



Newport News Composite Squadron

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Overview

- Lightning Safety
- Keep Cool in Hot Weather
- Water Safety
- Wake Turbulence
- Do's & Don'ts of Maneuvering Flight
- Airport Safety Tips
- Extra Stuff



Lightning Safety

- If you can hear thunder you are within striking distance
- Stay away from windows and doors
- If you are in or near water go to land and seek shelter
- If you feel your hair stand on end you are about to be struck
- If a person is struck call 911 immediately



Keep Cool in Hot Weather

- Things affecting your body's ability to keep cool
 - High Humidity
 - Personal factors
- Take these steps to prevent heat illness
 - Stay indoors
 - Drink plenty of liquids & replace salts/minerals
 - Wear appropriate clothing
 - Pace yourself and use a buddy system
 - Monitor people at risk & adjust to the environment
 - Do not leave children in cars & use common sense



Water Safety

- Know the water
 - Spring
 - Summer
 - Autumn
 - Winter
- Know your limits
- Wear a life jacket
- Be prepared
 - Check river conditions
 - Check beach advisories
 - Get boater education card
 - Brief children



Wake Turbulence

- Too bad we can't see wake turbulence
- Stay at or above the larger aircraft's final approach path
- Note it's touchdown point and land past that point
- If you can't land beyond that point go around



Do's and Don'ts of Maneuvering Flight

- Do remember that most fatal spins/stalls occur at low altitudes
- Do practice stalls/at a safe altitude
- Do fly at a safe altitude
- Do remember that turns and climbs increase wing loading

- Don't explore the flight envelope close to the ground
- Don't exceed 30 degrees of bank in the traffic pattern
- Don't buzz or show off with an aircraft
- Don't attempt maneuvers for which you have not been trained



Airport Safety Tips

- Keep your eyes and ears open while taxiing
- Two solid lines on your nose means hold short
- Visit www.faa.gov/airport/runway_safety/ for more good safety tips
- Remember pilots flying within 60 nautical miles of the DCA VOR are required to get online training at www.faasafety.gov



Extra Stuff

- A friend of mine sent me an email about using egg whites on severe burns.

It is truly a miracle cure for really bad burns



Safety Beacon



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Lightning Safety

Thunder and lightning storms happen all the time. But did you know that lightning strikes and lightning fires occur most often in the summer? Know what to do to keep you and your family safe when it does strike!

Safety Tips

Outdoor Safety

!!! **If you can hear thunder**, you are within striking distance of lightning. Look for shelter inside a home, large building, or a hard-topped vehicle right away. Do not go under tall trees for shelter. There is no place outside that is safe during a thunderstorm. Wait at least 30 minutes after the last thunder before leaving your shelter.

!!! **Stay away** from windows and doors.

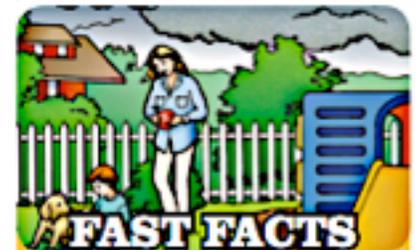
!!! **If you are in** or on open water, go to land and seek shelter immediately.

!!! **If you feel** your hair stand on end, that means lightning is about to strike, squat low to the ground on the balls of your feet. Place your hands over your ears and your head between your knees. Make yourself the smallest target possible and minimize your contact with the ground. Do not lie flat on the ground. This is a last resort when a building or hard-topped vehicle is not available.

!!! **If a person is struck** by lightning, call 9-1-1 and get medical care immediately. Lightning strike victims carry no electrical charge; attend to them immediately. Check their breathing, heartbeat, and pulse. CPR may be needed.

Indoor Safety

Unplug appliances and other electrical items, like computers, and turn off air conditioners. If you are unable to unplug them, turn them off. **Stay off** corded phones, computers, and other electronic equipment that put you in direct contact with electricity or plumbing. **Avoid** washing your hands, bathing, doing laundry, or washing dishes.



FAST FACTS

- ❗ Outside and other fires accounted for three-quarters of the lightning fires reported to local fire departments.
- ❗ Lightning often strikes outside of heavy rain and may occur as far as 10 miles from any rainfall.



Your Source for SAFETY Information

NFPA Public Education Division • 1 Batterymarch Park, Quincy, MA 02169

www.nfpa.org/education



Keep Your Cool in Hot Weather



Learn more about heat-related illness and how to stay cool and well in hot weather.

Getting too hot can make you sick. You can become ill from the heat if your body can't compensate for it and properly cool you off. Heat exposure can even kill you: it caused 8,015 deaths in the United States from 1979 to 2003.



These are the main things affecting your body's ability to cool itself during extremely hot weather:

- **High humidity.** When the humidity is high, sweat won't evaporate as quickly, which keeps your body from releasing heat as fast as it may be necessary.
- **Personal factors.** Age, obesity, fever, dehydration, heart disease, mental illness, poor circulation, sunburn, and prescription drug and alcohol use can play a role in whether a person can cool off enough in very hot weather.

Here are some facts about which people are at greatest risk for heat-related illness and **what protective actions to take** to prevent illness or death:

- People who are at highest risk are **the elderly, the very young, and people with mental illness and chronic diseases.**
- But **even young and healthy people can get sick from the heat** if they participate in strenuous physical activities during hot weather.
- **Air-conditioning is the number one protective factor** against heat-related illness and death. If a home is not air-conditioned, people can reduce their risk for heat-related illness by spending time in public facilities that are air-conditioned.

You can take these steps to prevent heat-related illnesses, injuries, and deaths during hot weather:

- Stay cool indoors.
- Drink plenty of fluids.
- Replace salt and minerals.
- Wear appropriate clothing and sunscreen.
- Schedule outdoor activities carefully.
- Pace yourself.
- Use a buddy system.
- Monitor people at high risk.
- Adjust to the environment.
- Do not leave children in cars.
- Use common sense.



CDC works 24/7 saving lives, protecting people from health threats, and saving money to have a more secure nation. A US federal agency, CDC helps make the healthy choice the easy choice by putting science and prevention into action. CDC works to help people live longer, healthier, and more productive lives.



Water Safety for Lakes, Rivers, and Beaches

Know the Water

At any time of year, water can be appealing and dangerous at the same time:

- **Spring** - Rivers are often high and swift from rains and snow melt and can easily overwhelm the strongest swimmer. Even on hot spring days, lakes, ponds, and rivers are still cold and dangerous for swimmers. Hypothermia can occur quickly in very cold water.
- **Summer** - Water that is warm on the surface, can be much colder below. Use caution when swimming and always supervise young children playing in or near the water. Rivers may not be moving as fast, but log jams can trap swimmers and large rocks and logs could tip over rafts, canoes, and kayaks. Illnesses can be prevented by not swallowing the water - learn more about [recreational water illnesses](#).
- **Autumn** - Early warm days of autumn can be like summer. But like spring, this time of year is unpredictable. Be prepared for sudden weather changes and cold water later in the season.
- **Winter** - Waters are always cold and can quickly go from being very calm to very rough, especially during storms. If you are on the water for hunting, fishing, or recreation, wear protective gear and life jackets. Tell someone where you are going and when you plan to return, and be prepared for sudden weather changes.

Know Your Limits

- Swimming in open water (lakes, rivers, ponds, and the ocean) is harder than in a pool. People tire faster and get into trouble more quickly. A person can go under water in a murky lake, making them very hard to find, or be swept away in currents. Avoid swimming where two rivers come together as many good swimmers have gotten into trouble or have drowned in currents that did not seem to be tossed into the water.

Wear a Life Jacket That Fits You

- Even the best water enthusiasts can misjudge changing water conditions when boating or swimming in open water. Be prepared at all times by wearing a life jacket. You will never know when you'll be tossed into the water.
- Have children wear a life jacket that fits them, and watch them closely around water as they can go under water quickly and quietly.
- A number of water safety laws were passed to improve the use of life jackets and prevent drowning:
 - Children 12 years old and under must wear a life jacket that fits them on moving boats less than 19 feet in length.
 - Recreational boats must carry one [U.S. Coast Guard-approved life jacket](#) for each person aboard. The life jacket must be available and accessible. This is a nationwide Coast Guard rule.

Be Prepared

- Check river or stream conditions by contacting the [United States Geological Survey](#) at 253-428-3600 ext. 2635.
- Take life jackets, a rescue device, a cell phone, and someone who knows CPR when you are out on the water.
- Check [beach advisories](#) before you go swimming.
- Boaters must obtain their [boater education card from state parks](#).
- Parents must tell their children about the dangers of open water at rivers, lakes, and beaches. Know where your child is, who they are with, and when they are expected home.
- Parents are powerful role models - if you wear a life jacket, it is more likely your children will wear a life jacket.

Learn more about water safety and drowning prevention from the [Washington State Drowning Prevention Network and Children's Hospital and Regional Medical Center](#).

RANDY BABBITT

Above and Beyond

Attitude Determines Your Altitude

I have often wished I could mandate professionalism. It is true that the FAA can require some of the behaviors that are indicative of professionalism, and the thickness of the rulebook is evidence of how we've tried to do that. The reality, though, is that true professionalism is a lot more than just rule-driven rote behaviors – *pro forma* does not make a *professional*. Indeed, most definitions of professionalism call it a level of excellence above and beyond minimum standards or basic legal requirements. That's why you don't become a professional simply by earning certificates, adding ratings, or getting a paycheck for flying.

Rather, professionalism is a mindset. It comes from having the attitude, the ethics, and the discipline to do the right thing — every time, all the time, regardless of who's watching.



Training and Education

We tend to use the words “training” and “education” interchangeably, but they’re not actually the same. Training is the acquisition of practical skills relating to specific useful competencies. Training is teaching someone how to do something. Don’t get me wrong. When it comes to teaching pilots how to aviate in terms of good ol’ basic stick-and-rudder skills, training is an accurate term and an important activity.

But the trifecta of professional airmanship also requires pilots to navigate and communicate as well as to aviate, and that’s where education is so important. Education is an experience that has a formative effect on an individual’s character, intellect, or physical ability. There is certainly a training aspect to aviation, navigation, and communication, as those terms are narrowly defined. But education is about teaching a person – in this case, a pilot – how to think, how to aviate no matter what, how to navigate through problems that are not just rote experiences from the textbook or maneuvers guide, and how to use crew resource management (CRM) and single pilot resource management (SRM) to communicate effectively with everyone who can render information or assistance.

To use flight instructor terms — I can do that, because I was one — training alone can take a pilot to the rote and understanding levels of learning. But it takes the formative experience of education to reach the application and correlation levels essential to true professionalism in flying.

Educating a Professional

So how do we educate someone to be a professional? Here are several ideas. And you don’t have to be an instructor to put them into practice.

Develop aviation citizens. In civic terms, a good citizen takes actions that strengthen our heritage or contribute to the political process. The concept of aviation citizenship is similar, as it implies actions that respect and strengthen our shared aviation community. Proficiency in aircraft control is only the beginning of aviation citizenship. As outlined in the FAA *Aviation Instructor’s Handbook*, the aviation citizen is a pilot who acts to:

- Make safety the number one priority.
- Develop and exercise good judgment in making decisions.
- Recognize and manage risk effectively.
- Be accountable for his or her actions.



Photo by Susan Pearson

- Be respectful of the privilege of flight.
- Act with responsibility and courtesy.
- Adhere to prudent operating practices and personal operating parameters.

Use Codes of Conduct. These concepts are also part of the *Flight Instructor’s Model Code of Conduct (FIMCC)*, recently published by a group of aviators who are passionate about professionalism. I am a real believer in the value that a formal code of conduct can have as a tool to promote safety, good judgment, ethical behavior, and personal responsibility – all components of professionalism. The code offers a vision of flight education excellence, and it recommends operating practices to improve the quality and safety of flight instruction. The FIMCC is one of several similar codes, such as the *Aviator’s Model Code of Conduct* and a *Student Pilot’s Model Code of Conduct*. You may want to keep these codes in your flight bag as a reference and reminder.

True professionalism is a lot more than rule-driven behaviors – *pro forma* does not make a professional.

A personal minimums list is another kind of code that marks a professional. In formal terms, personal minimums refer to an individual pilot’s set of procedures, rules, criteria, and guidelines for deciding whether, and under what conditions, to operate (or continue operating) in the National Airspace System.

As the FAA has suggested, however, you might think of personal minimums as the human factors equivalent of reserve fuel. When you plan a flight, regulations require you to calculate fuel use in a



A professional uses a checklist every time, whether it's the first time or the 1000th.

Photo by Raymond G. Stinchcomb

You don't become a professional simply by earning certificates, adding ratings, or getting a paycheck for flying.

way that leaves a certain minimum amount of fuel in the tanks when you land at your destination or alternate. The reserve fuel is intended to provide a safety buffer between fuel required for normal flight and fuel available. In the same way, a professional sets personal minimums that provide a solid safety buffer between the skills *required* for the specific flight you want to make, and the skills *available* through training, experience, currency, and proficiency. (For more information, please see the May/June 2006 issue of the FAA Aviation News.)

Use scenario-based training. The FAA is a strong advocate for scenario-based training (SBT). SBT is an approach that uses highly-structured scripts of real world experiences to meet flight training objectives in an operational environment. The goal is to help the pilot develop judgment and

decision-making skills. For SBT to be effective in educating a professional:

- Real world experiences need to have a real world context.
- SBT needs to use real world experiences.
- Those experiences need to be realistic.

Here's an example. Cross-country flight training can be structured as planning for a family vacation that the pilot might really want to take in an airplane. The importance of comprehensive flight planning and managing external pressures becomes very real when the pilot has to put it in specific terms such as: how many people and how many bags can be carried, how they have to be loaded, and whether the trip can be safely flown.

Participate in mentoring. Another part of developing professionalism is mentoring. There is a tendency to think of mentoring as a relationship between an older person and a younger one. In fact,

mentoring is a *transfer of experience* from a pilot with more experience or expertise to a less experienced colleague. In today's GA environment, for example, you may have thousands of hours in your logbook, but still have a lot to learn from a newer pilot who happens to be a whiz with the latest glass cockpit avionics. Bottom line: the goal is to help the person being mentored learn things that he or she might have learned more slowly, less effectively, or not at all without the mentor's assistance. I learned a lot from the pilots who mentored me in the various phases of my career as a pilot, and I tried to pass it on by mentoring my students when I was a CFI and my first officers when I was an airline pilot. As I see it, being a professional and a solid aviation citizen means taking advantage of mentoring opportunities, both as a mentee and as a mentor.

The Front Line is the Flight Line

We in the FAA can make rules, write policy, and issue guidance. But those who are on the front lines — or maybe I should say the *flight* lines — in the GA community are the people best placed to make a difference — not just today, not just tomorrow, but for the entire future of aviation. The way you fly, whether it is multiple legs every day or a recreational flight every month, should be consistent with the aviation citizenship principles outlined here. Consistent and disciplined use of practical tools like codes of conduct, scenario-based training, and mentoring are actions that give life and meaning to the concept of professionalism, and can help make professional behavior as natural as breathing.

I'm counting on you to help.

Wendy Bobbit is the Administrator of the FAA.

Learn More

FAA Aviation Instructor's Handbook – FAA-H-8083-9A

www.faa.gov/library/manuals/aviation/aviation_instructors_handbook/media/FAA-H-8083-9A.pdf

Best Practices for Mentoring in Flight Instruction

www.faa.gov/training_testing/training/media/mentoring_best_practices.pdf Aviator's Model Code of Conduct

www.secure8x.com/

FAA Aviation News – May/June 2006

www.faa.gov/news/safety_briefing/2006/media/mayjun2006.pdf



Calling All Mechanics

Keep Informed with FAA's Aviation Maintenance Alerts

Aviation Maintenance Alerts (Advisory Circular 43.16A) provide a communication channel to share information on aviation service experiences. Prepared monthly, they are based on information FAA receives from people who operate and maintain civil aeronautical products.

The alerts, which provide notice of conditions reported via a Malfunction or Defect Report or a Service Difficulty Report, help improve aeronautical product durability, reliability, and maintain safety.

Recent alerts cover:

- cracked rudder horn weld assembly on the Piper PA28R-201
- cracked oil cooler on the Continental IO-550B powerplant
- fractured L/H side pilot's window on the Piper 46-350P

Check out Aviation Maintenance Alerts at:

http://www.faa.gov/aircraft/safety/alerts/aviation_maintenance/

FAA Safety Team |Safer Skies Through Education

New FAA Safety Briefing Available

Notice Number: NOTC3072

The new issue of *FAA Safety Briefing*, available on the FAA Web site at www.faa.gov/news/safety_briefing/, presents ideas for enhancing mentoring and professionalism in general aviation. Articles highlight the importance of the attitudes, skills, and knowledge needed to take you to the top of your flying game. On page 28, you will find profiles of some of General Aviation's top mentors and professionals - the 2011 General Aviation Awards National Winners - who will be honored at this year's EAA AirVenture in Oshkosh, WI.

"Beyond the Air Show," found on page 4, also highlights the many educational opportunities available at AirVenture, along with a forum schedule for events at the FAA's Aviation Safety Center.

In addition, the issue's *Nuts, Bolts, and Electrons* department covers professionalism in maintenance, and *Angle of Attack* takes a look at the helpful role type clubs play in enhancing aviation safety. To learn more, download the July/August issue of *FAA Safety Briefing* at www.faa.gov/news/safety_briefing/.

FAA Safety Briefing is the safety policy voice for the non-commercial general aviation community. The magazine's objective is to improve safety by:

- making the community aware of FAA resources
- helping readers understand safety and regulatory issues, and
- encouraging continued training

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VISIT US ON THE WEB
WWW.GOCIVILAIRPATROL.COM

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.

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 that has shown significant improvement in using safety mishaps as an educational opportunity to raise awareness and prevent risk exposure.

Got a great safety article that you would like to see in a future Beacon newsletter? Please send it to Lt Col Sharon Williams at safetybeacon@capnhq.gov.

Region Safety Officers



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