



South Dakota Wing Roundup



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**Emergency Services REDCAP
30 November 2014**





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COVER PHOTO: SDWG's Lookout Mountain Composite Squadron's ground team moves up the side of a finger butte near Alzada, MT during a tri-state REDCAP on 30 November. The crash site is behind the knob at the center of the photo. A SDWG aircraft from Rapid City orbits overhead.

CAP Congressional Gold Medal

*By Maj. Bruce Kipp, CAP
Wing Public Affairs Officer*



Obverse and reverse of the Congressional Gold Medal presented to CAP honoring its WWII service to the nation.

On 10 December, at a ceremony in Statuary Hall at the U.S. Capitol a Congressional Gold Medal (CGM) was presented to collectively honor World War II members of the Civil Air Patrol whose valor and dedication during the war helped thwart the enemy submarine attacks against our vital shipping lines, saved lives, secured our nation's borders, conducted missions to support the war effort, and helped train members of the armed forces.

Presided over by House Speaker Boehner, Senate Majority Leader Reid, Senate Republican Leader McConnell, and House Democratic Leader Pelosi, the CGM was accepted by Col. Lester Wolff, a WWII CAP subchaser and former U.S. representative from New York and by CAP National Commander Maj. Gen. Joe Vazquez. The gold medal will be placed on permanent display in the Smithsonian Institution.

Later that evening at a gala dinner celebration was held for surviving veterans, families of



Mrs. Norma Kraemer is presented with her husband's bronze replica medal by CAP National Commander Maj. Gen. Joe Vazquez at the evening dinner celebration. North Central Region Commander Col. Robert Todd is in the foreground.



The CGM was accepted by Col. Lester Wolff, a WWII CAP subchaser and former U.S. representative from New York, and by CAP National Commander Maj. Gen. Joe Vazquez.

deceased members, CAP members and distinguished guests in nearby Crystal City. Maj. Gen. Vazquez personally presented a bronze replica medal to each CAP WWII veteran or to a member of the family of a deceased veteran.

South Dakota has four who will receive the bronze replica medal; Mrs. Sylvia Henkin, a resident of Sioux Falls, and three deceased individuals

– Luverne “Vern” Kraemer, Vernon Jeffries, and Earl Wilkinson. Mrs. Henkin and a member of Jeffries and Wilkinson families will receive the bronze replica medal at ceremonies to be held in South Dakota. Mrs. Norma Kraemer, widow of Vern Kraemer, travelled to Washington, D.C. for the ceremony and was presented her husband’s bronze replica medal by Gen. Vazquez. 🇺🇸



The men and women of CAP’s First Patrol Force (also known as Patrol Base-1) in Atlantic City, NJ pose for a final photograph before the unit was stood down. Vernon Kraemer is in the front row far left. The photo is dated August 31, 1943.



Commander's Corner

*By Col. John Seten
South Dakota Wing Commander*



Over the past few months we've been busy in the South Dakota Wing. We ranked the highest in the North Central Region for aircraft utilization for FY 14 and finished well above the national average for hours flown in FY 14. We were able to use nearly all of our allocated funding for Cadet Orientation flights in FY14 and we are expecting an increase for FY15 Orientation Ride funding so we can look forward to getting even more cadets in the air. This is a valuable program and we need to continue to support it going forward.

Since 1 October, the wing has been tasked with flying in support of a Radar Site test mission, two missing person searches, a missing aircraft search and an electronic beacon search which has resulted in one "find" credit awarded to the SD Wing. We've shown our ability to reach out to surrounding wings as we worked with the North Dakota Wing on one of the searches and the Wyoming Wing on another. Just this past weekend we were called upon by Lawrence County to assist in a missing person search near Spearfish, SD. We're happy to say that the missing person was found and was in good health. Great job to all that assisted with these search missions.

We continue to assist the State of South Dakota with aerial animal tracking missions and flew 288 hours in support of this mission in FY14. So far in FY15 we've flown nearly 70 hours in support of the animal mission. Thanks to all that assist with this mission with a special thanks to Lt. Col.

Gary Hewett for stepping up and being the lead on this mission. Lt. Col. Hewett has made himself available and logged 246 hours flying Civil Air Patrol aircraft in FY14 with the bulk of those hours in support of the animal tracking mission. That's what I call dedication!

Our cadets were hard at work in 2014 as they attended many National Cadet Special Activities; some of which were Blue Beret, flight academies across the country and also CyberPatriot where the Big Sioux Composite Squadron in Brookings was the top Civil Air Patrol team in the nation. Great job to Big Sioux on that accomplishment. I know they are working hard to get to the national competition again this year. I've received many applications for NCSAs for FY15 and we'll have a number of our cadets participating across the country.

By the time you read this article we'll have been at our state capitol for our annual legislative day where we will actively recruit more legislative members to our Legislative Squadron and to thank all of them for their support of our organization. I'll also have attended the Command Council meeting in Washington D.C. where I'll meet with the South Dakota legislative delegation to inform them of our activities and accomplishments and thank them for their support of the Civil Air Patrol.

We've have a really special group of people in the South Dakota Wing and I'm honored to say that I am a member of our great organization. 🇺🇸

CYBERPATRIOT-VII



*By Capt. Shannon Hofer, CAP, and
Maj. Nick Gengler, CAP, of Big Sioux Composite Squadron, and
Maj. Bruce Kipp, CAP, Wing Public Affairs Officer*

The Big Sioux Composite Squadron's cyber-security team placed sixth overall in the All Services Division and second among CAP teams in the third round (state) of the CyberPatriot-VII competition that was held from 5-7 December. The squadron's crew of ace cyber-sleuths now goes to the fourth round (regionals).

CyberPatriot is a unique educational competition that challenges high school students to resolve real-life cybersecurity situations faced by industry professionals. Created in 2009 by the Air Force Association, the CyberPatriot competition provides students with hands-on learning about securing computer networks while educating, and motivating them toward careers in science, technology, engineering, and mathematics, disciplines critical to the nation's future.

The 2014 Big Sioux Composite Squadron CyberPatriot team consists of Cadet Major Joshua Klosterman (Team Captain), Cadet Lieutenant Chris Dinnel, Cadet Senior Master Sergeant Jaden Petersen, Cadet Staff Sergeant Nathaniel Fleet, and Cadet Lieutenant Laura Rudnik. They are being coached by Capt. Shannon Hofer and mentored by Cadet Captain Tyler Gross.

Civil Air Patrol competes in the "All Services Division" which consists of teams from Army, Air Force and Marine Corps Junior ROTC units, the Naval Sea Cadet Corps, and CAP. Only the top two teams in each category of the All Services



Big Sioux Composite Squadron's cyber-security team that took part in CyberPatriot-VI (2013). Three of team members (Klosterman, Dinnel and Rudnik) are in the current competition. As in CyberPatriot-VI, Capt. Hofer and Cadet Capt. Gross are coach and mentor respectively in CyberPatriot-VII.

Division go to the national finals to be held in Maryland in March.

During the online qualification rounds the Big Sioux team faced realistic computer network threats at their home location seeking out weaknesses in simulated online networks and working to defend those networks from threat scenarios. A Cisco networking challenge was also a part of the competition. The team was scored according to how quickly and effectively they established and maintained the secure networks. In the regionals the team will be faced with similar but more complex and sophisticated online computer network threats.

If the Big Sioux team succeeds in the regional round they advance to the National Finals, the only in-person round. In the finals the team will compete to defend virtual networks and mobile devices from a professional aggressor team. The National

CyberPatriot-VII *Continued...*

Finalists also face-off in three additional competition components: Digital Cyber Crime Scene Challenge, Cisco Networking Challenge, and Digital Forensics Challenge. These extra challenges broaden the cybersecurity experience and expose teams to new elements of the many career opportunities available to them.

In last year's CyberPatriot-VI competition the Big Sioux cyber-security team made it all the way to the national finals that were held in Maryland. They placed seventh overall, no mean achievement considering there were 864 teams competing in the All-Service Division. However, they won first place among the 320 Civil Air Patrol teams competing. In recognition of this achievement the Air Force Association presented the team with the CAP Champion Award.

The Air Force Association (AFA), the sponsoring organization, is a non-profit, independent, professional military and aerospace education association. Its mission is to promote a dominant United States Air Force and a strong national defense, and to honor Airmen and our Air Force Heritage. AFA has 200 chapters nationally and internationally representing more than 100,000 members. Visit AFA at www.afa.org.

The annual CyberPatriot competition greatly benefits from the support and technical expertise of its presenting sponsor, the Northrop Grumman Foundation. Other sponsors include Cyber Diamond Sponsors, AT&T Federal, Cisco, Microsoft, Raytheon, USA Today, the Department of Homeland Security, the Office of the Secretary of Defense, Cyber Gold Sponsors URS, Splunk, Symantec Corporation, Cyber Silver Sponsors Air Force Research Laboratory, Embry-Riddle Aeronautical University, Leidos, MIT's Lincoln Laboratory, and University College of the University of Maryland. For more information about CyberPatriot, go to www.uscyberpatriot.org. 

PROFESSIONAL DEVELOPMENT COURSES IN CUSTER

*By Col. Mary Donley, CAP
Wing Professional Development Officer*

In October 2014, the Crazy Horse Composite Squadron in Custer hosted the CAP Squadron Leadership School (SLS) and the Corporate Learning Course (CLC) for members of North and South Dakota Wings. Maj. Sharon Moad of the Crazy Horse Composite Squadron directed the SLS for Lt. Ruth Carley of the Pierre Composite Squadron and Graham Frost, Daniel Villas and Ashley Ehret of the North Dakota Wing's 119th Fargo Cadet Squadron. The SLS is part of the Level II of CAP's Senior Member Professional Development Program. It focuses on training members at the squadron level on subjects such as leadership, personal communication, professionalism and the administrative and operational workings of a squadron. All senior members need this course to complete Level II and be eligible for promotion and awards.

Col. Mary Donley, SDWG Professional Development Officer, directed the CLC with the help of former Wing Commander Col. Mike Beason who taught some of the modules. The CLC was attended by 1st Lt. Kris Bierwirth, 1st Lt. Victoria Bierwirth, Capt. Richard Geeting of the Crazy Horse Composite Squadron and Capt. John Hoeck, commander of the 119th Fargo Cadet squadron. The CLC is part of the requirements of Level III of CAP's Senior Member Professional Development Program. This course is focused on the relationship of the squadron with the next major echelon of command – specifically the Wing. Specifically, CLC discusses how wing-level operations help to accomplish CAP's three missions of Aerospace Education, Emergency Services, and Cadet Programs. It describes the working relationships wing staff officers have with each other and with their squadron-level counterparts. All senior members need to complete Level III and be eligible for promotions and awards.

If any senior members have questions about Professional Development do not hesitate to contact me at: mfdonley@gmail.com. My goal is to see senior members progress in the areas of their specialty tracks, and get the awards and promotions they deserve. 

Flying In or Near a Thunderstorm

*Retrieved from General Aviation News, Salt Lake City Department of Airports,
Volume 22, Issue 9, September 2014
Edited by Maj. Bruce Kipp, CAP, Wing Public Affairs Officer*

Inclement weather conditions in the high northern plains, especially over South Dakota's Black Hills can present a pilot with entirely new set of challenges, not the least of which is thunderstorms.

1. Turbulence associated with thunderstorms can be extremely hazardous, having the potential to cause overstressing of the aircraft or loss of control. A thunderstorm's vertical currents may be strong enough to displace an aircraft up or down vertically as much as 2,000 to 6,000 feet. The greatest turbulence occurs in the vicinity of adjacent rising and descending drafts. Gust loads can be severe enough to stall an aircraft flying at rough air (maneuvering) speed or to cripple it at design cruising speed. Maximum turbulence usually occurs near the mid-level of a storm, between 12,000 and 20,000 feet, and is most severe in

clouds of the greatest vertical development.

Severe turbulence is present not just within the cloud. It can be expected up to 20 miles from severe thunderstorms and will be greater downwind than into the wind. Severe turbulence and strong out-flowing winds may also be present beneath a thunderstorm. Microbursts can be especially hazardous because of the severe wind shear associated with them.

2. With lightning, static electricity may build up in the airframe interfering with operation of the radio and affecting the behavior of the compass. Trailing antennas should be wound in. Lightning blindness may affect the crew's vision for 30 to 50 seconds at a time making instrument reading impossible during that brief period. Lightning strikes on aircraft are not uncommon. The proba-



Forks of lightning splits the sky over the high plains.



A thunderstorm building over the high plains area.

bility of a lightning strike is greatest when the temperature is between -5°C and 5°C . If the airplane is in close proximity to a thunderstorm, a lightning strike can happen even though the aircraft is flying in clear air. Lightning strikes pose special hazards. Structural damage is possible. The solid state circuitry of modern avionics is particularly vulnerable to lightning strikes. Electrical circuits may be disrupted. The possibility of lightning igniting the fuel vapor in the fuel cells is also considered a potential hazard.

3. Hailstones are capable of inflicting serious damage to an airplane. Hail is encountered at levels between 10 and 30 thousand feet. It is, on occasion, also encountered in clear air outside the cloud as it is thrown upward and outward by especially active cells.

4. Heavy icing conditions occur above the

freezing level where the water droplets are super cooled. Icing is most severe during the mature stage of the thunderstorm.

5. Rapid changes in barometric pressure associated with the storm cause altimeter readings to become very unreliable.

6. Abrupt changes in wind speed and direction in advance of a thunderstorm present a hazard during take-off and landing. Gusts in excess of 80 knots have been observed. Very violent thunderstorms draw air into their cloud bases with great intensity. Sometimes the rising air forms an extremely concentrated vortex from the surface of the ground well into the cloud with vortex speeds of 200 knots or more and very low pressure in its center. Such a vortex forms tornadoes.

7. Thunderstorms contain vast amounts of liquid water droplets suspended or carried aloft

by the updrafts. This water can be as damaging as hail to an aircraft penetrating the thunderstorm at high speed. Heavy rain showers associated with thunderstorms encountered during approach and landing can reduce visibility and cause refraction on the windscreen of the aircraft, producing an illusion that the runway threshold is lower than it actually is. Water lying on the runway can cause hydroplaning which destroys the braking action needed to bring the aircraft to a stop within the confines of the airport runway. Hydroplaning can also lead to loss of control during take-off.

Because of the severe hazards enumerated above, attempting to penetrate a thunderstorm is asking for trouble. In the case of flight the best advice on how to fly through a thunderstorm is summed up in one word - DON'T.

Detour around storms as early as possible when encountering them en route. Stay at least 5 miles away from a thunderstorm with large overhanging areas because of the danger of encountering hail. Stay even further away from a thunderstorm identified as very severe as turbulence may be encountered as much as 15 or more nautical miles away. Vivid and frequent lightning indicates the probability of a severe thunderstorm. Any thunderstorm with tops at 35,000 feet or higher should be regarded as extremely hazardous. Avoid landing or taking off at any airport in close proximity to an approaching thunderstorm or squall line.

Microbursts occur from cell activity and are especially hazardous if encountered during landing or take-off since severe wind shear is associated with microburst activity. Dry microbursts can sometimes be detected by a ring of dust on the surface. Do not fly under a thunderstorm even if you can see through to the other side since turbulence may be severe. Especially do not attempt to fly underneath a thunderstorm formed by orographic lift. The wind flow that is responsible for the formation of the thunderstorm is likely to create dangerous up and down drafts and turbulence between the mountain peaks.

Reduce airspeed to maneuvering speed when in the vicinity of a thunderstorm or at the first indication of turbulence. Do not fly into a cloud mass containing scattered embedded thunderstorms



A thunderstorm like on aircraft radar.

unless you have airborne radar. Do not attempt to fly through a narrow clear space between two thunderstorms. The turbulence there may be more severe than flying in the storms themselves. If the clear space is several miles in width, however, it may be safe to attempt to fly through the center, but always go through at the highest possible altitude. When flying around a thunderstorm, it is better to fly around the right side of it. The wind circulates counter-clockwise and you will get more favorable winds.

Source: www.slcairport.com/cmsdocuments/GA_News_Sep14.pdf, accessed January 7, 2015. 



How To Request Use of the Civil Air Patrol

*By Col. Mike Beason, CAP, former Wing Commander,
current Inspector General and Member of the Wing Incident Command Team*

From time-to-time local officials, county and state emergency managers, law enforcement, and other agencies and organizations request Civil Air Patrol support for a mission. It is useful for everyone to be aware of the process that allows CAP's South Dakota Wing to be tasked for missions.



The type of mission will determine who will fund CAP support. If the task is to search for a missing person or a missing aircraft, normally the U.S. Air Force pays for the CAP mission. That's because the USAF has overall search responsibility within the continental United States and CAP is its executive agent for those type searches. Mission requests are coordinated through the Air Force Rescue and Coordination Center (AFRCC) at Tyndall, AFB in Florida. Funding for other types of CAP emergency responses can come from a locality, a county, the state, or the requesting agency or organization depending on the type of mission. Contact the South Dakota Office of Emergency Management for further information.

Emergency Response Request for CAP Support

To use CAP to assist in an emergency response the requesting agency should contact the local county emergency manager (EM).

- The county EM will contact the state Office of Emergency Management (OEM).
- OEM will contact the AFRCC and/or the CAP National Operations Center to obtain CAP assistance.
- OEM will contact the South Dakota Wing and provide general mission information.
- South Dakota Wing will then contact the requesting agency to obtain specific mission information.

If the requesting agency/organization has a local CAP contact, it is helpful to also contact that individual and provide notice of a pending mission request. This "heads-up" helps improve response time of CAP personnel and availability of assets. If a local CAP member is contacted s/he should in turn contact the CAP Wing Commander or Incident Commander.

Non-Emergency Request for CAP Support

If an agency or organization wishes to use South Dakota Wing assets for a non-emergency request (assistance with parades, fairs, aerial photography, or other volunteer activities) contact the nearest South Dakota Wing squadron (Sioux Falls, Brookings, Pierre, Rapid City, Custer, Spearfish). Contact information for the squadrons is on the South Dakota Wing website at www.sdcap.us under "About CAP".

Alternatively, phone the South Dakota Wing Headquarters in Rapid City at (605) 393-4215 or by email at wa@sdcap.us. South Dakota Wing Headquarters is only manned about 20 hours per week. After hours, a non-emergency request can also be sent to the South Dakota Wing Commander, Col. John Seten, at john.seten@sdcap.us. 

Cadet Orientation Rides

*By Maj. Bruce Kipp, CAP
Wing Public Affairs Officer*

Tweens and teens join the Civil Air Patrol for a variety of reasons. Surveys, however, have shown that the #1 reason why they join is the opportunity to fly. CAP has a formal program to do just that called the Cadet Orientation Flight (COF) Program. The motto of the program is: Safe, Fun, Educational. COF is designed to introduce CAP cadets, under 18 years old, to general aviation through hands-on orientation flights in single engine aircraft and gliders.

Under COF, cadets are authorized five flights in the co-pilot's seat in a powered aircraft, usually a CAP-owned Cessna, and five flights in the front seat of a glider.

In addition, cadets are permitted an unlimited number of backseat flights. Cadets fly only in fair weather, under conditions that the FAA calls "visual flight rules." In powered aircraft, cadets are aloft for 45 to 60 minutes. If two cadets fly at once, they share 90 to 120 minutes of flight time.

Generally, an airport near a CAP unit's home-



Summer encampment familiarization ride in a National Guard UH-60 Black Hawk helicopter.

town will serve as the day's base of operations. The cadets may stay in the immediate vicinity, or fly to a nearby airport, land, switch seats, and return to the original airport. In South Dakota, for example, orientation flights in the West River area usually are over the Black Hills. In the East River area orientation flights are usually around the Sioux Falls/Madison/Vermillion/Yankton areas. Gavin's Point Dam is a popular destination.

While fun and educational, orientation flights are not intended as formal flight training. Orientation flights are commanded by experienced and certified CAP pilots. S/he is in control of the aircraft at all times and performs all takeoffs and landings. A cadet may handle the controls once the aircraft is above 1,000 feet. Each orientation flight has a syllabus of activities to be accomplished. The syllabi focus on such things as preflight checks,

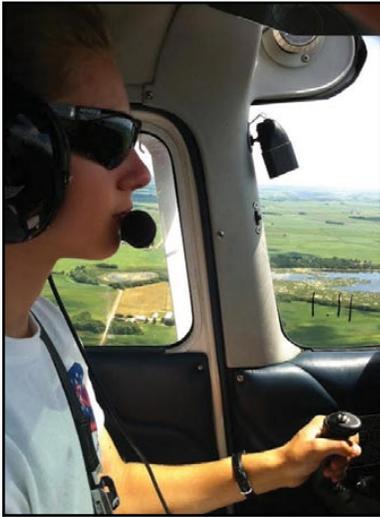


Cadet student pilots at the powered flight academy last summer at Mankato.

basic maneuvers, aircraft instruments, weather, etc.

Cadets can also participate in orientation flights in military aircraft. During the annual summer encampment cadets can experience a familiarization ride in a military helicopter such as a UH-60 Black Hawk operated by the National Guard.

In the summer months each year CAP holds a number of flight academies for powered aircraft and gliders. There is even a CAP flight academy for hot air ballooning. At these academies cadets can earn the CAP cadet Solo Pilot Badge!



Cadet Tech. Sgt. Hannah Becker works toward her solo wings at last summer's powered flight academy at Mankato.



November Joint REDCAP “FIND”

*By Maj. Bruce Kipp, CAP
REDCAP Public Information Officer*

Late in the evening of Saturday, 29 November the Air Force Rescue Coordination Center (AFRCC) at Tyndall AFB, Florida notified South Dakota Wing that an aircraft had been reported overdue to return to Spearfish, SD. The AFRCC also placed the Wyoming Wing on alert as rough forensic data on the pilot’s cell phone pointed towards Colony, Wyoming as a potential search site.

Very poor weather conditions in the area that night prevented either Wing from launching an immediate search. At first light on Sunday, 30 November, an eight-man ground search and rescue team was dispatched from South Dakota Wing’s Lookout Mountain Composite Squadron (Spearfish). They were sent to Colony, WY where

they conducted a local search for an aircraft emergency beacon (ELT).

Later that morning three aircraft; two from South Dakota Wing and one from Wyoming Wing were launched to conduct an aerial search for the missing aircraft’s ELT. Using onboard sensors the CAP aircraft began picking up the ELT’s signal and worked to refine the location. About an hour later, using aerial triangulation and refined cell phone forensics data the Wyoming Wing aircraft sighted the missing aircraft on the ground in the snow-covered Finger Buttes area near the tiny town of Alzada, MT.

The ground search and rescue team was re-directed from Colony, WY to Alzada, MT; a three



The Lookout Mountain Composite Squadron’s Ground Search Team approaching the crash site near Alzada, MT. They are climbing the side of a saddle in the Finger Buttes area toward the knob in the center of the photo. The crash site is on the reverse slope behind the knob. Photo courtesy of Montana’s Carter County Sheriff’s Office

state ground search mission for a single SAR team. While the ground team was en route the WYWG and SDWG aircraft took turns orbiting the crash site to direct the ground team to the location. Once officers from Montana's Carter County Sheriff Office arrived at the crash site the SDWG ground team and both wing's aircraft returned to their bases.

South Dakota Wing support for the REDCAP was provided by personnel from Rushmore Composite Squadron (Pierre), Lookout Mountain Composite Squadron (Spearfish) and Wing Staff members throughout the state. 🚁



The South Dakota Wing Ground Search Team secures the crash site awaiting arrival of the county sheriff. Photo courtesy of Montana's Carter County Sheriff's Office



A member of Montana's Carter County Sheriff's Office inspects the aircraft.

SHADES OF BLUE:

The Road to the United States Air Force

*By Elizabeth Foy, CAP Cadet Major and
North Dakota State University AFROTC Cadet 3rd Class*

*“Aviation is proof, that given the will, we have the capacity to
achieve the impossible” - Capt. Edward Rickenbacker*

United States Air Force Academy (USAF)

Everyone has certain parts of the United States Air Force Academy that are forever engrained in their memory. It is our nation’s premier Officer Training Program, graduating hundreds of cadets every year as new Second Lieutenants in the United States Air Force. I was able to experience the famed painted red footprints on the ground showing new cadets where to stand, run the halls for physical training and attend services in the beloved Chapel. I stood in front of the black Graduate Memorial Wall and sat (and stood) at attention while listening to briefings in Arnold Hall. The experience there is like none other.

Day 0, which is the start of Basic Training, marks the beginning of a new life for about 1,000 students. You mark your progression by where you learn essential pieces of information throughout your cadet career. Depending on your squadron, you arrive at the gate of the Academy with your small backpack full of personal belongings. This is all you carry with you of your previous life through Basic Cadet Training. The first half of your morning is spent meandering with future classmates through the halls of the reception center, where you receive your nametape and flight assignment. Waiting silently at the end of the welcome tape is the bus to the cadet area. Guarded by athletic cadets in white gloves, this is where you first learn the position of attention.

On the bus, the seven basic responses are pressed into memory, where your name is now “Basic Cadet”. The position of attention while sitting is quickly absorbed into muscle memory. When the bus stops you learn how fast you can run, and at the red footsteps you learn what it’s like to be a Preparatory school cadet. I learned that I can repeat the seven basic responses seven times in perfect push-up cadence with my fellow Northwestern Preparatory School chums before the cadre gets annoyed with us.

I learned so much more about myself during Basic Cadet Training, lovingly referred to as BEAST, than I have in quite some time. Civil Air Patrol prepared me greatly for the correct mindset during my time there. I had everything from Air Force-style unit organization to summer encampments - I understood why our cadre was yelling at



NDSU AFROTC Cadet Elizabeth Foy and U.S. Army First Sergeant Marvin Nicklay at a military ball.



Cadet Foy with her AFROTC Honor Guard colleagues at a NDSU “Bison” football game.

us to perform better and just how important it was to keep our flight commander happy. As part of the prior enlisted and preparatory school group, I was able to teach and lead my flight in the good times and bad.

There were 29 of us, all from different backgrounds and with different attitudes. Our cadre was a dynamic mix; five upperclassmen with different career desires and unique leadership styles. We were designated “Bravo Flight” of the Aggressor Squadron. We ran everywhere. They pushed us hard and ran us harder, but they did so with us the whole way. We learned in our hallway how to show respect to our cadre, and from the push-up position how to build it back up. We learned how to shine our shoes and prepare our rooms for a white glove inspection. We learned that everyone has something to contribute and we needed everyone’s leadership to get there.

In front of the Memorial Wall we learned just how sacred the ground was that we walked on. I touched the names of those inscribed there and learned just how heavy a salute can be. I saw each of my flight-mates faces reflected off the stone, the weariness of BEAST carried away on the breeze for a few passing moments.

I will never forget my time at the United States Air Force Academy. It is a period in my life I will treasure along with memories of friends there I will keep for a lifetime. After attending BEAST I came to the decision that the USAFA was not the lifestyle approach I needed in order to become an outstanding officer in the United States Air Force.

Air Force Reserve Officer Training Corps (AFROTC)

I am now enrolled in Air Force Reserve Officer Training Corps Detachment 610 at North Dakota State University in Fargo.

At AFROTC your progress is marked by the individual cadets around you. The average Detachment size is around 100 cadets. Each person plays a more personal role in forming your Air Force career. We’re an extended family, with all its grandeur and challenges. It’s a college course that requires a few hours of your time to complete. Just like the academy, you receive what you put in. Each program has its own difficulties. I was

blessed enough to have the choice between both.

I made the decision to stay with AFROTC because when I become an Air Force officer I want to be able to relate to my Airmen. I made it to the United States Air Force Academy, one of the world’s top schools. I have stood “on the shoulders of giants” as CAP Major Epp once stated. The unique challenge about AFROTC is it is your choice. It is no longer an environment of absolute integrity and excellence. It is the real world, complete with car trouble and apartment rent and grocery bills. It’s balancing your professional life with academics and your personal life. It’s where your integrity will be enforced by a small group of like-minded people on campus. AFROTC cadets don’t get scholarships, nor are we slotted for high-demand jobs such as pilots as easily. In the end, however, my former colleagues in Bravo Flight will graduate with a single gold bar on their shoulders exactly like mine.

I continue to pursue my commission in the Air Force every day. Due to the experience Civil Air Patrol gave me I was placed in a Wing Staff position after only having one semester in the program. I am currently the Honor Guard Commander. I’ve used my knowledge acquired at BEAST to help define a better training program for incoming AFROTC cadets and to help my fellow cadets prepare for our version of BEAST, that is field training at Maxwell Air Force Base, Alabama. If all goes as planned, I will complete my second basic training semester this summer and continue as an upperclassman this fall.

I would like to thank everyone who helped me achieve so much through Civil Air Patrol in North Dakota and South Dakota over the years. I would be more than happy to contribute to CAP in any way I can. And to any of you looking to pursue a commission at a Service Academy or through ROTC, please feel free to contact me. I would be more than happy to help you achieve your dreams.

[Editor: AFROTC Cadet 3rd Class Foy can currently be reached at elizabeth.foy@ndsu.edu. Due to security concerns, photos of the NDSU AFROTC facility, its training sites, and of members of its cadre have been removed from their Facebook page. The photos included with this article are from random extracurricular activities.] 

Studying Mandarin in China

*By Cadet Col. William Small, CAP
Lookout Mountain Composite Squadron*

China Adventure (中国冒险) - During the months of March, April, and May of 2014 I lived in Wuhan China for the purpose of learning the Mandarin dialect of the Chinese language. I chose to learn Chinese mainly was due to its usefulness. More business is going to China and they are an emerging power, so it seemed like a good choice to become familiar with their language and culture. The difficulty was another reason in a way. I didn't go after the easiest choice I went after what was hard so it means more to me to be able to learn it. This was a worthwhile opportunity in that not only did it allow me to learn a foreign language, but it also exposed me to living abroad on my own. Also, I took advantage of my time there by going to various different places on some weekends.

There were multiple reasons why I went to Wuhan to learn Mandarin. Some of the prominent reasons were to get more

language credits to graduate high school, to learn how to live on my own in a different environment, and how to be responsibly independent. My parents said that if I can survive three months in China by myself, I should not have a problem with college. The reason I went to Wuhan and not a school in the US or in a city like Beijing or Shanghai, is because Wuhan is thoroughly Chinese. Meaning I was completely immersed in the language and culture of China. If I went to Beijing or Shanghai I would have found places with familiar people, foods, etc. In Wuhan I really had to search to find something familiar (besides McDonalds).

My father was with me for the start of my stay in China. I flew over to meet him in Hong Kong and then we went by train together to Wuhan. Once in Wuhan we met up with my soon-to-be teacher and another employee of Rainbow Reading

(the language school I went to). They first took me to my accommodations for my stay. This was a two bed, one bath apartment with a small kitchen and living area. I stayed in one of the bedrooms and an English teacher from the Philippines (Archie) stayed in the other. During my stay I got to know Archie some and enjoyed talking to him. After I put my suitcase in the apartment my dad and I went out to do some basic shopping for things that I would need such as bed linens some light bulbs and coat hangers. I also got a cellphone. Getting a cellphone in China is a little different than getting one here. The basic premise is you buy a phone and then you buy a card for the phone which has so many minutes and data on it. It took a little time to figure this process out, but in the end I had a phone that allowed me to call others in China, and even the US (at a greater cost).



My teacher Zhong and I.



Map of China showing the city of Wuhan in Hubei Province.



An overview of a part of Wuhan taken from the Yellow Crane Tower.



The view from my apartment balcony.

Once I was settled in Wuhan my three months of learning routine started. Not every week was the same, but I had a basic daily routine. My school schedule was I had class every day from 10 to noon, and then from 1 to 3. Except on Thursdays when the afternoon class consisted of going somewhere in the city, be it a museum or park. So, every morning I would set an alarm for around 9. Once I got up, I would try to have breakfast. What I mean by try is I normally would have some cereal and milk, but when I did not I would either grab something from McDonalds on the way to class, or just wait until lunch. To get to class, I had multiple options. I could either walk one of several routes, take the above-ground train, or the below-ground train (subway). Normally I took the subway, but towards the end of my stay I started walking more, exploring all the possible routes. I also was interested in the looks that I got from the people on the streets.

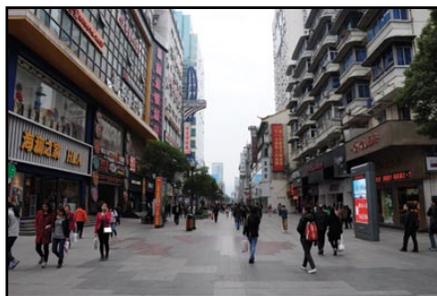


My room in the apartment where I stayed.



A park along the river visited during one of my afternoon class excursions.

Usually I was the only non-Chinese person around and some people looked a little puzzled by my presence, especially when I got onto the smaller streets away from the main areas. Once I got to school, I would find the classroom we were in for the day and start class with my teacher. With my program I was the only student so it was just one on one with my teacher Zhong (who went by the English name of Kevin). He was only teaching part-time as he was a student at Wuhan University. Once our morning class was over we would head out for lunch. Lunch quite often consisted of KFC (the China version), but we also went to a number of other eating places. In the end I got quite good with chopsticks and had a higher spice tolerance. After lunch we would have our afternoon class and then I was free for the rest of the day.



A shopping trip in Wuhan taken during one of my afternoon class excursions.



A map of Rainbow Reading.

With this free time, I did many different things. Sometimes I just went back to my room and relaxed, but other times I would go exploring. I just would walk around various parks of the city, especially the parks. Other times I would go to a movie, which by itself was an experience.

Going to a movie took multiple steps. First, I had to figure out what movies were playing. I could go to the theatre, but they didn't have pictures, only the names in Chinese characters. So I ended up getting an app on my China phone and had someone show me how to look up current movies on it. I just memorized which buttons to press and it worked. Then I had to actually go to the movie. I found the theater without too much trouble, but getting a ticket was harder. What I ended up doing was pulling up a picture of the movie I

Continued on page 28 . . .



The "lobby" in rainbow reading where I would wait if I was early to a class.

OPERATION WINDMILL

*By Maj. Bruce Kipp, CAP
Wing Public Affairs Officer*

Unofficially dubbed “Operation Windmill”, in official parlance it was called the “Wind Turbine Radar Interference Mitigation” (WTRIM) test. In mid-to-late October 2014, the Department of Defense/Department of Homeland Security Long Range Radar Joint Program Office conducted field tests in the vicinity of the Tyler Minnesota Common Air Route Surveillance radar site east of Brookings.

Operation Windmill was part of a two-year interagency effort to characterize wind turbine interference effects on existing air surveillance radars, to assess how wind farms hamper the ability to detect objects in the area, and to evaluate commercial off-the-shelf wind turbine radar interference mitigation technologies. The on-site tests were conducted by executive agents Sandia National Laboratories and Massachusetts Institute of Technology’s Lincoln Laboratory.

Test operations included a South Dakota Wing (SDWG) Cessna-182 aircraft equipped with the Garmin G1000 navigation system for flights on both sides of the South Dakota-Minnesota state line, north and west



Operation Windmill test area, one of the windfarms near Tyler, Minn.



Screen of the Garmin G1000 aircraft navigation system showing the day’s programmed flight patterns.



The initial Operation Windmill flight crew, (L-R) Project Officers Mr. Bryan Miller and Mr. Jason Biddle, Capt. Karla West, Capt. Jerry Zurovski, Col. John Seten, and Lt. Jerry Haden.

of Tyler, Minn. Daily during the test period the SDWG aircraft flew parallel track search patterns, expanding square search patterns and sector search patterns within the target area for a total of about 50 flight hours. Essentially, the CAP aircraft flew patterns at an assigned altitude with a data logger for eight hours a day. The data collected is being analyzed by the DOE, DOD, DHS, DOT/FAA, and DOC/NOAA.

The South Dakota Wing participated this project once before, in 2012. In 2014, Capt. Neil Schmid of the Sioux Falls Composite Squadron was the project officer.

China

Cont. from page 25 . . .

wanted to see on my phone and showed it to the person at the ticket counter. Then that person would show me a seat map and I would point to the seat I wanted. Finally they printed a ticket and I handed them the right amount of money. In the end, it took me a month to figure out how to do this, and I ended up doing it not that many times.

For the actual language classes, there were multiple methods used. We had a series of books we were working through that consisted of reading, speaking, and listening exercises. How it worked was when we started a new chapter in the book first I would learn how to properly say the list of new words, then I would listen to them used in sentences which I would then repeat. Generally, there were some exercises with the words like match the right image with the right sentence. We would stay on that chapter doing the exercises again and my teacher would make up some of his own until I had a decent understanding of the words and concepts addressed. Then the process was repeated with the next chapter while occasionally revisiting previous chapters. Sometimes it got tedious, but overall I was happy with the process. I found listening to the hardest because I could not understand at the speed with which they spoke. So it sometimes took a while to get through the exercise, but I did.

Walking the streets in China is different from in the US. A

particular vehicle made the experience memorable. This vehicle is the electric scooter. The scooter is very popular in China. What made it so interesting though was where and how they drove. A scooter literally would drive anywhere - on the road, on the sidewalk, with traffic, against traffic, across traffic, on pedestrian overpasses, etc. And as they are electric they are silent. I was never sure where I might find one and I could not hear them. One never hit me, but they got really close.

One of the fun things I did was ride the trains in China. I took trains to Hong Kong one weekend, and to Shanghai another weekend. Like going to a movie, it was a process I had to work out, although I didn't find it as hard. I found a website where I could look up the train schedules and then go to the station at the right time. At the station I had to find a ticket booth where I just said the name of the city I wanted and they gave me a ticket. All things considered, I am impressed I always got the ticket I wanted. Then I would go to the gate and get on the train. What I really liked about the trains in China is their punctuality and speed. If a train was schedule to leave at 1703, it left at 1703. The latest I think one ever was for me was about 40 seconds late. It was the same at the other end. If it was supposed to arrive at 1801, it arrived at 1801. It was very nice knowing the schedule was absolute. These were high speed trains which truly are high speed, they would go about 200 MPH.

At the end of the three months I would not say that I knew the language well, but I knew enough to get around. I couldn't have conversations with people, but I could ask questions when shopping, understand announcements on the subway, read some road signs, ask where the bathroom is, order food, etc. Mandarin Chinese is a tonal language. There are five tones in Mandarin and that was one of the things I struggled with most. I could get the words right, but get the tone wrong. It got frustrating at times. An example is the word "nar". In one tone it means "where" and in another it means "there". So I could be trying to say "where is he?", but actually end up saying, "he is there" because I change the tone of one word. To put it in perspective, if we had tones, the word "cat" could have five (or more) different meanings. It might mean cat, hair, run, is, and bakery for example. So, I really had to work to remember to get the tones right and remember all the meanings. I hope to continue learning but I have not found a way so far. My college does not have a Mandarin class, but I am currently in a Chinese Pop Culture class, so my learning of China continues.

Overall, I enjoyed my time in China. It was a little stressful at times but I got through it and learned a lot. I now have fun translating for others what is actually said in movies and TV shows when they speak Mandarin. I am not sure if I want to live in China, but I do hope to visit again someday. 🌍

INSPECTIONS... UGGGH!

*By Col. Mike Beason, CAP, former Wing Commander,
current Inspector General and Member of the Wing Incident Command Team*

“It’s that time again. Another inspection... I hate these things!” Have you ever said that? I have. But maybe we should reconsider. What if an inspection can help you turn a good program into a GREAT program? “We’re here to help!” says the inspector. Are they really there to help? Maybe, it depends on your attitude and what you’ve done with your CAP program. Let’s review the process.

Why do we do inspections? As the official auxiliary of the U.S. Air Force the Civil Air Patrol receives federal funds through the USAF budget. For this reason the USAF is charged with ensuring we maintain certain standards and comply with the written regulations. The inspection process is the method the CAP Inspector General (IG) program uses to ensure units meet the standards and are complying with regulations.



There are three types of inspections:

- **Subordinate Unit Inspections (SUI):** A SUI is a triennial inspection of squadrons by the Wing IG and other designated personnel, typically former commanders or selected wing staff personnel. These subject matter experts know how CAP programs are supposed to work. They have a wealth of knowledge to share on how to make specific programs better.
- **Compliance Inspections (CI):** A CI is a triennial inspection of the Wing staff by CAP national level inspectors and USAF inspectors, active AF members whose current “job” is oversight of CAP. Virtually every functional area of administration is closely examined to insure it has met and currently meets all applicable regulations.
- **Staff Assistance Visits (SAV):** A SAV is a visit by higher headquarters and/or regional USAF liaison personnel to assist a unit in improving mission effectiveness or preparing for an upcoming inspection. In South Dakota Wing, this typically is the USAF North Central Region liaison personnel conducting a SAV of the wing staff. A SAV is conducted using the same process as a CI.

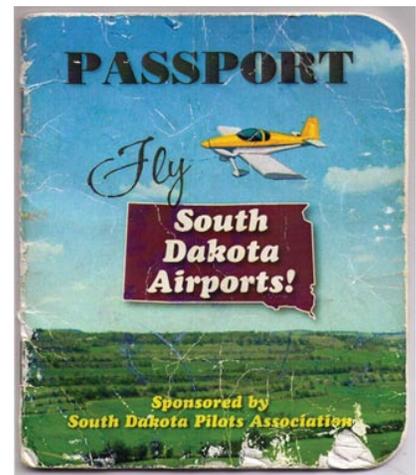
The preparation for all types of inspections is simple, know the regulations that apply to your program and apply them to your program. Piece of cake, right? Well, maybe not quite that simple. The regulations keep changing, the people in your unit keep changing, and you are a volunteer with limited time. So, where to start? Sit down and read the appropriate regulations. Pay special attention to items that start with “The unit shall (or will)...”. Reading the regulations will leave you with questions. See if there is a guide for your program. Many programs have them. Read that. Still have questions, ask your commander or the wing staff officer who is responsible for the same program at the Wing level.

Whether it is a SUI, a SAV or a CI, the inspectors want to give you a good grade. To do that, they need you to tell them about the great things you’ve done with your program, especially things that exceed what the regulations require. Simply complying with regulations won’t get you a “well done”. Determine what you’ve done “over and above” what’s required then be sure you tell the inspector about it. 🐦

SDWG Pilot Earns South Dakota Aviation Award

*By Major Bruce Kipp, CAP
Wing Public Affairs Officer*

Captain Neil Schmid of the Sioux Falls Composite Squadron attained a significant aviation achievement last October. Flying a SDWG aircraft he completed the final requirements for the “Fly South Dakota” program’s Gold Level Award. The program, which began in 2010, is sponsored by the South Dakota Pilots Association to promote general aviation within the state. It involves attendance at aviation safety seminars, visiting South Dakota museums with aviation displays and to land at South Dakota’s public-use airports. There are three levels in the program; Bronze, Silver and Gold, each with a varying number of requirements.



Capt. Schmid’s Fly South Dakota Passport logbook.

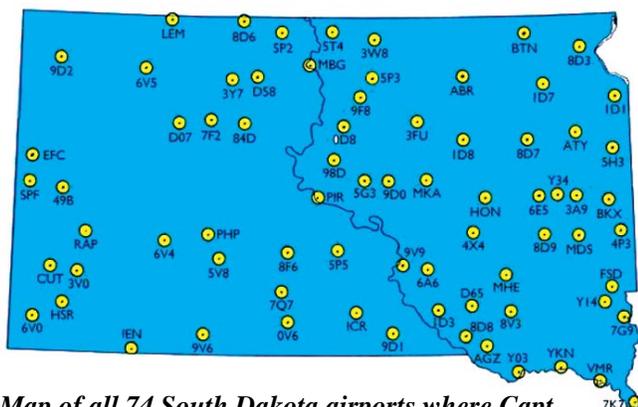


Fly South Dakota Gold Level Award patch and tab for wear on Neil’s civilian flight jacket.

When a pilot registers with the Fly South Dakota program he is issued a “Passport”, a logbook, in which he records and has verified completion of each requirement. The Gold Level Award required Neil to land at all 74 public-use airports in the state, attend four air safety seminars, and visit four South Dakota museums with aviation-related displays.

After three years of working towards his goal Neil completed the Gold Level Award requirement of visiting all the public-use airports in South Dakota by landing at Belle Fourche, Spearfish, Sturgis, Philip, Kadoka and Presho.

The Fly South Dakota Gold Level Award consists of an “I Flew South Dakota” patch and, for the Gold Level Award, a “74 Airports” tab for wear on his civilian flight jacket.



Map of all 74 South Dakota airports where Capt. Schmid landed to earn the Gold Level Award.



Capt. Schmid next to the CAP aircraft.

SOUTH DAKOTA WING'S NEWEST LIEUTENANT COLONELS

*By Maj. Bruce Kipp, CAP
Wing Public Affairs Officer*

South Dakota Wing can boast of two new Lieutenant Colonels; Joyce Jeffries and Nancy McKenney. Both were promoted to their new rank in October of 2014.



A silver oak leaf, the rank insignia of a CAP Lieutenant Colonel.

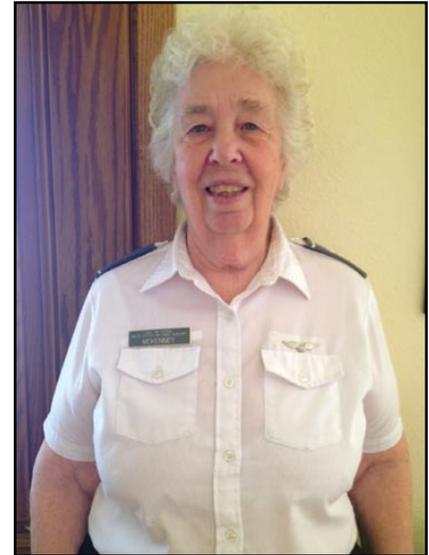
Lieutenant Colonel (abbreviated Lt. Col.) is the highest rank a wing member can attain without being a wing commander. The path to Lieutenant Colonel is an arduous one. First, it takes many years of excellent service with stops along the way at Second Lieutenant, First Lieutenant, Captain, and Major. It also usually entails serving in a variety of duty positions as well as advancement through the various levels of the CAP Senior Member Professional Development Program that focuses on education and training. Finally, not only must an individual attend various courses, conferences, seminars, staff colleges and academies as a student but must also later be a member of the cadre of, or teach at these activities. There are a lot of steps to go through to reach

the rank of Lieutenant Colonel in the Civil Air Patrol.



CAP Lieutenant Colonel Joyce Jeffries

Lt. Col. Joyce Jeffries joined CAP's Mississippi Wing in 1973. When her USAF family was reassigned to Misawa Air Base, Japan she transferred to the base's CAP unit. Upon reassignment of her family back to the US she transferred to the CAP unit at Ellsworth AFB where she is assigned today. Joyce is also very active as a Red Cross Disaster Response Volunteer as well as working with the Amateur Radio Emergency Service and USAF MARS radio.



CAP Lieutenant Colonel Nancy McKenney

Lt. Col. Nancy McKenney joined CAP in the fall of 1992. She currently serves on the Wing Staff in several duty positions and frequently assists in Cadet Programs. Over the years she has participated in REDCAPS as an aircrew member and took part in innumerable SAREXs. She has attended eight encampments in both North and South Dakota. As a cadet activity chaperone she has spent her share of time sleeping on hard floors. Nancy is also a long-time member of the Red Cross and has travelled around the United States helping manage shelters at disaster locations. 🇺🇸