

# **NORTH CAROLINA WING**

## **CIVIL AIR PATROL**

*U.S. Air Force Auxiliary*

### **Carolina WingSpan**

FEBRUARY 2008



*Late Breaking News*



Congratulations NC Wing.

Today, March 8, 2008 we concluded a very successful Staff Assistance Visit (SAV) at Wing HQ. I was very impressed with the out-briefing review of the tabs, the preliminary observations and findings, and very pleased we had so many commendables. North Carolina Wing is doing as well as we thought you were and your hard work has definitely paid off big time.

Now we need to take what we have learned, move forward with all our missions, and make sure we keep up the good work between now and the Compliance Inspection coming up in December. We have a great team in NC Wing, and I am humbled each day with the honor and privilege of leading such a fine group of dedicated volunteers. Keep up the good work and as always, keep it safe.

**GREAT JOB NC WING!!!!**

Larry J. Ragland, Col, CAP  
NC Wing Commander

*Carolina Wingspan* is 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.

# FINAL SALUTE

It is with the deepest of regret and sympathy for his family that I announce the passing of Chaplain Royce Beacham, Lt. Col. CAP. Chaplain Beacham was a 50 Year member of CAP and instrumental in the early years of the Raleigh-Wake Comp Sq. He was one of NC Wing's ties back to the Wright Brother's First Flight. Lt. Col. Beacham's Grandfather assisted the brothers in their work and his father was present the day of the historic flight. He worked as Chaplain for NC-048 and multiple Summer Encampments until being forced into retirement due to Alzheimer's.

At the moment the only details we have are that he will be laid to rest from Mitchell's Funeral Home on Glenwood Ave. in Raleigh, the time frame is not certain. At this time the family is requesting no flowers but memorial donations may be made to the Alzheimer's assistance foundation of your choice.

Please keep Chaplain Beacham and his family in your prayers.

Maj. Al Therriault CAP  
Director of Cadet Programs  
NC Wing

## Contents in this issue:

Request from NCWG PA .....	2
CSTS graduates eight cadets .....	3
Piedmont Winter Encampment .....	4
MER Cadet Leadership School .....	4
Raleigh-Wake conducts promotions, awards .....	5
MER Conference in April .....	6
Carolina WingTips .....	7
New mission for CAP aircrews .....	9
AE presentation in Charlotte .....	11
Lt. Col. Strug joins MER staff .....	11
Asheville Flight Academy .....	12
NC Wing Color Guard Competition .....	13
MER Staff College .....	14
Close To Home .....	15
SAV Photos.....	17
Airplanesvs. Pilots .....	18
Sights On Safety .....	20
WX Watch: All Fogged Up .....	21
Editor's Note .....	23

## Carolina WingSpan is published under the direction of:

NCWG Commander - Col Larry Ragland  
NCWG Vice Commander - Lt Col Wes Surratt  
NCWG Chief of Staff - Lt Col Roy Douglass

NCWG Director Public Affairs - Lt Col Anthony Biondo Jr  
[tonybiondo@msn.com](mailto:tonybiondo@msn.com)  
NCWG Deputy PAO, Group 1 - Capt James Williams  
[JPBTW@carolina.rr.com](mailto:JPBTW@carolina.rr.com)  
NCWG Deputy PAO, Group 2 - Maj Conrad D'Cruz  
[conrad.dacruz@netswirl.com](mailto:conrad.dacruz@netswirl.com)  
NCWG Deputy PAO, Group 3 - 1Lt Donald Penven  
[donpenven@gmail.com](mailto:donpenven@gmail.com)

NCWG newsletter "Carolina Wingspan" editor - 1Lt Donald Penven  
Send submissions to: [carolina.wingspan@gmail.com](mailto:carolina.wingspan@gmail.com)

"Carolina Wingspan" is the official newsletter of the Civil Air Patrol,  
North Carolina Wing HQ, U.S. Air Force Auxiliary

## TO ALL NORTH CAROLINA WING MEMBERS:

As a result of the MER Staff Assist Visit (SAV) conducted today at NCWG HQ, I need to make the following VERY IMPORTANT request.

I need every unit to send me a list of all larger activities participated in by at least one of your unit members during 2007 and continuing into 2008. There is a specific need for this information. The CAP National HQ Compliance Inspection Team scheduled to inspect each NCWG Staff function in December/08, will want to see this listing of activities.

Here in detail is what I need:

I need to know the date the activity took place, the location it took place and the name of the activity along with a very short description of the event. The type of activities needed are presentations to outside agencies or organizations, public display booths, giving assistance to any outside entity, marching in parades, posting colors at any event, tours of military installations, museums, field trips, aerospace activities conducted in public or at schools, meetings with any military, civic or government agency on any topic involving CAP. Let your imagination be your guide. If any member or members ( it can be as few as only one member participating or the entire unit ) participates in any activity involving any exposure to the public, military or outside agency/organization, I need to know about it so that I can add your contribution to my master listing. If in doubt about sending me the information, just send it and I will let you know if I can use it. The activity does not have to be a large event.

Send your information to me at: [tonybiondo@msn.com](mailto:tonybiondo@msn.com)

Thank you very much !!!!!

Lt Col Anthony Biondo Jr  
Director Public Affairs  
North Carolina Wing  
CAP / U.S. Coast Guard Auxiliary 5th District Southern Region Liaison Officer

# Cadet Staff Training School (CSTS) Graduates 8

Pope AFB, NC - Eight cadets from across North Carolina participated in the CSTS, Class 08-A, held on February 23-24, 2008 at Fayetteville Composite Squadron's new building located on Pope AFB. The CSTS is a 2-day course designed to teach current and future cadet staff the training necessary to accomplish their respective staff assignments at their home unit. The Fayetteville Composite Squadron Cadet Programs Staff requires their cadets to attend CSTS before being considered for a cadet staff position.

Cadets were instructed in Squadron Organization, Chain of Command, Cadet Staff Positions and Responsibilities, Leadership, Counseling, How to Create an Activity, How to Put Together a Squadron Meeting, File Maintenance, Drill and Ceremonies, and much more. The course also consisted of approximately a 4-mile ruck march from the schoolhouse to the Pope Gym.

Class 08-A Instructors were:

Maj David Siemiet  
Capt Niihau Ramsey (Course Director)  
Capt William Ryan  
C/Capt Andrew Greenwell  
C/Capt Charnice Williams  
C/2d Lt Michael Duprey (Asst Course Director)  
C/2d Lt Aaron Zadalis



Class 08-A Students were:

C/MSgt Zachary Baughman, Burlington Comp. Sqdn.  
C/MSgt Brennan Fifer, Cunningham Field Comp. Sqdn.  
C/MSgt Sophie Rynas, Cunningham Field Comp. Sqdn.  
C/TSgt Colton Haynes, Stanley County Comp. Sqdn.  
C/TSgt Brandyn McMahan, Fayetteville Comp. Sqdn.  
C/TSgt Jerod Tubbs, Cunningham Field Comp. Sqdn.  
C/TSgt Tabitha Tubbs, Cunningham Field Comp. Sqdn.  
C/SSgt Johnny Bailey, Hickory Comp. Sqdn.



All cadets who have graduated from this course are always welcome to come back as Assistant Instructors or Instructors.

Article by Capt Niihau Ramsey  
Photos by C/2d Lt Michael Duprey



# Cadets Soar to New Heights at 2007 Piedmont Group Winter Encampment

By C/Maj Olivia Barrow

What company manufactures the C-130?

When ATIS gives the wind direction and speed what does that mean?

What is the amount of push needed to get a rocket traveling upward called?

This is just a sampling of the information contained in the cadet packages, memorized and recited by forty-five cadets from NC, DE, and NatCap Wings at the Piedmont Group Winter Encampment. Held at the NC State Highway Patrol Training Center, this non-stop encampment had an aerospace theme as cadets learned to *Soar to New Heights*. Can you flight plan using a map, coordinates and a “whiz wheel” in six minutes? These cadets mastered this skill and were introduced to flying a flight plan in Microsoft Flight Simulator. Cadets also completed all the requirements for the Redstone Phase in the Model Rocketry program after flying some awesome Fizzy flyers creatively redesigned by 2d Lt Sam Brandt.

It was a whirlwind experience for the cadets as they learned how to do hospital corners and keep their rooms in inspection order, competed as flights in standard drill, and perfected uniforms for inspection. Each flight developed a sense of pride and esprit de corps that propelled them to excellence. At the end, the only complaint was they wished they could stay longer.

Although the competition was rigorous, Echo Flight (commanded by C/2d Lt Tyler Richardson and C/SMSGT Stephen Bloemsma) outshined Delta and Foxtrot overall, receiving Honor Flight for the week. C/A1C Sam Pollock won Honor Cadet and C/CMSGT Peter Barrow won Honor NCO.

---

## Middle East Cadet Leadership School

The Middle East Region Cadet Leadership School will be held at Seymour Johnson AFB, NC from 6-11 Jul 2008

Application process: Registration is accepted until 1 Jun 08 or until all the slots are filled. There are 25 slots available. Cost is \$100 per cadet, which does not include meals. Meals are purchased individually and cost approximately \$7 per day.

Apply using a CAPF 31, include your Social Security number on your application for the Military Support Authorization. Send a check with your application for \$100. Make the check out to MERCLS.

**Requirements:**

- √ At least 14 years of age
- √ Attended an encampment
- √ C/SSgt or higher
- √ Recommended by your squadron commander

ALL applications should be sent to:

Lt Col Landreth-Strug

4017 Chaumont Dr.

Apex, NC 27539

Any questions contact Lt Col Landreth-Strug [pstrug@nc.rr.com](mailto:pstrug@nc.rr.com)



# NC Wing squadron posts promotions, awards Raleigh-Wake's Cadet Coogan on fast track to Spatz Award

Raleigh, NC – The Raleigh-Wake Composite Squadron conducted promotions recently at its regular Tuesday evening meeting. Major Al Therriault, Deputy Commander for Cadets, said that Cadet Major Jeremiah Coogan was promoted to the rank of Cadet Lt. Colonel. Coogan currently serves as cadet commander for Raleigh-Wake, and he has been appointed Cadet Executive Officer for the weeklong 2008 Cadet Summer Encampment. Therriault noted that Coogan joined CAP in September 2004, and has ordered the exam for advancement to Cadet Colonel and the Spatz Award. NC House member, Rep. Grier Martin, assisted Coogan's mother, Mrs. Marialyce Coogan by attaching the cadet's new rank insignia during the ceremony.

C/2Lt W. Ross Hertzler received his Mitchell Award from Rep Grier Martin. "The Mitchell award is named for Gen. Billy Mitchell and recognizes a cadet's advancement from the enlisted ranks to that of a staff officer," Therriault said. Other cadets receiving promotions were: Caitlin Hall, who completed her orientation program and passed her exams to be promoted from Cadet Basic to Cadet Airman and C/CMSgt Kyle Zobel passed all requirements for his Armstrong Achievement. Rep Martin presented Hertzler and Coogan with certificates of accomplishment and congratulations signed by NC Speaker of the House, Rep. Joe Hackney and Rep. Martin.

Also attending the ceremony was Lt. Col. Jayson Altieri, U.S. Army, who recently returned from his command in the Middle East. Altieri presented the squadron a US Flag that he flew while serving as Commander, Task Force Corsair, in Afghanistan. He then gave the cadets and families a presentation of the work that he did with the task force and the aid they gave the people of Afghanistan. Altieri holds the CAP rank of Lt. Colonel and is a member of the Fayetteville Composite Squadron.

The evening's events were conducted in the Raleigh-Wake headquarters, General Aviation Terminal (GAT), International Drive (East). Raleigh-Durham International Airport.

1st Lt Donald Penven  
NC-048 PAO

Photos by 1st. Lt. Don Penven



Mrs. Marialyce Coogan (L) and NC House Rep. Grier Martin (R) pin new rank insignia on Cadet Coogan.



Cadet 2nd Lt. Ross Hertzler receives award from Rep. Martin as Capt. Dion Viventi and Cadet Lt. Col. Coogan look on.

# MER Conference coming in April

2008 MER Conference

25-26 April 2007

Sheraton Richmond West Hotel, Richmond, VA

Registration Form

## Registration Fees:

Cadet Full Registration: Includes all workshops, breakfast, lunch, and banquet = \$65.00

Officer Full Registration: Includes all workshops, breakfast, lunch, and banquet = \$80.00

Partial Registration: Includes all workshop, breakfast, and lunch = \$55.00

Guest: Banquet only = \$40.00

Mail check and completed registration form to:

Lt Col Phyllis Griffin, CAP

400 Sudbrook Lane

Pikesville, MD 21208-4759



Checks should be made out to MER CAP.

Registrations must be postmarked by Friday, April 11, 2008. Registrations postmarked after that time are not guaranteed meals.

## Hotel Information:

Sheraton Richmond Hotel West

6624 West Broad Street

Richmond, Virginia 23230

Phone (804) 285-2000

Online Hotel registration <http://www.starwoodmeeting.com/Book/MERCAP08>

The rate for single, double, triple, and quadruple occupancy is \$89.00 (\$100.57 with tax and charges).

The cut-off date is 26 March. Reservation will be held until 1600 hours without major credit card of advance deposit for guarantee.



# Carolina WingTips

## Cadet Encampment Executive Staff

I would like to announce the results of the Review Board for Executive Staff for Encampment. This is for Cadet Staff. They are as follows :

Commander= Nicholas Logel  
Dep. Comm.= Joshua Hancock  
X'O =Jeremiah Coogan

I think we have a great Exec. Staff and am looking forward to work with them.

Lt. Col. Linwood Barkley  
Encampment Commander

---

## New Wing Director of Cadet programs

As you know, Capt Eileen Kong is relinquishing the duty of Wing Director of Cadet Programs now that her doctoral studies and requirements have begun to take enormous amounts of her time. Our sincere thanks goes to Capt Kong for her service as NCWG/CP, and she has our best wishes for continued success in her pursuit of her medical studies.

There were three officers who responded to be considered to fill the pending vacancy of Director of Cadet Programs. All three candidates are commended for their interest in serving on the wing staff.

Effective 10 March 2008, Maj Albert Therriault assumes the responsibilities of NC Wing Director of Cadet Programs. Maj Therriault currently serves as the Deputy Commander for Cadets in the Raleigh-Wake Composite Squadron. He has also served as Commander of Raleigh-Wake Composite Squadron and Commander of the former Group 5. Maj Therriault completed Training Leaders of Cadets, has attended two encampments, and completed Level 3 of the Senior Training Program. He holds a master rating in Health Services specialty track, and senior ratings in Cadet Programs and Emergency Services specialty tracks.

Please join me in welcoming Maj Therriault as our new NC Wing Director of Cadet Programs.

Roy Douglass, Lt Col, CAP  
Wing Chief of Staff

---

## New MER Chief of Staff

Please join me in welcoming Col Russ Opland to the Middle East Region Staff. Effective immediately, Col Opland has been appointed the Chief of Staff for Middle East Region. Col Opland is the immediate past Commander of the Delaware Wing. He is well versed in each of CAP's three missions. His organizational skills are evident in the outstanding job he did in DEWG, and we look forward to having those talents applied to MER.

Please join me in thanking Lt Col Tom Merrill for his service to Middle East Region.

Regards,  
KAY JOSLIN WALLING, Col, CAP  
MER/CC

---

## Keeping track of net check-ins

A new page has been created to report on the communications check-ins reflecting the new call signs.  
<http://capefearcap.org/comm/>

Note that you can now create a listing based on either Call Sign or CAPID.

Let me know if you encounter any issues, or have suggestions for improvements.

Maj. Mike Starr, CAP  
CKH44

# Carolina Wing Tips continued

## Pistol match scheduled

The date of the pistol match we're all uh, (cough) shooting for, has been announced! Get your targets to me before the deadline!

The twelve highest-scoring shooters will face direct competition for five positions ( four shooters and one alternate) to compete against a pretty fair bunch of shooters, all of whom seem to be fairly ignorant of what we can do.

Here's the official notice, straight from Col Davis:

The Annual Adjutant General's Invitational Pistol Match will be held Friday 11 July

Lucy H. Davis  
Director, Civil Air Patrol Division  
North Carolina Department of Crime Control & Public Safety.

Now go out there, create clouds of gunsmoke and wake the neighbors!  
On second thought, you might want to wait until daylight.

Lt. Keith Savoy  
NCWG Director of Communications

---

## The NC National Guard needs you

As you may be aware the NC National Guard is an outstanding organization and is there in the trenches with our active military members, protecting us on a daily basis. Now they are looking for our help.

They have what sounds like an awesome program for their youth. It is called "Kids on Guard". A few times a year they have a weekend encampment for our National Guard member dependants. This weekend encampment helps to answer many questions regarding what their parent does in the Guard and also provides a fun opportunity for them to explore many aspects of what CAP does so well. They learn about compass work, map reading, model rocketry and much more.

The program director is looking for both senior member officers and especially cadet support for the program. If you are a Cadet Officer or NCO, a CAP Senior Officer that has completed LVL 1 and CPPT and would like to join in on the fun at Camp Butner this April, please let me know ASAP. We are looking for approx 20 cadets and 5 -10 Senior Officers. Beds, showers and food are being provided !!!! Could you ask for more??

Maj. Al Therriault CAP  
Deputy Commander for Cadets  
Raleigh-Wake Comp Sq  
Civil Air Patrol  
PO Box 80064  
Raleigh, NC 27614-0064  
SARPilot048@gmail.com  
919.274.1375

## CONGRATULATIONS C/Lt Colonels Fletcher!

The Apex Cadet Squadron has the distinct honor and privilege to announce the APPOINTMENT of both Cadet Lt Col's Cassie and Kali Fletcher to the United States Air Force Academy Class of 2012. They have been active CAP members since 2004 and have excelled in all aspects of the Cadet program. From numerous cadet command positions to National Cadet Competition Drill Team, their focus, enthusiasm and esprit de corps truly displays their dedication to serving their community, state and now, an elevated service to their nation!

We are immensely proud of their many accomplishments and are looking forward their continuing service.

Lt. Col. Pam Strug

# New Mission for CAP aircrews— training Combat Air Support controllers

## Joint Training mission with military units

February 18, 2008

Ft. Pickett, VA – On Feb. 18th a steady drizzle greeted members of the NC Wing, CAP, as they began preparations for the today's assignments. CAP is participating in a joint training exercise with units of the Air National Guard (ANG) and other U.S. military units. As the morning wore on a cold front began pushing the cloud cover toward the east leaving blue skies and a few scattered cumulus clouds. Along with the cold front were blustery winds. Fortunately the weather improved enough to allow the CAP aircraft and crew to continue the mission at noon.

On Feb. 16th pilots from the Winston-Salem Composite Squadron began flying the ANG forward air controllers over the heavily wooded terrain that comprises much of Ft. Pickett—a former army base now exclusively devoted to use by the National Guard.

At a briefing this morning conducted by Lt. Col. Bill Hawke, CAP Incident Commander, it was learned that CAP aircrews flew Joint Terminal Attack Controller's (JTAC) from the 118th ASOS NCANG for a total of nine training sorties on Saturday, and three longer sorties on Sunday. According to NCANG SMSgt Keith Hunt, most of the JTACs have never flown in small, single engine aircraft, so initial flights were mostly to permit the observers the opportunity to get used to seeing the terrain from the air. Hunt is also a member of the Winston-Salem CAP unit.

"The CAP aircraft is simulating the mission of Unmanned Aerial Vehicles (UAV) by providing a picture of the battlefield and also providing training for controllers who direct fast attack aircraft to the target. 'Predator' aircraft are in short supply here as they are mostly deployed along the U.S. borders and in the Middle East," Hawke said. These sorties allow the controllers to view target areas from the "pilot's perspective". This provides a training resource to the Air Force that airmen do not usually have.

Major Steven Francis of 118th ASOS NCANG indicated that the Guard needs this ability to train controllers on weekends when fighter aircraft are not available. CAP can provide this type training at low cost. The slower Cessnas are the perfect means to give the JTACs practice in verbally describing ground targets and leading fast mover aircraft to the attack. This training will enable the JTACs to be much more effective in directing attack aircraft. "With 10% effort and 2% **cost we** get an 80% solution for Close Air Support (CAS) training", said Major Francis.

According to Hunt, the Air Guard has radios compatible with current CAP air-ground frequencies, so communications between the airborne controllers and ground bases was very effective.

The principal missions completed thus far include JTAC members spotting friend and foe locations on the ground, and then reporting their sightings to controllers on the ground.

Several units from Canada are participating including the 36th Brigade Group. Other Air National Guard units from North Carolina, New Hampshire, Virginia, and Maryland as well as U.S. Army and Army Reserves and U.S. Air Force and AF Reserves were also on site.

Airborne missions completed today included convoy escort using NCANG spotters looking for hazards, suspicious vehicles and personnel waiting in ambush.

Winston-Salem officers included: Lt. Col. Bill Hawke, Chaplain (Lt. Col.) Wayne Byerly, Maj. Glen Peting, Maj. Dave Gamble, Maj. Neil Brock, Capt. Rick Shoffner, Capt. Jim Shepard, Capt. Bruce MacPherson, Capt. Dave Rodwell and Capt. Eric Orgain.

Lt. Col. Bill Hawke and SMSgt Keith Hunt contributed to this article



Photos from Joint CAP-NC ANG Exercise

L-R Maj. Neil Brock, Capt. Eric Orgain and Capt. David Rodman after arrival at Ft. Pickett



Photos by: 1st. Lt. Don Penven

L-R Lt. Col. Bill Hawke reviews area map with Capt. Rick Shoffner



SMSgt Keith Hunt and Lt. Col. Bill Hawke review weather forecast before launching a sortie.



# AE presentation at career day in Charlotte

This old Korean War Veteran got up early today, long before daylight. This was going to be a great day. I was traveling to Charlotte, NC where I would meet my friend, Capt Twiddy of the South Charlotte Civil Air Patrol NC - 800 Squadron. We were invited to set up a Civil Air Patrol (CAP) display and put on a program for the Career Day being held at J. M. Robinson Middle School. The Career Facilitator, Ms Mary Barlett had taken care of all of the arrangements, including the invitation.

We arrived at the school on time 8 a.m. and were greeted by several students who insisted on helping us carry all of our equipment to the exhibit hall. A large table and TV stand with a large screen TV set had been placed in a prime location on stage for use with Paul's Laptop computer.

Capt. Twiddy, Capt. Williams (Alias Capt. Marvel) and now Cadet 2/Lt Jay Thomas (Alias Lt. Marvel) set up a large display (model rockets, airplanes, pictures of cadet actives, DVD slide shows, flashing lights, etc.

Capt Marvel was in Dog Heaven. He had a captive audience of 385 students and teachers. He started the show by defying gravity in making a screwdriver float in mid air.

Things got quiet and someone said "Look at That and How does it work?" Captain Williams then explained David Bernoulli's 18th century laws of lift and flight. Lt. Marvel who took over and did a great job repeated the flying screwdriver and floating ball demonstration several times over the next two hours.

It was a great day for CAP and Capt. Marvel. A lot of pamphlets and brochures were handed out and a lot of questions were answered concerning CAP. Ms Judy Ryder, Math Teacher, again, has invited back into her classroom to discuss a rocket program.

Major James P. Williams  
NCWGAE Officer

Photo by: Capt. Paul Twiddy



Cadet 2nd. Lt. Jay Thomas gives aerospace demonstration.

---

## Lt. Col. Pam Strug named to MER position

Lt Col Pam Landreth-Strug of NCWG has been named the new Director of Cadet Programs for Middle East Region. Lt Col Landreth-Strug will formally take over following the MER Cadet Competition on 6 April 2008. She will be in charge of cadet program activities at the MER Conference, so any information regarding cadet programs at the MER Conference should be coordinated with her. Please join me in welcoming Lt Col Landreth-Strug to the MER Staff.

Lt Col Phyllis Griffin will nominally be the Director of Cadet Programs through 6 April, but will be focusing on her position as MER Director of Finance. Lt Col Griffin has provided outstanding service to Civil Air Patrol serving in numerous positions at the Unit, Wing, Region, and National level. She has provided a solid foundation for the MER Cadet Program. Please join me in thanking Lt Col Griffin for her service to Cadet Programs.

Regards,  
KAY JOSLIN WALLING, Col, CAP  
MER/CC

# Asheville Squadron conducts flight academy for cadets

During the normally low activity winter months, the Asheville Composite Squadron (NC019) has combined two of Civil Air Patrol's three main mission, cadet programs and aerospace education, and has started it's own flight academy for cadets.

The effort is to train the next generation of Civil Air Patrol pilots by giving the cadets an inexpensive opportunity to start working toward their private pilot's license.

On February 2<sup>nd</sup> the Asheville Composite Squadron started a local version of the CAP National Powered Flight Academy with seven cadets participating.

What normally takes 10 days of concentrated instruction during the summer Flight Academies is being spread over the month of February due to school and work schedules of those involved.

All cadets will receive 10 hours of flight training toward their private pilot's license and 22 hours of ground school instruction following the National Flight Academy Training Course Outline.

Ground instruction has been completed with nine classes totaling 22 hours covering the following material: aircraft controls, Aircraft systems, Aircraft speeds, Aircraft ground operations, Standard traffic pattern, Airport layout, Towered airport communications, Non towered airport communications and collision avoidance just to name a few of the subjects.

Out of the squadron's nearly 50 cadet-strong membership, seven have taken advantage of this first opportunity. They are C/2LT Michael Gallandt, C/CMSgt Stephen Bloemsma, C/TSgt Tristan Wicker, C/CMSgt Jason Nadle, C/CMSgt Nicholas Padleckas, C/Sgt Sam Pollock and C/CMSgt Rob Lollar.

Even with the unfavorable weather and numerous windy days, 30 sorties have been completed.

Asked what he thought about having a program that is usually conducted at a national or wing level being run at a squadron level, Cadet Chief Master Sergeant Jason Nadle said, "I think it's great because it's close to home, we don't have to spend a lot of money traveling and we know everybody!"

Nadle, 16, from the Leicester community said that he got interest in aviation after visiting the USS Yorktown in Charleston, South Carolina when he was 13. He has been a cadet for two years now.

Conducting the flight school for the cadets are ground instructors Lt. Colonel Wally Courtney and Captain Gary Lux. Flight instructors include Lt. Colonel Ray Davis, Major Rich Augur, Captain Rocky Fleming, Captain Brett McElheney and Captain Arnie Andresen.

"With improving weather we look forward to completing all 70 hours of flight training before the end of March," said Lt. Colonel Ray Davis.

This report filed by Clint Parker for the Asheville Civil Air Patrol.

# NC Wing 2008 Color Guard Competition

We had 38 cadets competing in two Drill Teams (Apex and Asheville) and three Color Guards (Asheville, Chapel Hill and Raleigh-Wake). On top of that we had five members of the 14WS Honor Guard and one CAP-RAP reservist (Maj Jeff Moore) serving as the judges. Twelve cadets from various squadrons were alternates and support staff. Ten Senior Members served as team sponsors/support staff and 15 additional Senior Members and Cadet Sponsor Members turned out to help with the event! That's 50 cadets and 31 Adults directly involved in the competition in one way or another. Not to mention the 30+ parents, spectators and other CAP members that turned out to watch! Not to brag...OK, maybe a little...I heard a rumor that NCWG is the only wing in Middle East Region that turned out two teams for a Drill Team competition! I also heard that one wing didn't even have a Color Guard competition! These wings are putting together a "wing" team made up of cadets from across their state.

The Justice Academy was a great facility for competition and even though it required some travel I think the participants agree that it was worth the drive.

The Honor Guard judges did a great job and took some time after the drill events were complete to offer the teams training tips on several different aspects of the presentation of the colors. I encourage all of you to seek out local military units and see if they have officers or NCOs who may be able to provide training for the cadets.

The ultimate goal for the CAP Division and NCWG goes beyond preparing competition winning Drill Teams and Color Guards. We want to have Honor Guards in each group that can go into the community and provide a number of services including presentation of the colors, funerals, parades, special events, etc. Anything to get our cadets in front of the public promoting CAP and the Drug Demand Reduction Program. We have funding to support this goal courtesy of the Cadet Leadership Program grant from the GREAT State of North Carolina. If your unit has or wants to develop an Honor Guard let me know. We want to help! And start preparing for next year's competition!

On to the particulars for this year's competition. The winning teams will be outfitted with new equipment and uniform items courtesy of the Cadet leadership Program grant. We want everyone to know that Cadet Programs and Drug Demand Reduction are top priorities in North Carolina and we put material support behind that claim. The adult leadership to administer the Cadet Program is crucial and we want the Senior Members and cadet Sponsor Members to know that we will help in any way we can! New drill rifles, new flag poles and flags, new uniform items and new insignia are only a part of the material support we will provide to the teams representing our wing at the region competition.

## DRILL TEAM WINNERS:

Written Exam - Apex  
Highest Score - Cadet Tyler Weston - Apex  
Mile Run - Apex  
Fleet Foot - male - Cadet Graham Neville - Asheville  
Fleet Foot - female - Cadet Kali Fletcher - Apex  
Panel Quiz - Apex  
Volleyball - Apex...but what a fun game it was!  
Inspection - Asheville  
Standard Drill - Apex  
Innovative Drill - Apex

OVERALL DRILL TEAM WINNER - Apex

OVERALL COLOR GUARD WINNER - Chapel Hill

## COLOR GUARD WINNERS:

Written Exam - Chapel Hill  
Highest Score - Cadet Daniel Kong - Chapel Hill  
Mile Run - Chapel Hill  
Fleet Foot - male - Cadet Daniel Kong - Chapel Hill  
Fleet Foot - female - No females  
Panel Quiz - Chapel Hill  
Inspection - Chapel Hill  
Standard Drill - Chapel Hill  
Indoor Practical Drill - Asheville  
Outdoor Practical Drill - Raleigh-Wake

Start preparing for next year and let me know if you need any help or support!

Maj Rich Augur  
Cadet Leadership Program Officer, CAP Division  
NC019, DCCA

# got garber?

No? Then you need a full helping of...

## 2008 Middle East Region Staff College

MERSC will provide your daily requirement of Level IV of the CAP Officer Training Program and help you on your way to getting that healthy glow needed for promotion to Lt Col!

Through hands-on exercises you will feel the satisfaction of learning interpersonal communications, leadership, management, and training techniques, and return to your daily and CAP life ready to tackle anything!

MERSC may be found at one location only — McDaniel College in Westminster, MD, *for a limited time only* — June 7-14, 2008, at a very reasonable cost that covers tuition, lodging, and meals. (Postmark will determine cost).

Discounted cost 10/1/07 thru 12/31/07	\$315
Regular cost 1/1/08 thru 3/31/08	\$325
Late cost 4/1/08 thru 5/1/08	\$335

Get yours now! Sign up with a CAPF 17, approved through your chain of command, and forward with full payment to Capt Tim Gleaton, MERSC 2008 Tasking Officer, 1118 Pepper Ridge Dr., Lugoff, SC, 29078. (*No payments will be accepted at the college*).

Have questions? Contact the Director, Lt Col JOHN KNOWLES (john.knowles@bcc.mdwg.cap.gov), or the Deputy Director, Lt Col NANCY GLEATON (nancygleaton@bellsouth.net). And don't forget to visit our web site at <http://www.mer-rsc.org> to see information on our past offerings!

*... we support the DDR program ...*



# Close To Home ... NTSB Reports

***Accident occurred Sunday, February 03, 2008 in Elkin, NC  
Aircraft: JE Kaylor/RL Strahmann RV-4, registration: N580RG  
Injuries: 1 Fatal.***

On February 3, 2008, about 1617 eastern standard time, an experimental amateur built RV-4, N580RG, crashed while maneuvering at Elkin Municipal Airport, Elkin, North Carolina. The flight was operated by the pilot as a personal flight under the provisions of 14 Code of Federal Regulations (CFR) Part 91. Visual meteorological conditions prevailed for the flight, and no flight plan was filed. The airplane was destroyed by impact and a postcrash fire, and the commercial-rated pilot, the sole occupant, was fatally injured. The flight originated about 1612, from Elkin Municipal Airport.

A pilot-rated witness reported the accident pilot and 2 other airplanes entered the traffic pattern for landing on runway 25, but the accident pilot performed a low pass over runway 25. When the flight was past the departure end of runway 25, the airplane was observed pitching up and rolling consistent with an aileron roll. After completing the roll, the accident pilot remained in the traffic pattern, landed uneventfully on runway 25, then secured the airplane (dark gray in color). Approximately 1.5 hours later the accident pilot and the pilots of the other 2 airplanes elected to depart from runway 07. After takeoff, the accident airplane turned downwind, base, and final, and while flying over runway 07 at an estimated 8 feet above ground level, the airplane was observed to pitch up and roll to the left while continuing to climb. The witness reported that at the top of the climb, the airplane appeared to perform a “split s” type maneuver, and began descending in a nose-low attitude. The witness further reported that before losing sight of the airplane due to obstructions, the airplane was flying nearly perpendicular to the runway and began a rapid nose-up pitch change. The witness then observed a fireball.

Preliminary examination of the accident site revealed several ground scars on grass south of the south edge of runway 25; the first ground scar was located approximately 16 feet south of the south edge of the runway. Several marks on the grass continue to a berm located approximately 47 feet from the south edge of the runway. Pieces of wooden propeller blade were located at the berm. Additionally, gray colored paint was noted at the ground scars south of the runway. The airplane came to rest inverted in a shallow berm south of the runway.

\*\*\*\*\*

***Accident occurred Friday, February 01, 2008 in Mount Airy, NC  
Aircraft: Raytheon Aircraft Corporation C90A, registration: N57WR  
Injuries: 6 Fatal.***

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.

On February 1, 2008, about 1128 eastern standard time, a Raytheon Aircraft Company C90A, N57WR, was substantially damaged when it impacted terrain while executing the missed approach for the Global Positioning System (GPS) approach to runway 36 at Mount Airy/Surry County Airport (MWK), Mount Airy, North Carolina. The certificated commercial pilot and the five passengers were fatally injured. Instrument meteorological conditions prevailed, and an instrument flight rules flight plan had been filed for the flight, which departed Polk County Airport/Cornelius Moore Field (4A4), Cedartown, Georgia. The personal flight was conducted under 14 Code of Federal Regulations Part 91.

According to witness statements, rain, low cloud ceilings, and fog were present in the local area. The pilot was first heard to check in on MWK’s common traffic advisory frequency (CTAF), and announce “final 36, Mount Airy.” The airplane was then observed to “break out of the clouds” at approximately 500 feet above ground level, in close proximity to the airport, and then descend “rapidly” for about 200 feet. It was then observed to “side step” to the left of the runway, and fly parallel to it for its entire length. The airplane then made a “hard” left turn at the end of the runway and climbed into the “fog.” A few minutes later, it came out of the bottom of the clouds in a nose down attitude, disappeared behind trees east of the airport, and the sound of impact was heard.

According to Federal Aviation Administration (FAA) preliminary air traffic control voice, and radar plot data, the airplane departed 4A4 at approximately 1024 and arrived in the vicinity of MWK approximately 50 minutes later.

After arrival in the local area, the pilot contacted Greensboro Approach and advised the controller that he was level at 4,000

feet above mean sea level (msl) on a northeast-bound track toward MWK. The controller then instructed the pilot to maintain 4,000 feet msl until crossing the EDLIF waypoint, fly the GPS approach to runway 36 at MWK, and switch to the CTAF for the airport.

Radar data obtained from the terminal radar approach control facility at Greensboro, North Carolina, contained recorded radar targets for the accident airplane from 1112 until 1128. During the GPS approach to runway 36, the airplane was recorded tracking inbound to the airport. The last radar target on final was recorded at 1125:40, at 2,000 feet msl, approximately 1.25 nautical miles from the runway 36 threshold. No more radar targets were recorded until 1127:49, when the target representing the airplane reappeared on radar on a left base leg at 2,300 feet msl. It then continued to turn left to about a 020-degree heading, overfly the threshold of runway 36 at 2,300 feet, and continue on a 020-degree heading for another 14 seconds. The last target was recorded to the east of the airport 0.6 nautical miles south of the accident site, at 2,700 feet msl.

The accident occurred during the hours of daylight. The wreckage was located at 36 degrees, 27.797 minutes north latitude, 80 degrees, 33.042 minutes west longitude, at an elevation of 1,219 feet msl.

The airplane came to rest in a residential area, upright on a magnetic heading of 200 degrees. Its angle of impact was approximately 45 degrees nose down. The fuel system was compromised in multiple locations and the ground around the wreckage was fuel soaked. No debris path existed, and the initial impact point was collocated with the remains of the airplane. All major components of the airplane were accounted for at the accident site.

Examination of the wreckage on scene revealed no evidence of any preimpact malfunctions, structural failures, or in-flight fire. Evidence did indicate that the landing gear was in the extended position prior to impact, and the flaps were in the approach position. Both propellers displayed S-bending, and no anomalies were identified with either engine. The rudder trim tab actuator correlated to 1 to 2 degrees of right rudder trim. The elevator trim actuators were measured and found to be in a position which correlated to 6 to 7 degrees nose up trim, and the electric pitch trim was off.

According to FAA records, the pilot held a commercial pilot certificate with ratings for airplane multiengine land, airplane single engine land, and instrument airplane. He reported 780 total hours of flight experience on his most recent application for an FAA second-class medical certificate, dated August 6, 2007.

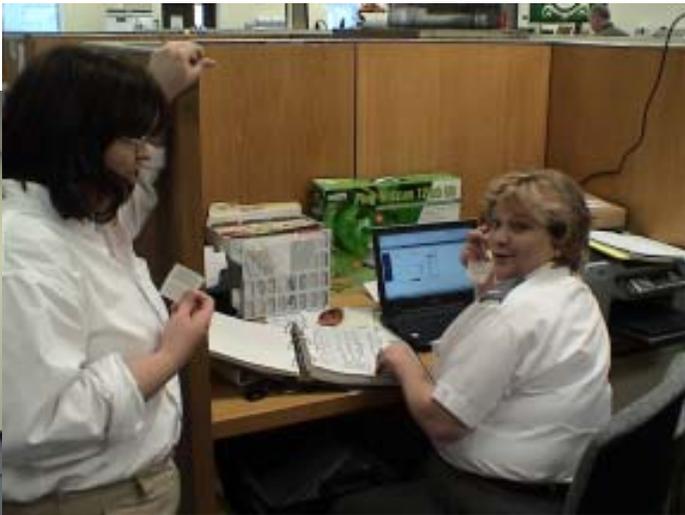
According to FAA records, the airplane was manufactured in 2005. According to maintenance records, the airplane's most recent manufacturer's recommended inspection program, phase inspection, was completed on November 9, 2007. At that time the airplane had accrued 799.7 total hours of operation.

A weather observation taken about 13 minutes after the accident, included; calm winds, visibility 2 and 1/2 miles in heavy drizzle, a broken cloud layer at 300 feet, an overcast cloud layer at 600 feet, temperature 1 degree Celsius (C), dew point 0 degrees C, and an altimeter setting of 29.90 inches of mercury.

The wreckage was retained by the National Transportation Safety Board for further examination.

---

SAV - MARCH 2008



Photos by: Col. Larry Ragland

# Airplanes vs. Pilots (Reprinted from “Over the Air Waves.”)

Where would our general aviation flight safety record be if we pilots were held to the same preparation and proficiency standards that are imposed upon aircraft manufacturers and maintenance personnel?

While this question is likely to stir considerable debate, it is not an “apples and oranges” issue as many might proclaim. Pilots and airplanes form the man-machine interface that make up any given flight. Thus, it would make sense that each of these two elements be treated similarly.

Curiously, the standards to which man and machine are held are not even remotely close! It takes several years or more to certify a new aircraft. New pilots are certified with just 35 to 40 hours of dual and solo experience.

Similarly, the airframe and power plant mechanics who maintain our aircraft require 1 to 2 years of formal training or 30 months or more of supervised on-the-job training. We pilots can push through the private pilot certificate in 30 days or less and we can obtain an instrument rating in 7 or 10 days!

The airplanes we fly are inspected after every 100 hours, if they are used for hire, and every 12 months regardless. We pilots receive a 1 hour ground and 1 hour flight review every 2 years!

*The proof is in the pudding!*

The differences in standards for pilots and airplanes are readily revealed in our accident data.

According to the AOPA’s Air Safety Foundation’s 2007 Nall Report, as their chart on the left depicts, 79.1% of all fatal accidents in 2006 were caused by the pilot and only 9.9% were caused by mechanical or maintenance issues.

Clearly, of the two elements in the man-machine interface, the man (pilot) is the weak link. He is, in fact, 8 times more likely to be responsible for fatal aircraft mishaps than the airplane he is flying.

*The economic realities*

Critics of this comparison between pilot and aircraft standards fiercely argue that economic realities preclude us from imposing the same standards on pilots as we do on aircraft manufacturers and maintenance personnel. These pinheads (to borrow a term from Fox TV commentator, Bill O’Reilly), insist that there would be a mass exodus of private pilots if training and proficiency standards were increased.

Hmmm . . . let’s compare the relative economic health of our highly regulated airplane manufacturing and maintenance industry versus our marginally monitored and minimally regulated population of private pilots.

While our total number of rapidly aging, loosely regulated pilots has dropped nearly in half since 1970, our toughly regulated aircraft manufacturing industry has been in a giant boom!

There are now over 75 different makes and models of new light sport aircraft alone, not to mention the recent revivals of Beechcraft, Cessna, Mooney, and Piper.

Very light jets (VLJs), despite rigorous certification requirements, are now rolling off of the assembly line. New aircraft sales are at a record high, all while we are witnessing the “graying” of the GA pilot population.

In other words, the airplane element of the man-machine interface, despite onerous regulation and high standards, is thriving while the man element, despite *loosey-goosey* standards and minimal regulation, is sliding down a slippery slope to possible extinction.

*Is there a message here for us?*

Is there a message? You bet. While we pilots may take comfort in our world of minimal regulation and while our flight schools feel no remorse in turning out pilots that barely meet the FAA’s Practical Test Standards, the only way to turn things around is through improved pilot proficiency. Not surprisingly, improved proficiency requires specific action.

Here's an example of just how bad things are. I was doing an aircraft checkout earlier this month for a young lady who earned her instrument rating last July. In the process, we encountered instrument conditions. I obtained a pop-up instrument clearance and instructed the pilot to continue on with the flight. Almost immediately, I noted beads of perspiration on her forehead.

I asked if she was okay. She responded saying, "I've never been in the clouds before!" Recall, this lady had received her instrument rating right here in the Buffalo, NY area where overcast skies occur almost every week.

See the problem? This instrument rated pilot was not provided the skills or confidence to remain upright in the clouds. Yet she fulfilled the current training standards for an instrument rating. Heck, we have dozens of instrument instructors (CFIIs) who, themselves, have never been in the clouds! This shortcoming in our training standards, alone, is laughable.

No, it's NOT laughable. Instead, it is a cruel deception that is causing unnecessary loss of pilot and passenger lives! And the same can be said about pilots who were never trained in crosswinds in excess of 12 to 14 knots. Sadly, the same can also be said about pilots who never received aggressive cross-controlled and accelerated stall training. The list goes on and on.

*So what action should we pilots and flight schools be taking?*

We pilots and flight schools can start by recognizing the basic difference between minimal standards of performance, e.g., the FAA's Practical Test Standards, and optimal pilot proficiency.

Similarly, we (both pilots and flight schools) must understand that the FAA mandated standards by which we qualify and train as private pilots are woefully inadequate and incomplete to produce safe, proficient pilots.

More importantly, we must understand that if these were the ONLY piloting standards to which we achieved, our life expectancy aloft is in serious question.

In summary, quality counts in aviation just like in most other aspects of human endeavor. Japan learned this lesson in the 1970s. China is now beginning to understand it. When we GA pilots finally learn it, that's when we'll see a marked reduction in our deplorable (100 times worse than the airlines) GA fatal accident rate.

### General Aviation Accidents 2006

MAJOR CAUSE	All Accidents	Fatal Accidents
Pilot	973 (73.8%)	216 (79.1%)
Mechanical/ Maintenance	223 (16.9%)	27 (9.9%)
Other/Unknown	123 (9.3%)	30 (11.0%)
<b>TOTAL</b>	<b>1319</b>	<b>273</b>

Bob Miller, ATP, CFII  
[rjma@rjma.com](mailto:rjma@rjma.com)  
716-864-8100

# NC Wing Sights on Safety

March comes in like a Lion and goes out like a lamb. Or is it the other way around? Anyway, March is here and Winter will officially end soon, but not before the Madness of ACC and NCAA basketball overwhelms our work days. We can all look forward to the transition from colder days to warmer times to come. But this month usually get better as the days go by.

By the way, Daylight savings Time begins on March 9 this year. Very sneaky!! I was just getting used to Apr-Oct DST and they changed it on me. That means I've got to re-do those VCRs and digital clocks at home. :(

The State of North Carolina recognizes Severe Weather Awareness Week every March. Since March is a weather transition month, severe storm and tornadoes may begin popping up this time of year. The state will conduct Tornado drills and exercises are conducted during this event, scheduled from March 2-8. Reference the following link for information about tornado drills.

<http://www.doe.state.in.us/safety/tornado.html>

For CAP, we just keep plugging away. Flying time may be more available as the days are getting longer and we can enjoy about as much daylight as darkness. Weather fronts seem to move through faster and more frequently, but the skies are usually very clear. During these transition months, we often get severe weather outbreaks that

include strong, gusty winds, thunderstorms, and tornadoes. It would be a good time to keep boning up on weather.

Refer to the websites below for some pretty good weather information.

[http://flash.aopa.org/asf/wxwise\\_ceilingvis/](http://flash.aopa.org/asf/wxwise_ceilingvis/)

<http://www.aopa.org/asf/publications/advisors.html#sa12>

If you're going to be flying more, refresh your knowledge of ground operations with the following:

[http://flash.aopa.org/asf/runwaySafety/html/index/runwaySafety\\_expanding.htm](http://flash.aopa.org/asf/runwaySafety/html/index/runwaySafety_expanding.htm)

Hiking and backpacking are more fun this time of the year. The mosquitoes are not out yet and my legless, slithering buddies are usually still in hibernation. As our ground teams get ready for the great outdoors, use caution.

<http://www.redcross.org/services/hss/tips/hiking.html>

[http://www.wildlife.state.nh.us/Outdoor\\_Recreation/hiking\\_safety.htm](http://www.wildlife.state.nh.us/Outdoor_Recreation/hiking_safety.htm)

<http://www.bluebison.net/yosar/safety.htm>

Have a safe March.

Capt. Dan McCollum  
NCWG Safety Officer

Don't do nothing stupid.....



# Wx Watch: All Fogged Up

Riding out ground fogs (Reprinted from the AOPA, [www.aopa.org](http://www.aopa.org))

By Thomas A. Horne

Let's say it's early evening and you're busy planning a flight for the following day. The forecast is for high pressure and clear skies all along your route and, to add to the good preflight vibrations, a walk in the night air reveals a crystal-clear, star-studded firmament devoid of a single cloud. There is a bit of a chill in the air, though, and you hurry back to the house to pack up your charts, put fresh batteries in your handheld GPS, and make your suitcase ready. You'll launch at oh-dark-thirty in the morning and be at your destination by noon.

Oh, really? From the hints I've already dropped, you might be able to guess what happens by the time oh-dark-thirty rolls around. A shallow layer of ground fog forms. What caused this to happen? Are some ground fogs denser or deeper than others? How long will it take for the fog to burn off? Is it smart to take off anyway — even if you're an experienced instrument pilot? The answers to these and other questions lie with an understanding of fog basics. Here are four key ground fog “triggers” that should make you wise to its ways:

**Beware clear nights.** Clear nights mean two big fog factors can exist. In the first place, clear weather implies — in many cases — high pressure. It's a high's descending air mass that creates cloud-free conditions because as air descends it warms, and thus dries any potential cloud-producing moisture. Take a clear sky and match it up with falling temperatures, and you've got a great recipe for radiational cooling. Any daytime heating stored up in the ground wicks readily away by the wee hours of the morning, sent into the open sky in much the same way that a car's radiator allows hot coolant temperatures to disperse in the ambient air. As temperatures fall during the night (actually, surface temperatures reach their lowest values right around dawn, after a whole night's worth of cooling) they can reach the dew point. Let temperatures drop within a few degrees of an air mass's dew point — the temperature to which the air must be cooled in order to reach the water-vapor saturation point — and you've got a big, big chance of fog.

**The surface inversion factor.** There's a general rule holding that the Earth's nighttime “skin,” or surface temperature, is about 5 degrees Fahrenheit cooler than temperatures just five feet (the height of a weather instrument shelter) above it. This implies another fog-enhancing factor: surface inversions. An inversion is a condition where temperatures increase with altitude. High pressure and clear nights conspire to create inversions because the high's descending, warming air mass meets colder air near the Earth's surface. Just where they meet is a big factor in ground fog dynamics. The inversion level may be only a few feet above the ground, in which case someone walking on a ramp may have zero visibility, but someone standing on a stepladder — or in a control tower — may be able to see the top of the fog/inversion layer. Wherever it tops out, it's important to remember that the cooled air below the inversion level is stable — meaning that the warmer air above it helps cap the ground fog.

**The water factor.** Airports located near rivers, lakes, and coasts are more susceptible to early morning fogs. That's because there are plentiful, nearby sources of water vapor. This extra water vapor helps make the fog denser and more persistent. When you think of all the airports located near rivers and coasts — and there are a lot of them, because their shorelines offer flat terrain, perfectly suited for runways — you realize just how much fog can affect takeoffs and landings over a far-ranging area.

**Draining valleys.** Cold, dense air flowing down valleys can also help create and sustain fogs in riverbeds. Like radiation fogs, valley fogs are most common in the fall through spring months, when nighttime temperatures are at their lowest and the nights are longest.

**When will it burn off?** This depends entirely upon how soon the sun can warm the ground. As soon as surface temperatures rise, the temperature-dew point spread widens, and the fog will begin to lift and disperse. If there are clear skies above the fog layer, the sun should do this job by 10 or 11 a.m., when it's high in the sky and temperatures begin rising in earnest. But if there are cloud layers aloft, then solar heating is impaired, and it may be hours — or days, if the clouds are associated with a slow-moving low or frontal system — before enough heat gets through.

Many pilots believe that fog burns off from the top down, that the sun's heat somehow eats away the top of the fog layer and slowly works its way down. Not so. Fog burns off from below, and surface heating does the job. Obviously, if the fog is deep and dense it will take longer to burn off. Want a crude rule of thumb? If ground fog doesn't “brighten” by late morning, don't expect it to lift any time soon. A check of radar imagery or local METARs will probably confirm the presence of sun-blocking broken or overcast higher clouds.

**Should you take off?** If you're flying under FAR Part 91, that decision rests entirely with you, the pilot in command. Assuming you're instrument-rated, current, and proficient, you could take off in zero-zero conditions and still be perfectly legal. Legal, but stupid! What if there was a problem or emergency immediately after takeoff? How could you navigate back to the

runway for a prompt landing? Answer: You couldn't. You'd be grinding along in the soup — on top, perhaps, if you climbed that high — nerves jangled, and with no way to make a legal instrument approach (let alone a visual approach) to a nearby airport. If you had smoke in the cockpit, a fire, a loss of oil pressure, or other dire situation you'd be in deep trouble indeed. And you just left the nearest airport, one that you presumably were familiar with.

A smart takeoff decision hinges on ceiling and visibility. Can't see across the airport? Better not go. Fog lifting? Can you see blue sky when you look straight up? Visibility improving? Then it may be worth a shot.

**Landing in ground fog.** Arriving late at night or early in the morning? Then make a point of checking in early and often with any ATIS (automatic terminal information service), AWOS (automated weather observation systems), ASOS (automated surface observing system) frequencies, or where applicable, check in with approach control and tower personnel for the latest weather changes. Listen up when it comes to the temperature-dew point spread, visibility, and mention of any indefinite ceilings (ceilings obscured by surface-based phenomena, such as ground fog) or low vertical visibilities (the visibilities upward into an obscuration). At these colder times of day, fog-warning signs can come on quickly. If the temperature is on top of the dew point and reports indicate lowering vertical visibilities, then get ready to divert to an alternate airport with better weather.

**When will I see the runway environment?** OK, let's assume that, based on a vertical visibility report of 200 feet, you decide to shoot an instrument landing system (ILS) approach to a fog-bound runway. Does this mean you'll see the runway or the approach lights at 200 feet agl? Maybe, but probably not. On the approach, what you see ahead is the slant-range visibility — the view on your flight path, ahead and slightly below you. Slant-range visibility is usually less than the vertical visibility into an obscuration because there are more water droplets in this longer-range view. Someone looking straight up from the runway may see traces of blue sky, but on approach to the runway a pilot may see nothing because of slant-range visibility restrictions.

The worst aspect of the lousy slant-range phenomenon can come when you're maneuvering in the traffic pattern in what seem like VFR conditions tinged with just a bit of fog. From your perch aloft, you can see very well — straight down to the runway. But turn from base to final in this "light" fog and you may suddenly encounter zero visibility as you enter the fog and experience the slant-range phenomenon. This kind of sudden instrument weather is most dangerous at low altitude. It's happened to me more than once: One minute you're on final, with the runway all lined up; the next, you see nothing as you enter the flare and attempt to look down the length of the runway — which has disappeared in fog. The only recourse is to go around or perform a missed approach, and divert to an airport with better conditions.

There are many other types of fog — advection, precipitation, upslope, steam — but ground fog caused by radiational cooling can be one of the most dangerous. It can be more localized than the other types of fog, and therefore more difficult to predict. It can form rapidly, ruin the beginning or end of a flight, and trap the unwary. Most deceptive of all is that it so often occurs when otherwise picture-perfect VFR weather is forecast.

# Editor's Note

## It ain't rocket science!

The real rocket scientists among us are our CAP cadets. I've witnessed a couple of AE Day's and am always impressed by what this younger generation can accomplish. Most of the time the rocket whizzes off the launch pad reaching incredible heights. But once in a while they just sit there and fizzle. No mind--next time it'll fly.

Putting together a newsletter isn't rocket science. That's mostly because more and more of you are contributing to it. Over recent months we've seen some new author's joining the regulars. That's exciting! The first few issues of Carolina WingSpan had me really nervous when so little came in. It's like those rockets that sometimes fizzle. Be patient and it'll fly next time.

This issue is a little late for a couple of reasons: 1). I didn't start putting it together until the day after the SAV; 2). I haven't learned how to put .pdf files up on the website and the webmaster is out of town; 3). I had some real problems with the manner in which materials were submitted--particularly photos. So I find it necessary to repeat the manner in which articles and photos should be submitted:

**Public Affairs SUBMISSION GUIDELINES FOR CAROLINA WINGSPAN NEWSLETTER Submitting Articles:** Articles should be composed *single-spaced* in Microsoft Word. Please do not use any formatting, tables, text boxes or photos imbedded in the copy. Articles may be 500-750 words in length. Longer articles may be edited for brevity. Suggest a headline. Identify the author (rank, name, home squadron or Wing Staff position). Articles and photos should be received by the 25<sup>th</sup> of the month for inclusion in the next issue. *Articles of an urgent or highly important nature may be squeezed in at the last moment.* Articles received after the 25<sup>th</sup> may or may not be included in subsequent publications. Send your article as an Email attachment to: [carolina.wingspan@gmail.com](mailto:carolina.wingspan@gmail.com). **Submitting Photographs:** Photos should be about 1.5 to 2.0 Mb in size. Pick your best ones. Action shots are preferred. Send up to four (4) photos as Email attachments to the address above. Photos will be used based on composition, content, clarity and space available. (I've yet to see a really good cell phone camera photo.) Be certain that the persons depicted are in proper uniform IAW CAPR 39-1. Be certain to include cut lines with each photo listing the subjects from left to right and perhaps a note about what the subjects are doing. Please do not imbed photos in your Word document.

### ***In review:***

- Send your copy in MS Word as an attachment to your email. Preferred type font is Times New Roman
- Send photos as attachments. Photos should be 200 dpi, and in JPEG or TIF format. Please don't send every photo you took, just 3 or 4 of the best ones.
- Size the photos to about 1.5 to 2.0 mb. If you don't know how to resize them, ask a rocket scientist (cadet).
- Each photo will be identified by who is pictured and what he/she is doing. The name of the photographer must also be included. **Photos imbedded in an email will not be used**
- Send your work to: [carolina.wingspan@gmail.com](mailto:carolina.wingspan@gmail.com)

See ... it ain't rocket science!

1st. Lt. Don Penven  
Editor