



**HEADQUARTERS
CIVIL AIR PATROL VIRGINIA WING
UNITED STATES AIR FORCE AUXILIARY**



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COMMANDERS PLEASE POST

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WING BULLETIN: It is very important that you share this Newsletter with all Members of your Unit. Please review this material at your unit meeting and post a copy on your Bulletin Board so that it will be available to ALL members. (Members can't participate if you do not tell them about upcoming events). This Bulletin is posted on the Virginia Wing Website as a PDF document. ****All reports are listed on the Virginia Paperless Wing Website. Please have your officers refer to the calendar for report dates.**

1. SAFETY – Crew Resource Management – Just for flying?

There has been much talk for a long time about the need for Crew Resource Management (CRM) for operating an airplane safely and efficiently. As described in many authoritative articles on the subject, CRM refers to the effective use of all available resources: human resources, hardware, and information. Human resources include all other groups routinely working with the cockpit crew (or pilot) who are involved in decisions that are required to operate a flight safely. In the CAP, these groups include observers, scanners, ground radio operators, maintenance personnel, air traffic controllers, and flight release officers. As is also the case for other risk management activities, CRM is not a single task. CRM is a set of competencies, which must be evident in all tasks to be accomplished during a flight as applied to the single pilot or the multi-crew operation. CRM competencies, grouped into three clusters of observable behavior, are:

1. Communications processes and decisions.
2. Building and maintenance of a flight team.
3. Workload management and situational awareness.

If only one word could be used to describe this concept the word would have to be communication. At any time during the flight anyone in the airplane should be able to question a crewmember on the game plan and how it's going, and get a comprehensive — and correct — answer. To be sure, there must be a pilot in command. Someone has to have the final authority over the flight, but beyond that, all actions taken in the cockpit should be discussed and understood by all crewmembers before the deed is done. This is not to say that there must be a lengthy discussion over every little action as it happens. Some items fall under "standard" crew briefings.

It should not take much translation to see how the principles described above can also be applied to ground activities of all types where there is leadership and other participants. Strong communications about plans for the tasks at hand and leadership responsiveness to any and all questions for clarification are very important for safe and effective outcomes.

2. CADET PROGRAMS

The new Training Leaders of Cadets (TLC) course was conducted on Jan. 14-15, 2006 at Virginia Wing Headquarters by Capt Mark Evans and Capt Deborah Thiem. Capt John White and Capt Jason Smith also served as instructors to the fifteen senior members participating. The material was presented using lectures, discussions, and activities, including building peanut butter sandwiches. The course provided a strategic perspective of the Cadet Program, ideas for partnering with parents and other units, and best practices for managing a successful program. Another TLC course will be scheduled for the summer. For more information contact Capt Deborah Thiem.

Encampment staff selection will be conducted on Feb. 11, 2006 at Virginia Wing Headquarters. Staff training day will be April 1, 2006 at Virginia Wing Headquarters. RST will be conducted May 19-21 at Fort Pickett. Further details are available via the Encampment link from the Cadet Programs page on the Virginia Wing website.

Another Cadet Aerospace event will be held on Saturday, February 18, 2006 at Virginia Wing Headquarters. The day will be filled with speakers, discussion, and activities centered on aviation throughout history. Speakers from NASA Langley and the Virginia Aviation Museum are scheduled to be present. Aviation jeopardy and a flight simulator are included in activities. To participate, cadets must send a completed CAPF 31 to Capt Deborah Thiem. Bring a bag lunch and \$10 to cover snacks, drinks, and activity supplies. Further details are available via the

Aerospace Weekend link from the Cadet Programs page on the Virginia Wing website.

The Virginia Wing Color Guard Competition will be held March 4, 2006 at Virginia Wing Headquarters. Each group may submit one team. Further details are available via the Color Guard Competition link from the Cadet Programs page on the Virginia Wing website.

Professional Development

Corporate Leadership Course (CLC) will be conducted April 22-23 at Virginia Wing Headquarters. If interested, please submit a completed CAPF 17 to Capt Deborah Thiem as soon as possible. The few remaining slots will be filled based on receipt of the completed CAPF 17.

Cadet Programs Webpage has been updated. In addition to the activities postings, there is now a section for recognitions. Each month the milestone page will be updated with the names of those cadets who earned Milestone awards the previous month. CAP cadet scholarship winners will be posted on the Scholarships page. Finally, there is a general recognitions page where unit commanders and DCC can submit information on cadets that have been recognized for their achievements, such as Air Force Association awards, Air Force Sergeants Association awards, VFW awards, and Cadet of the Year awards. Please contact Capt Deborah Thiem for more information.

3. Summer Encampment

Planning for the 2006 Summer Encampment is in full swing. Seniors and Cadets are invited to attend this year's encampment at Fort Pickett in Blackstone VA. The dates this year are June 24 to July 2. Here are some of the particulars:

1. We are now accepting cadet applications. All of the forms can be found on the encampment website at:
<http://www.vawg.cap.gov/cadet/encampment/html/documents.html>.
Click on the link and download the forms. Submit all of the forms and payments at the same time. Send to Captain Cathy Egan.
2. The cost of the 2006 Encampment is \$130. There are scholarships available. Visit the cadet programs website for more information.
3. We will be posting equipment lists, welcome letters, and other information on the encampment website.
4. Seniors that would like to volunteer should contact Captain Mark Evans or Captain Terry Gentile.

4. HEALTH SERVICES

February is American Heart Month. A few heart attacks are sudden and intense, but most heart attacks start slowly, with mild pain or discomfort. Often people are not sure what is wrong and wait too long before getting help. Most people only think of men getting heart attacks. Heart disease is the number 1 killer of women over age 25.

Common signals of a heart attack include the following:

- Persistent chest pain or pressure that does not go away, or goes away and comes back.
- Chest pain spreading to the shoulders, neck, lower jaw, or arms. Pain along with dizziness, lightheadedness, nausea, or vomiting.
- Trouble breathing or shortness of breath.
- May break out in a cold sweat, and the skin may be pale, ashen, or blueish.
- Denial of the seriousness of the signals or a vague feeling of "impending doom".

Women, the elderly, or diabetics may experience signals of a heart attack that are more difficult to recognize. They may have pain that does not start in the chest but begins in the back, neck, or jaw. They may not describe pain, but complain of overall weakness, vague discomfort, or a dull aching sensation.

The most important step you can take for someone with a suspected heart attack is to call 911 or the local emergency number. Prevention today is critical to reducing your chance of having a heart attack in the future. You cannot control all risk factors, but you can reduce your overall risk if you are willing to change your behavior to live a healthier lifestyle. Risk factors you cannot control include: family history, your age, gender, and race. Controllable risk factors include: smoking, high cholesterol, high blood pressure, physical inactivity, overweight, diabetes, and stress. If you have not done so already, it is time to eat healthy, stop smoking, become physically active, and have regular check ups by your health care provider.

At Wing Headquarters there is a small box with Health Information for adults and teens. Help yourself to this information.

5. AEROSPACE EDUCATION (AE)

I have some good news this month for you. The Wing Staff has decided to ease the burden on AEO's and CC's by requiring that AE Reports be submitted semi-annually rather than quarterly. That means I will expect a report by 10 July and 10 January each year. I hope this will mean that AEO's can file complete reports with the listing of AE events held each month during the six-month period. I am also looking for some one that can scan the Squadron Report form in the AEO Handbook CAPP 15 and convert it to a MS Word template or .dot file. This form is shorter and easier to fill out than the one we have been using.

Don't forget to sign up for the Cadet AE Workshop being held the weekend 17-19 February at Wing Headquarters. It will be focused on "Aviation: Yesterday, Today, and Tomorrow." It will bring aviation from its earliest beginnings to today through speakers, discussion, and activities. Please contact Captain Deborah Thiem, Director of Cadet Programs at dcp.va@vawg.cap.gov for details.

We will be holding our first Aerospace Education Member (AEM) Workshop at the NASM Udvar Hazy Center on 18 March. We plan to have 30 teachers attend this workshop and then follow up with orientation rides in CAP aircraft. We still need Cadets who can operate the Satellite Tool Kit (STK) program for Girl Scout Week at the Hazy Center on 25 March.

We have 4 Squadrons from Virginia Wing participating in the Aerospace Industries Association (AIA) Team America Rocketry Challenge (TARC) May 20th, 2006 at the Plains, Virginia. Those squadrons are the Danville, Monticello, Minuteman and Winchester Squadron. There will also be 13 other Squadrons from Colorado, Texas, Illinois, Pennsylvania and other states participating.

The National Conference on Aviation and Space Education (NCASE 2006) will be held at the Crystal Gateway Marriott in Arlington, Virginia 19-21 October 2006. Please save these dates. It promises to be a big event next year with significant improvements to those held in the past. You can get a full description of the convention on the web site www.ncase.info.

A member of the Wing AE Staff would like to pay a visit to your unit this year. This may be conjunction with a Unit Inspection or as a Staff Assistance Visit. Please let Major Bert Jones or myself know when we can schedule something. We will probably need at least a month's notice. Lt Col David C. Scull, VAWG DAE, 7897 Wellington Drive, Warrenton, VA 21086, Ph: 540 349-9310, E-mail: kd4sv@arri.net.

Major Albert L. Jones, VAWG Asst. Director for Internal AE, 370 Westview Lane, Heathsville, VA 22743 Ph: 804 580-5120, E-Mail: uptheriver@rivnet.net.

6. MAINTENANCE

1. Nose strut shimmy - Nose strut shimmy can be caused by several actions of the nose strut.
 - A. Tire out of balance.
Corr: Probably replace the nose tire.
 - B. Shimmy dampner.
Corr: Needs serviced with red hydraulic fluid. If red fluid drops are on either of the lower ends of the cylinder, service for now, and order a replacement shimmy dampner.
 - C. Have mechanic check nose strut structure when servicing shimmy dampner.
 - D. On landing or takeoff, a little back pressure on the control column will reduce some of the vibration. Careful, you can get into a bit of trouble with a cross wind or the touch down speed is too fast.
2. A recent article on winter operations raised a few questions. An attachment follows at the end of this bulletin from AOPA. The links for the article and an additional article from AOPA are:
<http://www.aopa.org/asf/publications/sa11.pdf>
<http://www.aopa.org/asf/asfarticles/2001/sp0112.html>
3. A note about tire pressures. On the 172 with 180 HP engines, the pressures are as follows: Main tires 6.00 x 6 6-ply rating 35 to 40 PSI. Nose tire 5.00 x 5 4-ply rating 40 to 45 PSI. Tire pressure should be checked every thirty days.
4. An attachment is a supplement to CAPF 71 JUN 2005. The purpose of the attachment is to be sure the airplane has all necessary CAP needed equipment. This is a standard list that will apply to all aircraft. When your aircraft leaves to another location, it should be equipped the way you would like your new aircraft to be equipped. Copies of CAPF 71 JUN 2005 and this attachment should be in aircraft logbook.

- 7. OPERATIONS** – Within the next 2 weeks all VAWG aircraft should be back in service. 559 is getting a new engine and prop overhaul, 41L has been repainted, wing reskinned and fresh Annual, and 714 has a new engine.

Our glider, 365BA , suffered wind damage at CJR requiring a major tail replacement. The part must be ordered from the factory in Europe. We anticipate a 3-month down time. Based on this the glider will be placed in its trailer for safe storage.

The Maule has been relocated to Group 2 and 559 will also be relocated to Group 2 following the engine replacement. As no tow requirements are anticipated the aircraft will be placed in normal CAP service.

The Glass 182, presently based at Manassas will be relocated to Group 2 around the end of Feb. Group 3 will get 326 in exchange.

When all aircraft movements are completed each Group will have 4 aircraft. Group 1 will also have 02R (182RG) for pilot rating upgrades.

Effective Feb 1, 06 Flight Release Officers will be required to view the pilots information on Nationals MIMS system to insure the pilots are current and approved before issuing a flight release.

All Cadet O ride pilots must obtain a mission number from LtCol Eric Litt before flying any Cadets under CAPP 52-7. This mission number must be given to a flight release officer when requestng a flight release for O rides.

Newsbreak

Roanoke Squadron -- The following cadets of Roanoke Squadron were promoted to their present grades this month: C/Major Daniel Bessette; C/Captain Kasey Bailey; C/Captain Justin Boitnott; C/1st Lieut. Chris Bennett; C/2nd Lieut. Peter Broughton; C/2nd Lieut. Philip Knouff; C/CMSgt Thomas Everett.

Lieut-Colonel Doug Kabler and 1st Lieut. Tom Gardiner participated in the Virginia Wing Sarcap held at Danville, Va.

From The Augusta Composite Squadron

The Augusta Composite Squadron has seen some new and exciting changes in the past two months. We recently had our Annual Squadron Dinner in January and there were some wonderful guests as well as some promotions and changes in offices. The Wing Commander, Col Rick Mosley as well as, the Group three Commander Lt Col Duke Stanton were present to officiate for us with some of the changes to

come. The biggest of these being a Change Of Command from our Squadron Commander, Maj Terry Gentile, who has been in command for four years, to 1LT Eric A Taylor, who has served as the Deputy Commander for Cadets for the past year. We were also privileged to be able to have Lt Col Eric DiDomenico who is a retired Air Force pilot and Academy instructor speak to our squadron about his past experiences in the Air Force and about life.

There were several promotions for both Cadets and Senior members. C/MSgt Daniel Noonan received his Doolittle Achievement and promotion to C/SMSgt and C/SSgt Christian Sykes received his Rickenbacker award and promotion to C/TSgt. Capt Terry Gentile completed his Grover Loening achievement and was promoted to Major and 2LT Eric Taylor was awarded First Lieutenant as a special promotion for taking command of the squadron.

With our new squadron command, our cadets have taken on new roles. They are leading the squadron meetings more than before and will continue to grow in their positions. We have a whole new squadron cadet staff, headed up by C/2LT Adam Cook, who has already made some great changes. We also are starting a Parents Committee, so that our cadets and their families can share in more activities, which we are very excited about.

Finally, three of our cadets have completed the GSAR course at Ft A.P. Hill this past fall/winter and are now Ground Team Member 3 rated. C/SSgt Adam Pugh, C/TSgt Christian Sykes and C/Amn Alex Whitesell completed the course and are already teaching Basic ES to our cadets and plan on going further with their training as well. C/SSgt Pugh has recently applied to the Hawk Mountain Rescue School and has also been made our Cadet Emergency Services Officer.

From Leesburg Composite Squadron:

Leesburg Composite Squadron hosted a Parents Night on 31 January 2006 to encourage a closer relationship with the parents of our cadets and to share our program with them. Inspired by the recent program to enhance cadet protection, Squadron Commander Captain John White put together a outreach program which included:

1. Explanation of the Cadet Program and how it fits into both CAP Senior Program and USAF, including the 3 missions of CAP – Col. Petyak (DCC)
2. Why we drill and do ceremonies – 1Lt A. Johnson
3. Cadets and Emergency Services 1Lt Irey

4. Aerospace Education (2Lt Kelley/SM Dancy)
5. Character Development – 1Lt Becker (MLO)
6. Flight opportunities (o-rides and gliders) – Maj Van Etten
7. Encampment, NCSAs and flight training – C/LtCol White
8. General information about Squadron communication, Scholarship opportunities, Dues, a Parents' Committee, upcoming events and schedules, including a possible Dining Out - Capt White

The event was warmly received by the 27 parents in attendance.

Congratulations are extended to the following Cadets on their recent achievements:

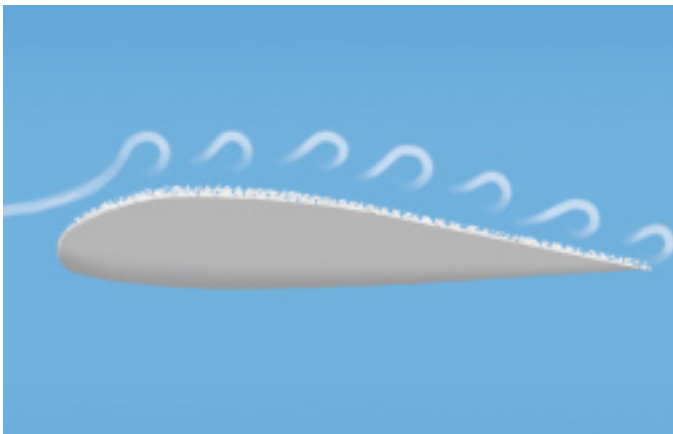
C/Capt Heather White (Amelia Earhart Award)
C/2Lt Samantha Golden (Gen Billy Mitchell Award)
C/2Lt James Clendenin (Gen Billy Mitchell Award)
C/2Lt Eric Andrade (Gen Billy Mitchell Award)

Also, special congratulation go out to C/2Lt Matt Lowen on being accepted into the Class of 2010 of the United States Naval Academy and C/LtCol Misa Yarmie on being accepted into the Class of 2010 of the United States Military Academy at West Point.

Cold Facts: Wing Contamination

During the last 10 years, there have been over 30 accidents on takeoff as a result of wing contamination by snow, frost, and ice. A few simple steps during preflight could have easily prevented these accidents.

Frost and snow often accumulate on wings, elevators, and other surfaces when an aircraft is parked outside on the ramp. The disrupted airflow over the wings can substantially alter flight characteristics. Increased stall speeds, longer takeoff rolls, or an inability to fly at all may be the result. Even a passing snow shower can foul surfaces enough to make flight inadvisable.



Smooth boundary layer flow over airfoils is critical to safe flight—degrade it with any snow, frost, or ice and flight may not happen.

When frost or snow is present on the airframe, the pilot has two choices: go home or spend some extra time during preflight **completely removing** frost and snow from the aircraft. While no Federal Aviation Regulations (FARs) specifically prohibit a light general aviation (GA) aircraft from attempting a takeoff while covered in snow or frost, doing so may fall under careless and reckless operation (FAR 91.13).

In December 2004 the National Transportation Safety Board (NTSB) mailed pilots an alert letter urging them to *look at and feel* the aircraft's wings during preflight to ensure no ice is present.

Clean it up!

The best and easiest way to prevent contamination is to park the aircraft in a hangar.

In the highly regulated airline world the rule is simple: an aircraft can depart only when it's 'clean' - no snow, frost, or ice on any part of the aircraft. GA pilots should use the same winter operations principle.



If the aircraft is snow-covered, consider using soft bristle brooms or small snowbrushes. While effective, they can scratch paint, so use care. Clean towels or shop rags will also remove snow without scratching the paint.

The bad news is that underneath the snow there may be a layer of ice that also needs to be removed. Removing frost and ice is trickier than loose snow, but just as critical. The best tool is a heated hangar and an hour to spare. When melting the frost and ice make sure water does not penetrate control surface hinges where it might refreeze and cause problems.

From an aerodynamic viewpoint, there is no such thing as “a little ice.”

No hangar available? No problem.

There are several hangar-in-a-can “solutions” available:

Glycol is the most expensive and generally only available at select FBOs. **Polypropylene antifreeze** is pink in color, not harmful if swallowed, and is available at RV, automotive or marine stores and is used for winterizing portable water systems. Placed in a small garden sprayer it works quite well, especially if heated to room temperature.

Automotive windshield de-icer in a spray can is inexpensive and can be purchased at gas stations and department stores. Do not use it on aircraft windshields or windows. It’s the easiest to carry and unless the airframe is heavily iced, will yield several applications. **Rubbing alcohol**, sold in relatively small quantities in drugstores and supermarkets, can work in a pinch



A garden sprayer can be used to help remove frost.

using a spray bottle with a hand pump. With the exception of Glycol, these products are inexpensive to purchase and *should be used liberally. Remember, we’re talking about becoming airborne!*

Cleaning off the windshield is slightly different. Some pilots clear the aircraft’s windshield by using a *clean* towel or shop rag. Other pilots start the airplane and wait for the defroster to do the job. This could take a while in cold weather at idle power. Both of these techniques work without damaging the windshield. **Do not** use car ice scrapers, credit cards, or any other hard plastic device to remove frost or snow from the windshield. Do not taxi until you can see enough to move safely. No cheating!



“Hangar-in-a-can” products are small enough to fit in a flight bag.

Finally, remember that do-it-yourself airframe decontamination will take awhile, in cold, often-windy conditions. A light flight jacket and tennis shoes, while stylish, do not work well. A parka, boots, gloves and a hat will encourage you to give this critical job the time and attention it deserves.

Want to learn more about winter flying? Take a look at *Aircraft Icing*

<http://www.aopa.org/asf/publications/sa11.pdf>

and *Snow time*

<http://www.aopa.org/asf/asfarticles/2001/sp0112.html>

To access the AOPA Air Safety Foundation accident data visit

www.aopa.org/asf/accident_data/

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