

# ***NORTH CAROLINA WING CIVIL AIR PATROL***

***U.S. Air Force Auxiliary***

## ***Carolina WingSpan***

***Citizens serving communities: Above and Beyond***



**LEST WE FORGET...**



Photo provided to A1web courtesy of the CAP Historical Foundation and Major Andrew J. Feldman, NY Wing CAP.  
This photo is from the first low-altitude fixed-wing photo recon mission over the World Trade Center wreckage, flown by the Civil Air Patrol on September 12, 2001.

**SEPTEMBER 11, 2001**

*Carolina Wingspan* is a publication of the North Carolina Wing, Civil Air Patrol, Wing Headquarters, P O Box 2082 Burlington, NC 27216-2082. The opinions expressed herein are those of the individual contributors and may not reflect the opinions of Civil Air Patrol or its leadership.

On Sept. 10, Raleigh-Wake HQ received a call from Wendy Roberson, formerly Hildebrand, stating that Trooper Andrew Stocks and she were cadets together in NC-048 back in the 80's.

Trooper Stocks died in a fatal traffic accident while responding to an emergency call.

Please keep the family in your prayers, and when arrangements are announced it would be nice to have a CAP presence.

Lt. Col. Al Therriault

Submissions to Carolina WingSpan: Please use the guidelines published on the NCWG website: <http://www.ncwg.cap.gov/index.cfm?fuseaction=category.display&categoryID=6> Articles must be submitted to: [Carolina.wingspan@gmail.com](mailto:Carolina.wingspan@gmail.com). Failure to follow these guidelines may result in you article being rejected for publication.

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## From the Commander

I want to congratulate everyone who attended and participated in the 2008 NC Wing Conference. This was another GREAT conference. The Distinguished Visitors were impressed and I was impressed with all the excitement and spirit of this Wing. Your energy is contagious and your accomplishments obvious. The New Bern facility turned out to be absolutely great and I want to thank Lt Col Davis and 2Lt Gaddy for all their hard work in preparing for this fantastic event. The preplanning and hard work paid off big.

This conference was especially nice for me. As my last Wing Conference serving as your Wing Commander, I could not have asked for a more successful event. The attendance was good, the seminars were productive, and the entertainment kept us all laughing. I am also very pleased with the awards that this Wing was able to present to so many who had done so much. You are the best, NC Wing. I am already looking forward to next year's Wing Conference in eager anticipation.

Keep up the good work and God bless you for being who you are.

Larry J. Ragland, Colonel, CAP  
NC Wing Commander  
919-935-1029 Cell

# Cold Comfort

Reprinted with permission, from the AOPA  
By Julie Summers Walker

## Tips for winter flying

"It's getting really cold in my area now; is there a certain kind of oil that I should use in the wintertime?"

"What is the proper way to heat the engine on my airplane? The temperature outside is positively frigid here now."

"What should I use to get the ice off of my airplane's wings? We've had icing conditions for more than a month here."

These are typical questions heard by the aviation technical specialists in AOPA's aviation services department at this time of year. When the weather turns cold in most of these United States, flying takes on a whole different set of concerns for pilots.

"Flying in the winter offers new challenges but great rewards," says aviation technical specialist Brent Hart, who learned to fly in Minneapolis. "You have the best performance from your aircraft, the air you fly in is much smoother, the skies are crisp and blue and offer great visibility, and an added bonus is the thrill of landing on ice!"

However, says Hart, winter flying takes more preparation. "You must think ahead," he says. Here are a few tips from this veteran winter flier, but much more information can be found on AOPA's Web site (see "AOPA Web Resources").

- \* If your aircraft isn't hangared, make sure the wings and cowling are covered. Ice builds on the wings, resulting in inefficient airflow and longer takeoff runs. If you don't have covers for the wings, use a hand broom to brush off snow and ice.

- \* Consider getting a new battery before winter sets in.

- \* Because of contraction and expansion caused by temperature changes, control cables should be properly adjusted to compensate for those changes. Your airframe and powerplant mechanic should check the tension and make any adjustments needed.

- \* Park in the direction that the sun rises in the morning; it will help melt the snow and ice on the windshield. Cover the pitot tube and vents.

- \* Use a preheating device but have a fire extinguisher nearby and someone to supervise the preheating. Prime at least three times before starting the engine (check your aircraft's manual). Have a carbon monoxide detector, especially if you have a tightly sealed airplane.

- \* Take off the airplane's wheelpants. Ice and slush can collect under the pants and cause the wheels to lock up when you land.

- \* When taxiing, look out for ice. Check the brakes so you know that you can stop when doing your runup. Attempting to perform a runup on ice can result in sliding out of control.

- \* If you're flying on skis, put something such as a plastic garbage bag or blocks between the skis and the snow when the airplane is parked.

- \* Dress warmly; pack a snack bar for fuel; keep a well-stocked survival equipment kit.

As an AOPA member, you have access to the best resource anywhere for information and answers for pilots. AOPA provides information for its members through a vast array of communications technologies. You can reach experts in all fields of aviation via AOPA Online ([www.aopa.org/members/](http://www.aopa.org/members/)), the AOPA Pilot Information Center (800/USA-AOPA), and e-mail ([inforequest@aopa.org](mailto:inforequest@aopa.org)). Aviation technical specialists respond promptly to member requests while AOPA Online provides members with access to information and resources 24 hours a day, seven days a week. The toll-free AOPA Pilot Information Center gives you direct access to specialists in every area of aviation. The center is available to members from 8:30 a.m. to 6 p.m. Eastern time, Monday through Friday.

# Hanna doesn't deter cadet officer training

Through rain, and wind and gloom of Tropical Storm Hanna..... No not the US Postal Service, but the North Carolina Cadet Officer Corps. Training moves on and is not hampered by Hanna. As the rains began to fall Friday night nine cadet and five senior officers gathered at wing headquarters for a great weekend of training and team building.

With the two new flat screen monitors on the wall of the meeting room we were able to have team building slides on one while Jim Cantore and Mike Seidel were on the other tracking the progress of Hanna. There was also time to relax and enjoy each other's company throughout the weekend. Saturday brought lots of sunshine in the afternoon and a day full of learning, thinking outside the box and more team building. While C/Col Coogan and C/Maj Evrard were supplying the cadets with more material to put in their CAP and life portfolio, the senior officers were also doing some training of their own. Maj. Augur and Lt.Col. Therriault worked with the senior officers there on Cadet Programs basics, updates, tools available to them and even some ES and Professional Development assistance.

ALBERT R. THERRIAULT, Lt Col. CAP  
Director of Cadet Programs, NC Wing



C/Col Coogan presenting a team building problem to cadet officers attending training session. *Photo by LtCol Therriault*

## NCWG Cadet Officers Training

Congratulations to the following cadets for graduating from NCWG Cadet Officer Training School:

- \* C/2d Lt Zachary Baughman
- \* C/2d Lt Rob Lollar
- \* C/1st Lt Stephen Bloemsma
- \* C/2d Lt Joseph Seaman
- \* C/1st Lt Stephen Coogan
- \* C/2d Lt Peter Upton
- \* C/2d Lt Kyle Zobel

Each one gave up their weekend and braved hurricane weather in order to participate. I thoroughly enjoyed working with them and was impressed by their teamwork, dedication and critical thinking. Not only do these cadet leaders return to their home units with more tools in their "leadership toolbox" and broader perspectives on leadership, but they are now prepared to continue their own leadership development by teaching and training cadet NCOs and airmen wing-wide. I look forward to working with them in the future.

NCWG Cadet Officer Training School was held 5-6 SEP 2008 at NCWG Headquarters. Cadet Officer Training School equips Phase III cadet officers with the strategic thinking, communication skills, teamwork, and CAP knowledge required to serve in command and staff positions, both at the home unit and at wing-wide activities. The material instructed is at the same level as that taught at a Region Cadet Leadership School.

Thanks go to Lt Col Al Therriault and Maj Rich Augur for their support through logistics, supervision and mentoring. C/Maj B. Hamilton Evrard also proved an invaluable asset with his outstanding instructional ability.

Sincerely,  
JEREMIAH COOGAN, C/Col, CAP  
Cadet Leadership Officer

# Carolina WingTips

## **Congratulations to NC Wing**

Captain Mary Sandlin reports that NC Wing completed its logistics inspection today with words like "Outstanding" coming from our CAP-USAF inspector guest. Three squadrons were inspected with only one observation being noted and no findings. Big kudos go to the Burlington Composite, Raleigh-Wake Composite, and Fayetteville Composite squadrons. They did a superb job of doing the things it takes to show we can be accountable with the resources the Air Force entrusts to us. I know this didn't happen without a very concerted and determined effort.

I also want to give the highest praise I can offer to Captain Mary Sandlin for escorting our guest around the state, and doing all the preparations required to achieve this kind of positive result. She obviously did a great job of assisting the units in preparing for this inspection. The Wing owes her a great big Thank You for all her hard work.

This is the kind of Wing any Wing Commander would be envious to lead. I am absolutely so proud of each and every member involved with this big success story. You continue to be the best.

Larry J. Ragland, Col, CAP  
NC Wing Commander

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## **Major "O" Ride Milestone**

I am pleased to announce that Lt. Col. Wally Courtney of the Asheville Composite Squadron has just completed giving his 100th front seat Cadet Orientation Flight!

Lt. Col. Courtney (a retired US Navy Captain) joined CAP less than 3 years ago in December of 2005. He completed the CAP Pilot Checkout and was designated a Cadet Orientation Pilot in February 2006.

Since joining he has also been named the NCWG AEO of the Year and has been responsible for the Asheville Composite Squadron being awarded the AE Excellence Award two years in a row, and they expect to receive it again this year! Additionally, he developed power point presentations that are in use statewide to assist Senior Members and AEOs with teaching Aerospace Dimension Modules to cadets.

Many thanks to Lt. Col. (Capt) Courtney!

Maj Rich Augur  
NC019/DCC

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## **Is our message getting out there?**

I've been involved in the Public Affairs training track for over three years and I was curious about how well we are doing on a local and the national level. I went into the archives of CAPNews On-line and made a few interesting discoveries as well as checking our Wing website:

1. From 2005 through Nov 7, 2008 CAPNews published 95 articles from the NC Wing
2. From Jan.1 to Nov 7, 2008 NC Wing members published 26 articles on CAPNews
3. NC Wing's slowest year was 2006 with only 19 articles
4. To date, in 2008, 36 articles have been posted on the Wing website
5. From 2006 to Nov 7, 2008. 19 issues of Carolina WingSpan have been published

Experience has shown that if you follow the CAP News and NC Wing guidelines you have a better chance of being published. So give it a shot.

# Preparing For Winter Flying

Reprinted from AOPA archive

Unless coconuts are growing in your backyard or all the birds in your neighborhood wear tuxedos, preparations for winter flying will likely present you with challenges. The first and greatest is actually encountered even before leaving the ground: that bracing adventure of coaxing your airplane from hibernation and preparing it for flight.

It's easier to assimilate the collective wisdom of cold-weather flying if we consider each part separately, from preflight to postflight. In winter, there can actually be one additional step, and that's preheat, so let's start there.

When it's below freezing, a thorough preheat is just as essential as the studious scrutiny of preflight. Without one, your engine's moving parts will be straining to prevail over viscous, syrupy oil, and your cold-soaked battery will struggle against the increased resistance and a greatly increased load. Bone-dry cylinders will be scored as pistons grind against them; crankcase valves can stick; and then there is the risk of iced plugs, a flooded engine, or even fire when one misinterprets the cause of sluggish starting and overprimes the engine - or even worse, pumps the throttle. For any frozen engine, coercion by force only brings higher operating costs and an early overhaul.

Opinions vary as to what the cutoff is, but below 32 degrees Fahrenheit (0 degrees Celsius), a gentler means of persuasion should be *de rigueur*. A lucky few of us have the best preheat option of all: a warm hangar. In all my flying, I've enjoyed such a refuge exactly once. If you do have a hangar, even it's an icebox but it has electricity, an oil sump heater or preheat system is a good idea. For the rest of us, preheats epitomize life: If you won't plan on investing the time now, you can plan on investing the money later. If you rent the aircraft you fly, ask your flight school or fixed-base operator what its policies and capabilities are regarding preheating.

Perhaps born of Yankee ingenuity is a preheating option available in the flying club to which I belong. Years ago, some inventive soul removed the blades from a secondhand lawnmower, installed a sheet-metal cover under it, and attached a flexible hose to its discharge chute so that its main product became hot air. Even though it is the old pull-cord type, since there is no blade there is little inertia to overcome, and it's very easy to start. We simply direct the flexible hose upwards toward the engine by the nosewheel well, using any number of convenient points for attaching it via a hook installed at its business end. We are careful not to direct heated air directly onto fuel, oil, or hydraulic lines! Twenty minutes later: a warm engine. Lacking such inspiration, however, the accumulated expense of paying your FBO to send a lineman out with a preheater is still likely less than that of an engine overhaul.

Even before the preflight, what you do after a previous flight - in this case replenishing fuel - can be important. Condensation of water in partially filled fuel tanks can be bad news in the liquid phase, and potentially worse if it freezes. Water vapor can condense inside half-empty fuel tanks, and pieces of ice can do more than momentarily break your engine's stride, which is what entrained slugs of water can do in warmer weather. Ice can block fuel lines. Consider filling up after landing (winter or summer), so long as full fuel won't be a liability for the airplane's next pilot or your next flight-remember that many two-seat trainers can end up significantly over their maximum gross weight with full fuel and two large occupants. Another thing you can consider is removing wheel pants, which will help to prevent slush and compromised braking ability.

When I walk up to an airplane, regardless of how cold it is, the first thing I do is waggle the wings. By the time I get around to draining the sumps, maybe 10 or 15 minutes later, I've allowed some time for any water to settle to the lowest points. Then I get that preheat going while I complete the rest of my preflight.

It's natural to want to expedite a preflight when the outside temperature is low, but just when you want to hurry is precisely when you should take your time. Also, interruptions can lead to skipped checklist items, so if you get distracted by a friendly conversation (or a mug of hot chocolate), recheck the item you left off with and resume from there. Thoroughly check the fuel drains for entrained water. Examine the heater shrouds for cracks or gaps. And make sure you have a carbon monoxide testing patch in the cockpit (and that it hasn't expired).

Check all vents and even the crankcase breather line (underneath, usually by the nosewheel) for obstructions or condensed vapor. Frozen water vapor can plug up the breather line and give your engine a terminal case of iceclerosis, where pressure builds up and causes the oil filler cap to blow off, or ruptures a seal. Don't let water or melted ice get near hinges or other critical moving parts. Of course, check for ice or water in any vent, static port, and the pitot tube. All openings are targets for obstruction by ice.

[Continued on Page 21...](#)

# A Legacy Lives On

sac-ri-fice [sak-ruh-fahys] noun, verb, -ficed, -fic-ing.

1. the surrender or destruction of something prized or desirable for the sake of something considered as having a higher or more pressing claim.

2. to surrender or give up, or permit injury or disadvantage to, for the sake of something else.

My oldest son has always known what it means to have to sacrifice. There may have been 2 ½ years before his sister came along that he wasn't sharing either himself, his space, his time or his opinions. When we became a foster family, he shared his room with a younger sibling and his parent's attention with children who had different needs from himself. His latest passion is belonging to an organization called Civil Air Patrol (CAP). It is an under recognized program that supports our US Air Force as an official civilian auxiliary component. It also supports our youth in a drug free, structured program that allows their self esteem to grow and be supported with simple qualitative criteria. My son's sacrifices in this program have been mostly time related. He freely gives time to help in training new cadets, going to summer encampments to learn the program better, and like many kids giving up Tuesday nights for meetings. Unfortunately, he and the rest of our family have just experienced one of life's greatest sacrifices. He lost his uncle in the fight against an untouchable enemy, drugs.

My brother was a Virginia Beach police officer. He had worked hard for the last ten years to achieve a dream of becoming a detective. He worked as an undercover narcotics officer with the Special Investigations Division. He was very good at his job and had made many arrests in the fight to keep drugs off our streets. Our entire family was very proud of the fact that he was a police officer. His two sons and my four children looked up to him because he chose this profession. My oldest son however had other reasons to feel close to him. My brother put in four years with the US Air Force. He served in Desert Storm and made sacrifices for his country and his family. He was the person who had told my son about CAP. He was the one who had encouraged him to join and assured him it was a worthy program. My brother had also just started flying lessons so he could take his family up with him someday. My son also has always wanted to be a pilot.

My brother was killed in the line of duty. He was out on what was to be a routine night. He set up a drug deal and was well protected by other members of his unit. Little did he know that one of the people he was meeting was a person with no moral fiber, no sense of right and wrong and no sense of what it means to make a sacrifice in pursuit of effecting change.. He shot my brother without any mercy. He didn't want to find out who he was or what his aspirations were or even if he had a family. We may never know why he did what he did, but we will always know that he was an individual with no moral compass, no ability to comprehend fairness and no right to be carrying a weapon. He was a person who was by all accounts consumed with a need for drugs and no regard for human life.

I write this today to remember my brother but also to recognize my son and the choices he has made and will make that will keep him from ever being a person like the one who killed his uncle. CAP is a program that starts at age 12 and goes through virtually any age. The senior members who carry out the search and rescue missions go from 18 to well up into their seventies. The emergency services component frees up our Air Force to do their job in protecting our country. The training of the cadets makes it possible to have a new generation of youth that understands the dangers inherent with drugs and lack of self control. CAP is an all volunteer organization. All of these fine people give up their time to make sure that our youth have positive role models influencing the choices that will set them up for the rest of their lives. No one who is involved with this program feels they are sacrificing their time without great reward.

There is nothing arbitrary about the program. In typical military fashion, the goals are set out, expectations are established, and promotions are attainable with hard work (much like real life). These are the types of programs that our youth need more of. The cadet program (ages 12-21) teaches aerospace education, moral leadership, safety, pride and accountability as well as military customs and courtesies. There is a huge focus on aerospace education and on physical fitness. There is a NO DRUGS policy which is called Drug Demand Reduction and while there is a hope that this message is reaching the public, there is also no tolerance for drugs within the unit. The cadets are expected to look sharp, act smart, be respectful, and have fun. They get time in the air with experienced pilots; they shoot off rockets, check out airplanes, helicopters, and important historical sites. They get to stay on military bases and train with some of our nations finest. The advantages and rewards are many for those who are affiliated with this organization. This is a tremendous program that has impacted our family very personally. I am a senior member, and my son is a cadet. I am forever grateful to my brother for telling my son about CAP. If you want to know more, check out our website ([RaleighWake.googlepages.com](http://RaleighWake.googlepages.com)) or come to a meeting on a Tuesday night at 6:30 at the General Aviation Terminal at RDU.

I am very proud of my son. He has attained the rank of Cadet Second Lieutenant with hard work and determination. He has given up a lot of purely social activities to go on trips and be an active part of CAP. He doesn't regret that at all. Some of his best friends and people he can look to for advice for the rest of his life will be people he met in CAP. My son is 15 and he already knows about sacrifices. My brother was 37 and he knew a lot about them also, ultimately sacrificing his life for what he believed in. He loved his job and he loved knowing he was making a difference in the lives of the people around him. My son will continue in that tradition making a difference in the fight against drugs. I am proud of both of them.

Terri Zobel

Cadet Second Lieutenant Kyle Philip Zobel June 2, 1993-  
Detective Michael Smith Phillips June 17, 1971- August 7, 2008 End of Watch

# JoCo members staff Open House

It was a beautiful, if not a little warm, day for flying and the EAA made quite a few flights with their Young Eagles program. That made it more challenging for us with parking duties as the crowd was sizable. As well, we had a great turnout of people coming by the recruiting/PAO display this year and hopefully will bear some fruit.

On a personal note I want to give a hearty THANKS to the good folks from the Cape Fear Composite Squadron for coming up to assist this year. With the parking and flight line duties the day was hot, but interesting to say the least.

Donald A. Beckett, Lt. Col., CAP  
Public Affairs Officer  
Johnston County Cadet Squadron



Photos by: Lt. Col Don Beckett



# Hurricane Ike strikes Texas coast

Editor's Note: Photos from Chaplain Major Ed Fleagle's (Cunningham Comp. Sqdn.) commander on the AR-1 Disaster Medical Assistance Team, Tim Tackett. One of the Arkansas DMAT/FEMA members has been putting these together.



Marine One with Pres. Bush aboard tours Galveston area



Memorial to victims of Galveston hurricane of 1900



# Rockets fly in Group One

Neither a severe gas shortage in Western North Carolina resulting in stations being closed for weeks nor rain on Friday night could not stop these rocketeers from getting their rocket badge! 18 cadets, nine SM and two visitors from Asheville, Iredell and Charlotte made the weekend a great success!

- Swain County (NC151) had planned to send 3 cadets, 2 cadet visitors and 1-3 SM but couldn't come due to gas
- Gastonia (NC024) had planned to bring a van load but gas got them also.
- Shelby (NC050) planned to attend but gas got them too.
- One member of Apex (NC801) planned to attend but also didn't get here.

Eight (8) of the cadets attending needed most of the written and hands-on phases to complete their rocket badge requirements and our goal was for all to get their badge by Saturday afternoon.

FRIDAYEVENING...

Three cadets from Iredell and 12 cadets from Asheville spent the night in the barn. Asheville Cadet staff began teaching the Redstone, Titan and Saturn classes in the barn using the classes developed by Lt Pam Strug, power point presentations, a projector, and a sheet hung on the side of the barn.

They took a break later in the evening and built "Fizzy Rockets", complete with "Semper Gumby" templates. Asheville Cadet staff taught this phase also. We launched the fizzy rockets in the barn with cadets standing in the hayloft to judge which rocket went the highest. They then built "Goddard" rockets and launched them in the barn until the rain quit...oh yes, we had planned to camp in a "tent city" in the field but since it was raining as folks arrived so we just went to the barn. We later went outside and had distance and altitude contest with the "Goddards". The eight cadets completed the "Redstone Phase" on Friday night.

We then watched the movie "Return with Honor" - a documentary about the Vietnam POWs.

SATURDAY

AM - The classes continued and by 1000 all 8 cadets had completed the written phases. Asheville cadet staff then assisted them in building the Titan and Saturn phase rockets. Most had already built the Estes Viking (Titan phase) rocket so the time was spent building the "Patriot (second Titan phase rocket) and Payloader for the Saturn Phase. All rockets were provided by the CadetLeadership Program Grant.

Mr Dale Herman, a Level 2 model rocketeer, brought his trailer full of rockets and gave a great presentation. He launched a few of his "lesser" rockets as part of our afternoon launch.

By noon the rockets were done and the launches began. First, the eight cadets completing their rocket badge requirements were trained on how to pack and launch a rocket and then they launched! First the Vikings, then the patriots and then the payloaders with a 3 ounce weight. All rocket engines were provided by the grant. All 8 successfully completed their launches and got their badges, complete with a cadet formation and awards ceremony!

We then let everyone launch whatever they had brought or built. We had more than 80 total launches on Saturday!

Three AVL cadets stayed on Saturday night (2 of them had missed camping the night before). We had the bonfire we had canceled on Friday due to the rain on Saturday night. On Sunday morning they spent time designing and building their own rocket with a glider! They launched it 5 times. None real successful as far as the glider actually gliding but all recoverable! Once it went in a tree but we were able to get it out. They also had about 15 more launches of other rockets they had built for the weekend.

Summary...over 100 launches, 24 of which were directly related to getting the 8 cadets their badges. Only one rocket recovered with doggy teeth marks (Parker the dog was our canine recovery system)!

All food was prepared and provided by 1Lt Rhonda Augur (snacks on Friday evening, breakfast lunch and supper on Sat., breakfast and lunch on Sunday).

Maj Rich Augur  
Cadet Leadership Program Officer

# Rocket Day in Goldsboro

I am pleased to say we had a great day for launching rockets today in Goldsboro NC. We had a great group of cadets and SM 's to attend. The weather was great and gave us a super day for the event There were 46 successful launches recorded and two large rocket launches and two attempts to launch the V-1. Each proved to be eventful in proving aerodynamics rule and design cannot be overcome.

I hope the other regions had as much success as we did. I heard that the western region had to cancel some of their units participation due to gas problems.

I regret it for the cadets who did not get to have an experience of launching rockets to the vertical flight regime. There is definitely an excitement when a rocket ignites and whisks it way in to the sky.

Let's all work to make the membership of CAP worthwhile for cadets.

SM George Wolfe

\*\*\*\*\*

To all the senior members who arranged and attended our Group 3 Rocket Day, THANK YOU!  
Our cadets will always remember their first launch. You all made it a fun day and I am so grateful for the support that you give the aerospace program.

I know the Goldsboro folks knocked themselves out, and to each of you, please know you are appreciated. Please tell the senior members at Goldsboro whose email addresses I do not have, that their time and effort is not in vain. We had some happy cadets!

We are also grateful for the patience of the folks at SIG Aviation and Two Dogs Aviation at Goldsboro-Wayne Municipal Airport. They actually managed to continue flight ops around rocket launches-- safely, and with good humor.

Our estimate is that the feared V-1 replica reached a height of 12 feet, and performed seven loops on the first sortie, and made several cadets and seniors die laughing on the second. Major structural damage was anticipated, but the V-1 lives to wreak havoc another day.

Maj. Mary Anne Fleagle, AEO  
Cunningham Field Composite Squadron, MCAS Cherry Point

\*\*\*\*\*

WOW!!! What a great day we had in Goldsboro yesterday, we had close to fifty CAP cadets and seniors members come out and take part in rocket day at the wayne county airport. The weather was great and we saw a lot of different rockets leave the ground. and I would like to thanks all who came out and participated in the event. and thanks to the wayne county airport for allowing us to hold our rocket day there.

I would also like to say a big THANK YOU to the members of Goldsboro Composite Squadron for all the hard work and planning that they put in to the event from SM George Wolfe who let us use his hanger and shuttled folks around in the golf cart to 2Lt. Tony Overman for the shopping and preparing the great hotdogs we had for lunch and all the other behind the scene work they did. It's folks like them that make a great squadron. and thanks to Lt Col. James Williams for the long drive to Goldsboro and all his help making this go off so well.

It really was a great time by all and we can't wait to do it again.

Mary Sandlin Capt. CAP  
Commander NC-126  
Goldsboro Comp.Sq.



Maj Mary Anne Fleagle  
Photo by: Maj Jim Williams

## ...Goldsboro Rocket Day continued

The fog was so thick that you could not see aircraft sitting 150 feet away, but by 9:30 the fog had burned off and Cadets started to arrive for the big day. By 10:00 hrs. 25 Cadets had logged in ready to launch their rockets. And to be sure that we had plenty of help, ( 11) Eleven Officers logged in too making this a great rocket and fun day for ever one.

Capt. Mary Sandlin, Commander and S/M George Wolfe of Goldsboro Composite Squadron (MER-NC-126), the Host Squadron for this event, did an outstanding job of making arrangements for this event. The launch site could not have been better. Operations were in a hanger and the launch site was 500 feet away on taxi strip. S/M Wolfe provided shuttle service by Golf cart to and from the launch site.

The list is so long and I will not try to list every person that participated. I do want to list the Units that participated. They were:

Mer-NC-169 Halifax Composite Squadron  
MER-NC- 023 Cape Fear Composite Sqdn.  
MER-NC-160 Cunningham Field Composite Sqdn.  
MER- NC- 126 Goldsboro Composite Sqdn.  
MER-NC- 048 Raleigh-Wake Composite Sqdn.  
MER-NC-001 NC-Wing HQ.

Many rockets were launched. 25 cadets completed the Titan hands on phase. Three completed the Saturn phase. A number took the written test. Some built their first rocket and launched them.

One young Cadet had an Elite Payload Rocket and the payload was a raw egg loaded in the compartment. He made several great launches, but he had trouble with his parachute. After several tries, he ran out of raw eggs and gave up. Another had a twin glider rocket. It took three tries to get a good deployment of the gliders.

The Cadet discipline was great--they followed the rules of safety. I have not seen a finer group of cadets and they are to be commended for their courtesy.

Everyone had a great day and the senior Officers are to be congratulated for a job well done.

James P. Williams- Maj., CAP  
DDAE & DDPA  
NC- Wing- NC-001

Photo by: Maj Jim Williams



# Awesome Ride!

Several cadets across the area were able to take a special flight in late summer in a KC-135, which originated at Seymour Johnson Air Force Base near Goldsboro. Some squadrons had to leave in the wee hours of the morning—but it was worth it! Flying 23,000 feet above the Atlantic and Outer Banks was neat enough, but seeing F-15's fueled in mid air was “an absolutely awesome experience” according to Cadet Sara Logel from the Boone Composite Squadron. The F-15 was so close, the cadets could see right into the cockpit! Thanks, Goldsboro Squadron and Senior Member George Wolfe and Captain Chris Melcher for arranging this spectacular flight!

Lt. Joanne Brown

PAO, Boone Comp. Sqdn.



U.S. Air Force F-15s

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## Fayetteville Unit Hosts Model Rocket Day

On September 27, 2008, eight members of North Carolina Wing's Fayetteville Composite Squadron held a Model Rocketry Day at Fort Bragg, North Carolina. The Rocketry Day was held in conjunction with two other Civil Air Patrol Rocketry Days held across the state in Asheville and Goldsboro, North Carolina.

On Saturday morning the eight Civil Air Patrol members assembled on the Polo Field at Fort Bragg and convoyed to a training area on post. According to a CAP spokesman, “Civil Air Patrol's Model Rocketry program is an achievement program for cadets interested in the science, technology, and flight of model rockets. The program introduces cadets to the hobby and science of model rocketry. The entire program begins with simple alternative-power models and progressively challenges cadets with more advanced models. Cadets who complete awarded the CAP Cadet Model Rocketry Badge upon completion”

Cadets who participated in the program on Saturday were required to build, launch, and recover their own rockets. The entire program was conducted under the supervision of CAP Senior members who served as Safety and Range Officers during the launch. The CAP Model Rocketry Program was designed to get cadets, qualified senior members and the squadron commander all working together. Upon completing this program, the cadet will be recognized by both peers and senior staff members as having leadership skills in the field of model rocketry.

Many of the rockets the cadets built were replicas of U.S. Army Honest John and Patriot missiles used during the Cold and Gulf Wars. Cadets who qualified for the Model Rocketry badge included: Lucas Bispo, Daniel Bradshaw, and Angela Wilson.

POC: Capt Rob Mason, Fayetteville Squadron Commander, CAP



# Middle East Region Update

To all members of Middle East Region:

Effective 1 October 2008, Lt Colonel Amanda B. Anderson is appointed as Director of Administration for Middle East Region. This is the second time Lt Col. Anderson has held that position at MER. She is a very capable CAP officer of long experience in multiple staff positions, and will greatly enhance the team at Middle East Region.

Major Marco Soave has successfully completed his term as the MER Director of Administration. He will be moving to another staff position within Middle East Region, to be announced at a later time.

Colonel Joseph R. Vazquez, CAP  
Commander, Middle East Region

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## Civil Air Patrol Cadets Receive Promotions

Smithfield, N.C.- Three cadets from the Johnston County Cadet Squadron received promotions during the squadron's weekly meeting. Cadet Joshua Rose, Cadet Deputy Commander and Cadet Glen Edwards, Cadet Commander, were promoted to the grade of Cadet Captain. Cadet Garrett Scott, was promoted to the grade of Cadet 1<sup>st</sup> Lt. In order to receive the promotions, all three cadets successfully completed comprehensive written exams on leadership and aerospace education as well as a comprehensive physical fitness exam. c/Capt. Rose, a member of CAP since 2005, is the son of Jerrod and Tricia Rose of Clayton. Cadet Rose attends Clayton High School as a Sophomore. c/Capt. Edwards is the son of Glen and Patty Edwards of Clayton. Cadet Edwards, a member of CAP since 2002, is a student with the Johnston County Middle College Program. c/1<sup>st</sup> Lt. Scott is the son of Jaynean Scott of Smithfield. Cadet Scott, a member of CAP since 2005, is a sophomore at Triple S High School. Civil Air Patrol is the civilian, volunteer auxiliary of the United States Air Force, and was formed December 1, 1941. CAP provided vital services to the military for the nation's defense during World War II. Today, Civil Air Patrol conducts search missions for missing aircraft and persons, provides emergency disaster support in conjunction with other relief organizations, encourages and fosters civil aviation in local communities through adult and youth aerospace education programs, and provides a comprehensive cadet leadership program. For more information on CAP in Johnston County, visit [www.logcc.com/jococap](http://www.logcc.com/jococap).



Photo by Donald A. Beckett, Lt Col. Back Row Left: Capt Jerry Simmons, Sqdn Commander; and Lt Col Pat O'Neal, Deputy Commander. Front Row Left: c/Capt Joshua Rose, c/Capt Glen Edwards, and c/1Lt Garrett Scott.

# Winston-Salem Air Show

September 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> NC082 cadets and seniors made significant contributions to the overall successful operation of the air show. Maj Ron Cheek, the officer in charge of operations, lead the team in what was his 10<sup>th</sup> air show in an outstanding performance of all assigned duties. Before the start of daily operations, the squadron chaplain led a short moral leadership session. Cadet Colonel Barry Feinstein as the head of cadet operations was responsible for assigning the cadets their duty positions over the two days of the air show. Many cadets were working in this capacity for the first time. Because of their discipline, training and excellent leadership they listened, understood and carried out their directives exceptionally well. Cadets served in a number of areas, such as patrolling the flight line and restricted access areas, to prevent air show guest from getting into harms way. In spite of very iffy weather conditions Saturday and improved but much hotter conditions Sunday, they did their jobs and did them well. Also participating were seniors and cadets from the Iredell Composite Squadron located in Statesville. Their participation was greatly appreciated. By working with each other both units proved the value in the ability to work in unison. This serves to strengthen our organization to serve whenever and wherever we are called upon. We also assisted in 3 finds of individuals who had become separated and handled one emergency (Lady fainted)

Senior members were in charge of communications, the aircraft static display, and recruitment. Maj Steve Mann and 1Lt Ray Dehart manned the communications tent for the duration providing excellent command and control capabilities for the entire operation. Letting the public know who we are and what we do was a major function as well. A large contingent of ES trained aircrew and ground crew members manned the C-172 static display and adjacent recruiting booth meeting hundreds if not thousands of potential members. Hundreds of children under aircrew supervision were allowed to enter and sit in the C-172, many had never been this close to an airplane let alone in the pilot seat, which thrilled them and their parents. Many parents remarked this is an experience that their children will never forget, and it would hopefully bring them back when they reach the age to become CAP cadets. Along with the seniors on duty in uniform, several CAP senior members worked in their “civilian” capacity as community leaders as air show support personnel, where they were performing jobs critical to the overall success of the air show.

Praise for a job well done was received from the Air Show Manger, Winston-Salem Airport Manager, the Winston-Salem Airport Commission, representatives from the FAA as well as the general population at the air show.

Gene Clodfelter PAO  
NC082 Winston-Salem Composite Squadron Civil Air Patrol  
28 September, 2008



Photos courtesy of Winstom-Salem Comp. Sqdn members



# NC Units support Regional Fly-in and conduct Open House Swain-Jackson and Asheville Composite Squadrons

October 22, 2008

On October 18th, 2008, cadets, senior members, parents and guests of both the Swain-Jackson and Asheville Composite Squadrons supported the Jackson County Airport's annual Regional Fly-in while also showing off the new Swain-Jackson Composite Squadron's facilities. In all, over 30 aircraft participated in the event including a CAP airplane piloted by 1st Lt. Rich Feeman that was on display and often visited by many of the 1,000 attendees at the Regional Fly-in. Leading up to the event, the cadets and senior members of the Swain-Jackson Composite Squadron spent over 100 man-hours assisting the airport with painting and other general preparation for this very exciting event. Then afterwards, they also assisted in clean up.

The visitors and CAP members were able to participate in the EAA Young Eagle aviation program for orientation flights on one of four different planes that participated. In all, over a hundred passengers had the opportunity to fly throughout the day.

On display at the Open House, Swain-Jackson had laid out rapid deployment HF and hand held VHF radios. Also, on display were emergency locator training transmitters and locating devices, field equipment, and many other items. Elements of the Asheville Comp. Sqdrn., led by Lt's Green & Green, had an entire display set-up with CAP's DDR (Drug Demand Reduction) program which is a very supportive and constructive program to help keep youth away from drugs and involved in productive positive activities.

Also, in attendance at the Regional Fly-in was Greg Koontz, Acrobatic Stunt Pilot. He treated 14 individuals to a 20 minute flight each. Two members of the Swain-Jackson Comp. Sqdrn, were able to make the historic flight. Cadet Airman John-alan Short and Cadet Senior Airman, Micah Metz and his sister Rebekah, all of which enjoyed their flights. The cadets thought the "hammer head stalls" and "eight point turns" were the best. Gregg Koontz runs a Bed and Breakfast/Flight "Upset" Clinic in Ashville, Alabama, for those who may be interested in taking your flight training to the next level. ([www.gkairshows.com](http://www.gkairshows.com))

Mid afternoon Greg Koontz treated the visitors to a one hour acrobatic performance that tested the strength of the aircraft, the pilot's skills and the visitors' ability to watch with anticipation, excitement and trepidation.

The Swain-Jackson and Asheville Composite Squadrons are involved in community service opportunities including parades, Color Guard presentations, emergency services support, "Pennies for Pearl", and many other activities.

Capt. John A. Short  
Swain-Jackson Composite Squadron, CAP



Cadet Short and display aircraft

# Raleigh-Wake Holds Open House

On Saturday the 11th, and Tuesday the 14th of October the Raleigh Wake Composite Squadron of the Civil Air Patrol held its annual open house. We had several new cadets arrive and all said that they enjoyed the activity. Activities included presentations on Aerospace, Leadership, National Cadet activities and encampment as well as a hands on activities for Drug Demand Reduction and Aerospace. The most popular activity however was definitely the hands on Aerospace activities. During these we built and launched "Fizzy Flyers," which are decorated film canisters launched with Alka-Seltzer and Water as well as harrier type gliders. We built them indoors then took them outside and launched. During the Tuesday open house we built the Goddard rocket which is a simple design that will qualify cadets for their first achievement award in rocketry. We went outside and had 4 group launches to see who had the best design. The winner gained a pack of ribbons for distribution on National red ribbon week and several CAP pencils.

During these activities the veteran cadets also had the opportunity to go on Orientation flights in the squadron's two aircraft. In one aircraft 3 cadets were flown under the supervision of a senior member while in the other craft a senior member was having her first flight. During these flights several cadets and Senior members had their first flights and a few had flights further on in their curriculum. All in all CAP had a very successful open house and we hope to host something similar again next year.

Cadet 2nd. Lt. Kyle Zobel



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## County Manager Gets Shoreline Patrol After Nor'easter

Shortly after a rugged northeaster weather system moved through "down East" North Carolina's coastline recently, Coastal Patrol Base 21, Beaufort, was able to fly Ms. Jo Ann Smith, Carteret County Manager, on a shoreline survey of her county from Bogue Inlet to Cedar Island. She was able to view the over wash damage and changes to the shoreline as well as take photos to review later.

Carteret County is a strong supporter of CAP and CPB21 was happy to be of service in this area. Mission Pilot was Major Fred Eldredge, and Mission Scanner/Observer was Major Linda Eldredge.

Submitted by Maj. Linda Eldredge, PAO  
Photo by Maj. Fred Eldredge, CO



L: Carteret Co. Manager Jo Ann Smith - R: Maj Linda Eldredge



Bogue Inlet, Carteret Co.

# Iredell Composite Squadron assists with Carolina Balloon-fest

Amid striking fall colors, beauty queens, colorful hot air balloons and thousand of spectators members of the Iredell Composite Squadron where busy during the Thirty-fifth Annual Carolina Balloon-fest held at the Statesville N.C. Regional Airport October 24-26, 2008.

Squadron members assisted members of the Iredell County Emergency Medical Services setting up and manning a first aid booth and rest station, displayed search and rescue equipment, and set up a communication equipment display. Squadron cadets also manned a CAP public relations booth with information about CAP history and information about the North Carolina Wing. In addition cadets also distributed numerous Red Ribbons and drug abuse prevention material as part of CAP's Drug Demand Reduction Program Red Ribbon Week celebration.

The squadron also conducted an open house at the CAP hangar located at the airport. Squadron members took the opportunity to discuss CAP's numerous programs with visitors. Iredell Composite Squadron member Capt. Breece Nesbitt also displayed his historic O-1 Bird-dog, a Vietnam era forward air controller aircraft, in the hangar during this event. O-1s where also later used extensively by the Civil Air Patrol.

[www.cap.gov](http://www.cap.gov).

Capt. Jim Mixon



Balloons take to the air during the Carolina Balloon Fest at the Statesville Regional Airport



Capt Breece Nesbitt's classic L-1 Bird-dog during the squadron's open house

Photos by Capt Jim Mixon, NC162 Public Affairs Officer:

Accident occurred Tuesday, July 29, 2008 in Highlands, NC  
Aircraft: Piper PA-23, registration: N1180P  
Injuries: 2 Fatal.

## NTSB Report

On July 29, 2008, at 1453 eastern daylight time, a Piper PA-23, N1180P, was substantially damaged when it impacted terrain in Highlands, North Carolina. The certificated airline transport pilot and the pilot-rated passenger were fatally injured. Visual meteorological conditions prevailed and an instrument flight plan was filed for the flight which departed Bowman Field Airport (LOU), Louisville, Kentucky at 1255, and was destined for Hazlehurst Airport (AZE), Hazlehurst, Georgia. The personal flight was conducted under 14 Code of Federal Regulations (CFR) Part 91.

According to a friend of the pilot's, the pilot recently purchased the airplane, and he and his son were enroute to his home in Florida on the day of the accident.

Preliminary air traffic control (ATC) information provided by the Federal Aviation Administration (FAA), revealed the airplane was at 9,200 feet heading southeast, at 1448, when the pilot reported that he was encountering severe turbulence and intended to reverse direction to divert around the weather. Radar data indicated the airplane continued on its southeasterly heading for about another minute, and then made an approximate 270-degree left turn to a westerly heading. The airplane continued for about three more minutes until the last radar hit was observed at 1453, in the vicinity of the accident site.

A witness, who was working construction approximately 150 yards from where the airplane impacted, stated he heard what "sounded like a helicopter when it starts up or shuts down." He then looked up to see an engine depart the airplane and continue to travel with some "upward momentum," in a west/northwest direction. Another section of the aircraft structure fell to the ground near where the witness was standing, and at the same time, he heard the airplane impact in the wooded area across the street.

The airplane impacted rising terrain, in a heavily wooded area, at an elevation of 2,614 feet. The airplane came to rest, inverted, oriented on a heading of approximately 225 degrees magnetic. Trees surrounding the airplane were virtually undisturbed and there was no forward wreckage path.

The right wing remained attached to the fuselage, and the right flap remained attached to the wing. The wingtip was separated from the wing and not located. The right engine remained attached to the wing and the propeller remained attached to the engine with both blades resting perpendicular to the ground. Examination of the propeller revealed slight S-bending.

The inboard section of the left wing was separated from the fuselage at the wing root and came to rest, with the wing root at the base of tree, and the top side of the wing resting on the tree. The left flap was attached to the wing at its inboard hinge.

The tail section of the airplane was separated from the fuselage, aft of the rear passenger seats, and located approximately ¼ mile from the main wreckage.

Two flight control cables were observed from the cockpit area to the tail separation point, and the cable ends were broomstrawed. Both aileron flight control cables were attached to the left aileron bellcrank, which was pulled out of the left wing. The cables were intact to the right aileron.

The outboard section of the left wing, the left aileron, and several pieces of fuselage skin were located beyond the main wreckage, in a 1/4-mile radius, on the same heading as the airplane's flight path. The left engine was located in a creek about 1/2 mile from the main wreckage, also on the same heading.

Examination of the cockpit instruments revealed the airspeed indicator read 0 knots, the attitude indicator displayed a 40-degree nose-down attitude, the directional gyro indicated 105 degrees, the altimeter indicated an altitude of 100 feet, and the kohlsman window read 29.92 inches of mercury. The number one VOR was set to 075 degrees, and the number two VOR was set to 176 degrees.

The pilot held an airline transport pilot certificate with a rating for airplane multiengine land. He also held a flight instructor certificate with ratings for airplane single and multiengine land and instrument airplane. His most recent FAA first-class medical certificate was issued on July 21, 2008. At that time, he reported 11,920 total hours of flight experience.

The pilot-rated passenger held a private pilot license with a rating for single-engine land. His most recent first-class medical certificate was issued on July 21, 2008. At that time he reported 255 total hours of flight experience.

Weather reported at McGhee Tyson Airport (TYS), Knoxville, Tennessee, 67 miles northwest of the accident site, at 1453, included winds from 280 degrees at 5 knots, visibility 10 miles, and few clouds at 5,000 feet.

The weather reported at 1353, at TYS, included thunderstorms south of the airport, moving east/southeast.

Weather reported at Asheville Regional Airport (AVL), Asheville, North Carolina, 43 miles northeast of the accident site, at 1454, included winds from 010 degrees at 5 knots, 10 miles visibility with light rain, few clouds at 2,600 feet, scattered clouds at 3,900 feet, and broken clouds at 7,500 feet.

The weather recorded at 1548, at AVL, included heavy rain visibility 1 ¼ mile visibility and winds from 290 degrees at 12 knots, gusting to 16 knots.

Weather reported at the Greenville Spartanburg International Airport (GSP), Greenville, South Carolina, 56 miles southeast of the accident site, at 1453 included winds from 200 degrees at 5 knots, 10 miles visibility, and clear skies.

The weather recorded at 1653 included a thunderstorm from the west, moving southeast.

# NC Wing Annual Conference and Awards Held in New Bern

**New Bern, NC** - While pleasure boats of every size and shape tugged at their moorings along the Trent River during a steady gale, just inside the Sheraton Hotel and Marina, The North Carolina Wing, CAP annual conference General Assembly was called to order by Lt. Col. Jason Alteri at 9:00 a.m. on October 25. NC Wing Commander, Col. Larry J. Ragland welcomed the membership attending and introduced the head table.

Cadet/Col. Ryan Strug of the Apex Squadron gave a visual presentation of the Apex Drill Team, winners of the Middle East Region competition and who competed on the national level.

The Wing was honored to have as keynote speaker, National Vice Commander, Brig. Gen. Reggie Chitwood. Gen. Chitwood drew applause several times as he detailed some of the plans put forth by Commander, Maj. Gen. Amy Courter and the National Board. He stated that some senior officer's courses are being written to replace those currently being offered through the Air Force University. "In particular," he said, "ECI 13 will be a CAP course with emphasis on our missions." Gen. Chitwood caused a flurry of excitement among the pilots in the assembly when he stated that serious consideration is being given to refurbishing some of our aging aircraft. "We can refurbish four airplanes for the cost of one new Cessna 182—over \$400,000." He said. As an example, he used the annual aircraft give-away program sponsored by the AOPA, who rebuilds an aircraft from the ground up.

Following Gen Chitwood was Ms. Susie Parker from National Headquarters who gave updates on their activities.

Other presentations were given by Col. Joseph Vazquez, Middle East Region Commander, and Gen. Rudy Rudisil (USA Ret.), Deputy Secretary of NC Crime Control and Public Safety.

The annual awards ceremony followed the general assembly. Major awards are posted on the NCWG website.

Go to: <http://www.ncwg.cap.gov/index.cfm?fuseaction=article.display&articleID=320>

See photos at:

<http://picasaweb.google.com/donpenven/NCWG200802#>

<http://picasaweb.google.com/donpenven/NCWG2008#>



Brig. Gen Reggie Chitwood



Head Table



Col. Larry Ragland



Gen. Rudi Rudisil



Col. Joseph Vazquez

Do not use an automotive scraper to remove snow and frost from the airplane! You can fashion a push-broom-style remover. You should carry several towels or cotton rags in your car to rub off all frost from the wings, or perhaps your flight school or FBO can provide deicing fluid for the task - ask for instruction in its proper use. Conscientious removal of snow and ice from airfoil surfaces is important, because even a light frost can sap the wing's lifting capacity.

Be sure to use the correct amount of oil (obviously), as well as the right grade, as indicated in your pilot's operating handbook - it might call for a different viscosity during cold-temperature operations. When it's cold, things get less flexible, and different materials react differently: check hoses, hydraulic fittings, and seals. In blowing snow, make sure all openings are clear, such as carburetor and heater intakes, and fuel vents. Also, this isn't exactly a preflight item, but if you have an anemic heater, blocking drafts from the baggage area can make a difference in cabin comfort.

Once the preheat is done, it's time to start the engine and resume the checklists. Wait too long and things may get cold quickly; you can do any cockpit resource management after the engine is really warmed up. First, always use your manufacturer's recommendations for cold-weather operations, and with cold-weather starts, always have a fire extinguisher handy. Once things are warmer under the cowling, here are some points to consider between the warm-up and the start-up. In cold weather, you will obviously need more primer than normal. If your engine isn't as preheated as you thought, it is possible to get frosty sparkplugs. This happens when it runs a few seconds, then quits; the cylinders are still cold, and water vapor freezes on the spark plugs' electrodes. If that occurs, you're not going anywhere quickly. If it's *really* cold, a slow idle may not keep the plugs warm enough, either. Experience (yours or someone else's) can tell you what rpm to use.

Your engine may be warming up, but be aware that your control cables (such as for the throttle and carburetor heat) may still be working under the load of congealed lubricants. Be wary of sluggish starting; if you don't preheat long enough, you may mistake sloth for starvation and overprime the engine. Overpriming could also result in scored cylinder walls from having washed them down with avgas (not to mention poorer compression, which will make starting even harder). Don't try to start even a warm engine by pumping the throttle. Engine fires in flight are rare; engine fires on the ground are not. (Think about that.) For constant-speed props, cycle the prop several times to fill the propeller hub with warm oil. Just be careful not to "deep-cycle" it.

Oil pressure should be in the green within 60 seconds at about 1,000 rpm. (That's a rule of thumb. Follow your POH.) Now you're sitting in a warmed-up airplane, ready to taxi. In a word, do it *s-l-o-w-l-y!* This goes double when there's snow and ice on the ground. Braking may be poor to nil, and even your tricycle-gear airplane may weathervane into a breeze. Avoid short turns and quick stops. Snow may be covering an ice slick. And give snow banks a wide berth! During the first few seconds of your runup, make sure you're not moving. Also, before you take off into any weather (and especially instrument meteorological conditions, if the weather allows and you're appropriately rated), be sure that your cockpit and instruments have warmed up. A vacuum-driven gyro, for example, can be unreliable below about 40 degrees Fahrenheit.

Finally, we're ready to fly. The best insurance item for wintertime (or any time) is to file and open a flight plan. Carry extra fuel, keep track of what winter winds may do to your fuel planning, and continue to keep track of the weather at your destination. Know where the better weather is. Over remote areas, plan your route of flight within range of roads. Dress warmly enough to walk home. Carry extra clothes, warm waterproof headgear, food, and especially water on long-distance winter flights, in case of an unplanned landing (see "Survival Scenarios," ). Making a long-distance phone call to confirm the conditions of taxiways and runways wherever you're headed is often a wise investment. And if you have a cell phone, bring it. Keep abreast of conditions en route via Flight Watch, HIWAS, and local ATIS stations.

Winter can bring some wonderful things: severe clear, below-sea-level density altitudes in the East, great tailwinds if you're headed East, better performance, and clouds low enough to be overflowed. But aside from shorter days, what can be howling winds, annoying turbulence, and the weather-prone zone on the northeast side of a low-pressure system, ice is your biggest concern in flight. Using carburetor heat is obviously more critical when it's already cold, and particularly in partial-throttle operations such as slow flight, approach, and descent. If you do encounter structural ice, you can usually escape it by changing altitude, but waiting isn't an option. Climb up through it at a high speed and shallow angle, and down through it at a lower speed, but high rate of descent. Remember that ice can cause an aircraft to have sudden and violent stall characteristics, and a much higher stall speed. Ice usually forms first on small-radius fixtures. And if you see ice on the wings, chances are good that you already have ice on the tail, so don't slow down or use flaps.

Winter weather systems are smaller, and fronts often move faster, so things change (and also clear up) more quickly. Even your Piper Cherokee 140 can take you into an entirely different weather system. The world below can become a homogeneous sheet of white, and some of your previously well-contrasted favorite landmarks (even lakes) may be covered over with snow. Always be alert for the odor of exhaust fumes - carbon monoxide has no odor, but the other gasses do - or

feelings of sluggishness, unexplained headache, dizziness, or other hypoxia symptoms. Be ready to shut off that heater and open a window! You may have missed something or developed a carbon monoxide leak. Winter brings more gusty winds, so go up with your favorite instructor and get crosswind current.

After you land, remember that cold may make flight more efficient, but it has the opposite effect on ground operations. What you see is not necessarily what you'll get. Depth perception suffers when snow covers everything. Snowdrifts may be larger than they appear, and ice may be invisible. Plan to use all of the available runway length and be on guard for wind shifts. Be prepared for ineffective braking, and lower your crosswind limits by half for snow (and to near nil for ice). If your destination is a nontowered field, contact an aircraft that has just landed and ask about runway conditions. Remember that snow plowing begins with the longest runway, and the GA ramp is usually last.

A few other thoughts: During engine shutdown, consider turning off the fuel and letting the engine run the carburetor dry. (This reduces the fire hazard during the next preheat.) Fill the tanks right away if doing so is appropriate, put on those control locks and tiedowns...and close that flight plan! Be sure to install the engine cover, if you have one, as well as the other familiar ones (pitot covers, etc.). For folks up in Frostbite Falls, remove wet-cell batteries when below freezing if they're not fully charged.

Oh, and one last thing: In mid-winter, never book the first rental slot of the day.

*Jeff Pardo is an aviation writer in Maryland with a commercial private pilot certificate for airplanes, and instrument, helicopter, and glider ratings. He has logged about 1,100 hours in 12 years of flying. An AirLifeLine mission pilot, Pardo has also flown for the Civil Air Patrol.*

## BETA TESTERS NEEDED

Since becoming a unit PAO back in 2005 I've witnessed slow but steady growth in the PAO ranks across the Wing. The PAO Directorate has offered PAO Boot Camps every year but attendance has been minimal. I believe that part of the problem is that some of you have to travel four to five hours to get to Burlington. We hope to make it a little easier for you. We will be conducting a Beta Test of an on-line training program--a sort of electronic boot camp. For now we need seniors only. Once the program is up and running, then cadets will be included. Send me an email signifying your interest in assisting: donpenven@gmail.com Put "BETA TEST" in the subject line.

## Website and Newsletter Submission

Nothing has changed. The same submission guidelines still apply.

Go to: <http://www.ncwg.cap.gov/index.cfm?fuseaction=page.display&pageID=486>

Up until now I have accepted articles any way I could get them: from CAPNC, from my personal email, etc. But I realize that by not enforcing the guidelines I am *compounding a felony*.

*Why even bother with a newsletter. Why post articles on the website. Both of these tasks eat up a lot of time. CAP as a whole believes that newsletters and articles on the website serve several purposes, among which are:*

- 1. They give recognition to your members. This is a moral builder.*
- 2. They provide our shareholders a glimpse of what we are doing--in other words, are they getting their money's worth?*
- 3. They tell surrounding units what your unit is doing--what the Wing is doing. Maybe this will provide some motivation to do the same things.*
- 4. They can be a great recruiting tool.*

*So, from this issue on, articles submitted contrary to the guidelines will be returned. Let's all make this work, folks.*

*Don Penven, 1st Lt, CAP  
Deputy Director, Public Affairs  
Editor: Carolina WingSpan  
Website Article Puterupper*