunctions, bad weather, or heavy workloads, chances are they will join the statistics of this study. OTC antihistamines such as Actifed, Benadryl, Contac, Dristan, Nyquil and Sinutab can all hide your cold and flu symptoms and make you more comfortable when you are at home in bed. But, while flying, you can expect sedation, dizziness, impaired coordination, blurred vision, and possibly a fatal aircraft accident! When a pilot is not feeling well and makes the decision to go ahead and fly, the odds against a successful flight go up. Throw in the different impairments from medication and you have a downright compromising situation. You not only compromise your life and the future of family members left behind, but also the lives of your passengers, other pilots in your vicinity, and people living their lives under your flight path.

Remember, if an illness is serious enough to require medication, it is serious enough to prevent you from flying. If a label warns of side effects, do not fly until twice the recommended dosing interval has passed. So, if the label says "take every 4-6 hours" then wait at least 12 hours to fly. When in doubt, seek advice from your Aviation Medical Examiner.

Resist the temptation to fly when ill or while medicating.

Fatigue Manifestations compliments of SKYbrary

The Operators Guide to Human Factors in Aviation (OGHFA) is a project of the Flight Safety Foundation European Advisory Committee. OGHFA is an extensive summary of human factors information focused on further advancing commercial aviation safety.

The Briefing Note (BN) "Fatigue Manifestations" explores some of the causes, manifestations and consequences of pilot fatigue. It also outlines the basics of fatigue management and discusses how fatigue management is important to flight safety during both long-range flight (LRF) and short-range flight (SRF).

Read more about the Fatigue Manifestations on SKYbrary at: http://www.skybrary.aero/index.php/Fatigue_Manifestations_%28OGHFA_BN%29?utm_source=SKYbrary&utm_campaign=d88b3d04b8-SKYbrary_Highlight_26_10_2010&utm_medium=email

Safety Day Change

Just another reminder. There has been a policy change that will require an annual SAFETY DAY to be held during the months of January, February, or March, in lieu of the old policy requirement to hold one in October. The policy implementation date for this will begin in January, February, and March of 2012.

Safety Officer College



The dates have been locked in for the first CAP Safety Officer College at Kirtland AFB:

June 6-10, 2011 Travel dates June 5th and 11th.

More information will be coming on eligibility, the selection process, and course content.

As a preview, it will be full of education on mishap investigations, photography, human factors, crash lab work, safety philosophy, risk mitigation, and regulatory learning.

Safety Accomplishments for 2010

The National Headquarter safety staff working in conjunction with the National Safety Team (NST), were able to accomplish a great deal in 2010. Here are some highlights:

- Established the National Safety Team
- Civil Air Patrol has achieved the following successes in safety for FY10
 - o 50% reduction in powered aircraft accidents. The last reported NTSB rate for U.S. General Aviation (2008) was 7.11 per 100,000 flying hours, whereas CAP's rate for FY10 was 1.78
 - o 100% reduction in vehicle accidents (zero)
 - o 67% reduction in bodily injury accidents
 - o \$500,000 reduction in repair costs
 - o ZERO fatalities
- Improved safety technology, education, and accessibility
 - o Numerous online and classroom training courses added to CAP's safety education program
 - o Added computer based safety education technology, safety education tracking program, and hazard reporting system
 - o Safety Officer College slated for FY11 at Kirtland AFB
- Safety Alert process in place
- Safety Regulations
 - o Updated safety apparel policy to meet DOT standards
 - o Updated NTSB reporting requirements to comply with 49 CFR Part 830
 - o Improved safety education and risk briefing policy
 - o Updated introductory safety education requirements
 - o Approved cadet safety officers for addition at all levels
 - o Expanded mishap definitions to promote close-call reports
- Safety marketing and awareness
 - o Addition of safety advertising in the Volunteer magazine
 - o Re-invented newsletter format and content, "The Safety Beacon"

SUMMARY

CAP's safety awareness and program management has significantly improved with the addition of NHQ safety staff working in conjunction with the National Safety Team (NST). The NST is comprised of the National Safety Officer and volunteer assistants assigned as subject matter experts for flight and ground safety. Region and Wing Commanders are moving away from a punitive safety program towards a behavior based safety program which has shown significant improvement in using safety mishaps as an educational opportunity to raise awareness and prevent risk exposure.

CAP GOALS for Safety Performance for FY11

- i. Aircraft Accident/Incident Rates <1.78/<42.7
(rate per 100,000 flying hours)
- ii. Vehicle Accident/Incident Rates 0/<3.73
(rate per 10,000 members)
- iii. Bodily Injury Accident/Incident Rate <.59/<13.6
(rate per 10,1000 members)

Hear Our Thoughts, Hear Our Experiences By Members of the Civil Air Patrol Nationwide

Words of wisdom can often be overlooked in our daily lives. Complacency can slide into our world in simple ways that we miss in the hustle and bustle of daily life. If you have a practice or safety awareness topic to share, the instructions are in the January 2010 "Sentinel" for your reference. Keep in mind these are ideas, not CAP policy. Thank you for your submissions.

Robert K Kelly Jr	AK-015	December 2010	Ground bound vehicles should always be parked such that your first move is forward. That is, if you cannot park in a pull through spot, back in. If you have two or more people with you, utilize one as a spotter. Also, before moving the vehicle for the first time, walk around the vehicle checking for obstacles and obstructions, and checking the condition of the vehicle such as tires, lights, bumpers, etc.
Irwin I Kleinman	IN-175	December 2010	A good idea for changing flats. Carry an 18" to 24" square board and place it under the jack when lifting the car. It helps to spread the load on soft, muddy or stone surfaces. Also carry a padded knee pad to kneel or sit on. Never place any part of your body under the vehicle. You may get trapped.
Randall L Porterfield	GA-506	December 2010	In the winter, always keep blankets in the car in case of a mechanical breakdown or an accident. In either case, the possibility of death by very cold temperatures can suddenly become very real! Randy Porterfield, Ga.
Darrin G Stewart	MS-048	December 2010	Make sure you discharge static electricity before pumping gas by touching bare metal on vehicle.

Brian K Flynn	NC-048	December 2010	I realized the other day that I practice ORM when my son eats. Recognize which foods represent a high choking hazard and teach children to be careful when eating them and why. You do not want to scare them, but if you can teach them to chew a hotdog or an apple carefully and pay attention to the food when they eat, it will benefit them in many ways, reducing the hazard of choking being just one.
Scott T Singletary	FL-423	December 2010	It is a good idea to carry the proper survival gear for the environment you are working in.
John C Wigginton III	LA-093	December 2010	To improve a safety mindset and capabilities there is a website that is recommended for viewing called the Safe America Foundation. www.safeamerica.org . (Please also review http://www.capmembers.com/safety/resource_links.cfm for other outside websites supported by CAP).
Vincent M Corey	AL-126	December 2010	Fire Safety (Safety Beacon Team editorial addition: Test your smoke alarms monthly and make sure that your house is protected by an adequate number of working alarms. .Smoke alarms should be located inside each bedroom, outside each sleeping area, and on every level of your home. . Share your fire escape plan, including the location of your outside meeting place, with your overnight guests. Everyone should know at least two ways out of each room in your home. . Keep halls, stairs, and doorways properly illuminated and free of clutter and other objects that could hinder an escape during a fire emergency. . Check to make sure your stairs, halls and entries are properly illuminated. Use nightlights in hallways and bathrooms. . Consider having older guests or those with mobility issues sleep on the ground floor of the house.)
James A Buist II	IN-069	December 2010	Dress for the Weather: Not just what it is now, but what it may be in the near (24-72 hour) future. You never know when you may get stranded in a ground vehicle or after an unplanned, off-airport aircraft landing. Hat, gloves, boots, and coat are a must this time of year.

A Picture Is Worth a 1000 Words!



Is this a gear up landing or a landing that resulting in a gear-up?

Whether you have a fixed or retractable gear aircraft, the GUMPS check is always recommended. G-GAS U-Undercarriage M-Mixture P-Propeller S-Safety (Seat Belts, etc.)

Until Next Month

Discover, report, stop, share, listen, and learn. The things we have read about in this issue already have happened, so you are not allowed to experience these for yourself. Remember to “Knock It Off” and slow down. For streaming dialogues on some subjects, remember CAP Safety is on Facebook and Twitter. Happy New Year to you and your families.

