

CIVIL AIR PATROL

Spring 2019




volunteer

**Legislative Day
Delegations Gather
on Capitol Hill**




**Cadet Wings' First Grad
Leads the Way**


**Small UAS Program
Takes Flight**

 /CAPNHQ

 @CivilAirPatrol

 @civil_air_patrol

 /CAPMember

 /company/CivilAirPatrol



Embry-Riddle produces more commissioned officers, pilots, and rated officers than any other AFROTC detachment in the country.

► TOP RANKED AEROSPACE ENGINEERING PROGRAM

100%

CLASSES TAUGHT BY FACULTY

25

AVERAGE CLASS SIZE

1ST

COLLEGE OF SECURITY AND INTELLIGENCE IN THE NATION

95%

JOB PLACEMENT RATE

The world's most comprehensive collection of academic programs focused in aviation, aerospace, intelligence, and cyber security.

EMBRY-RIDDLE
Aeronautical University™

PRESCOTT, ARIZONA

prescott.erau.edu/cap

CIVIL AIR PATROL

volunteer

Spring 2019

FEATURES

- 5 From Your National Commander**
Inclusiveness and Diversity Make CAP Stronger
- 7 Cadet Wings**
Texas Cadet Is First in Program to Earn Her Private Pilot Certificate
- 10 Summer School**
Four CAP Cadets Joining Junior ROTC Cadets at Purdue University Flight School
- 12 Skydiving Champion**
Parachutist with 20,000 Jumps Now Flying with North Carolina Wing
- 16 Seeing Double**
Once again, CAP Responds to Category 4 Tropical Storms
- 20 'Game-Changers'**
Newly Tested Camera Pods Enhance CAP's Aerial Photography
- 24 Up for the Challenge**
Volcano Eruptions, Earthquake ... No Problem for Pacific Region
- 28 10th Anniversary**
CAP Aces Aerospace Connections in Education (ACE)
- 32 Model DAE**
Lynda MacPherson Grows Alaska Wing's AE Program
- 35 Small UAS**
Fledgling CAP Program Gaining Interest Nationwide
- 38 In Memoriam**
Scholarship Allows CAP Officer's Service to Continue
- 41 Legislative Day**
CAP Delegations Lead the Way on Capitol Hill
- 45 Civic Leadership Academy**
Twenty-four CAP Cadets Learn About the Power of Relationships
- 48 Congressional Squadron**
New Commander, Vice Commander Chosen for Unit
- 49 Spaatz Dinner Reunion**
Gen. Goldfein's Speech Preceded by Surprise Visit from Former Rescuer
- 51 Their Day in Court**
CAP Legal Officers Admitted to Practice Before U.S. Supreme Court



At the Aerospace Connections in Education (ACE) Lift-off 2018-2019 in Hillsboro, Virginia, the joined hands of Bob Corsi (left) and Jim Hannam serve to symbolize the strong relationship between Civil Air Patrol and the Air Force Association. Corsi is the vice chair of CAP's Board of Governors while Hannam is vice chair, aerospace education, of the AFA board. The AFA has been a major partner in the development and growth of ACE. Go to page 28 to learn more about ACE and its 10th anniversary. Photo by Susan Mallett, CAP National Headquarters

- 52 Codetalker Bahé Ketchum**
New Arizona CAP Squadron Named for Legendary Navajo Hero
- 55 Super Bowl LIII**
Georgia, South Carolina Wings Help Prepare for Big Game
- 57 Providing AquaEffort**
National Capital Wing Cadet Creates Nonprofit for Clean Drinking Water
- 60 Eye in the Sky**
Oregon Aircrew Partners with Veteran Outreach Program

ON OUR COVER

Connecticut Wing cadets participating in CAP's Legislative Day walk through the 90-foot-high central atrium in the Hart Senate Office Building on Capitol Hill, on the way to their next scheduled meeting with one of their federal lawmakers. The cadets (from left) are Cadet Chief Master Sgt. Brion Henry, Cadet Capt. Liam Waldron, Cadet Tech. Sgt. Angelina Scrivines, Cadet 1st Lt. Johnathan Bell and Cadet Chief Master Sgt. Daniel Kim. Henry and Scrivines belong to the Stratford Eagles Composite Squadron, Waldron to the 399th Composite Squadron, Bell to the Royal Charter Composite Squadron and Kim to the Connecticut Minuteman Composite Squadron. See page 41 for full Legislative Day coverage. Photo by Susan Schneider, CAP National Headquarters

Civil Air Patrol Volunteer is oriented toward both internal (CAP) and external audiences. For that reason, it uses the Associated Press style for such things as military abbreviations. Official internal CAP communications should continue to use the U.S. Air Force rank abbreviations found in CAPR 35-5.



Quality

Experience, Turntime

Since 1960, operators worldwide have trusted Consolidated Aircraft Supply for their accessory overhauls. Factory trained and authorized by K.G.S. Electronics.

Wherever you are worldwide, no matter what aircraft you operate, our extensive spares inventory is ready to solve your AOG needs.

Call NOW for competitive pricing.

Consolidated
AIRCRAFT SUPPLY CO., INC.

Delivering On Time, At A Price That Flies True.

Factory trained and authorized by:



KGS Electronics

FAA G11R167K

EASA 4346

Major credit cards accepted

631.981.7700 • Fax: 631.981.7706 • Toll Free USA: 800.422.6300
55 Raynor Ave, Ronkonkoma, NY 11779 USA • consol1291@aol.com
www.consolac.com



MISSION CRITICAL INTELLIGENCE

TASE Imaging Systems have more than 250,000 operational hours providing real-time intelligence to the warfighter and first responders.

Free White Paper Download: 4 Considerations when selecting an Airborne Surveillance System

www.cloudcaptech.com/whitepaper



UTC Aerospace Systems

EDITORIAL STAFF

Maj. Gen. Mark E. Smith
NATIONAL COMMANDER/CEO

John A. Salvador
CHIEF OPERATING OFFICER

Paul Gloyd
DEPUTY CHIEF OPERATING OFFICER

Catherine Sivills
MANAGING EDITOR

Steve Cox
ASSOCIATE EDITOR

Dan Bailey
CONTRIBUTING EDITOR

CONTRIBUTING WRITERS
Alexis Faire, Jennifer Gerhardt, Jennifer S. Kornegay, 1st Lt. Rachael J. Mercer, Capt. Mike Painter, Sheila Pursglove, Lt. Col. Brenda A. Reed, Russell Slater, Paul South, Lt. Col. Morgan Torp-Pedersen, Vicky Travis

GRAPHIC DESIGN
Marie Troy

MAGAZINE EDITORIAL BOARD

Lt. Col. Steven Solomon
NATIONAL PUBLIC AFFAIRS MANAGER

Lt. Col. Paul Cianciolo
NATIONAL MARKETING/SOCIAL MEDIA MANAGER

Lt. Col. Andrew Oppmann
NATIONAL NEWS COORDINATOR, CAP.NEWS

Lt. Col. Robert Bowden
NATIONAL PHOTOGRAPHER

Capt. Susan Parson
CAP'S LIAISON TO FEDERAL AVIATION
ADMINISTRATION

ON THE WEB

Visit www.CAP.news daily for the latest national and wing news.

Civil Air Patrol Volunteer is published biannually by Civil Air Patrol, a private, charitable, benevolent corporation and auxiliary of the U.S. Air Force. Please send all correspondence to Marketing & Strategic Communications, 105 S. Hansell St., Bldg. 714, Maxwell AFB, AL 36112; telephone 334-953-9369; email mac@capnhq.gov. Opinions expressed herein do not necessarily represent those of CAP or the U.S. Air Force. Civil Air Patrol Volunteer welcomes manuscripts and photographs; however, CAP reserves the right to edit or condense materials submitted and to publish articles as content warrants and space permits.

Radar Team Duo Honored with Public Benefit Flying Award

Two members of Civil Air Patrol's National Radar Analysis Team, 2nd Lt. Argon Helm (left) and Lt. Col. John Henderson, were honored with a 2018 Public Benefit Flying Award by the National Aeronautic Association,



in partnership with the Air Care Alliance. The two were recognized for developing and overseeing two new software programs — “The Sandbox,” which allows emergency managers to view a live radar feed for search and rescue, disaster relief and other critical missions needing to track airborne resources in real time, and “ICARUS,” which uses computer algorithms to predict when aircraft have crashed. The Public Benefit Flying Awards were created to honor volunteer pilots, other volunteers and organizations engaged in flying to help others, as well as those supporting such work. Photo by Lt. Col. Mark Young, National Radar

Analysis Team

Squadron's 6 Spaatz Award Recipients Welcome 7th



When Cadet Col. Samuel Ward of the Illinois Wing's Scott Composite Squadron received Civil Air Patrol's top cadet honor, the Gen. Carl A. Spaatz Award, his six predecessors from the

squadron's history made a point of being at Scott Air Force Base for the presentation ceremony. Afterward they gathered for a group photo — (front row, from left) retired U.S. Air Force Lt. Col. Ernest Lockwood, Ward, Air Force Lt. Col. Nicholas Delcour, (back row, from left) Air Force Reserve Senior Master Sgt. Rod Repp, retired Air Force Col. Robert Byrd, CAP Col. Joe Abegg and Derrek White. Less than one-half of 1 percent of all CAP cadets achieve the Spaatz. Scott was the 2,198th to do so. The Scott unit's first Spaatz recipient, Lockwood, earned Spaatz No. 76 in December 1968. Photo by Lt. Col. Greg Hoffeditz, Illinois Wing

MAKE THE SKY YOUR DESTINATION

**MIDDLE
TENNESSEE**
STATE UNIVERSITY



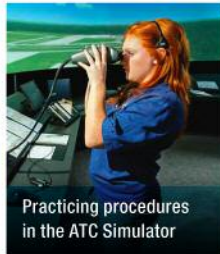
One of our aerospace majors in a Diamond DA40, just one of our 24 aircraft used for flight training. MTSU's Boeing 727 is visible in the background.



Students working in the 360 degree Air Traffic Control simulator at MTSU



MTSU aerospace majors working in the flight operations maintenance hangar.



Practicing procedures in the ATC Simulator



MTSU has proudly hosted the 2017 National Civil Air Patrol Cadet Engineering Technologies Academy as well as the 2016 and 2017 Tennessee Wing Encampments.

Let MTSU Aerospace help you get your career off the ground. With specialized programs in Flight Dispatch, Maintenance Management, Professional Pilot, Administration, Technology, and Unmanned Aircraft Systems Operations, we have something that fits your interests.

Fourteen full-time faculty members, 35 flight instructors, and over 750 majors places us among the largest of the nation's collegiate aviation programs.

We also offer an online Master of Science degree with concentrations in Aviation Education, Aviation Management, and Aviation Safety and Security Management.



I AM *true* **BLUE**

Aerospace Department

For more information, visit
mtsu.edu/aerospace

0817-4596 / Middle Tennessee State University does not discriminate on the basis of race, color, national origin, sex, or disability. See our full policy at www.mtsu.edu/titleix.

Inclusiveness and Diversity Make CAP Stronger

This quote is attributed to Mother Teresa: “I can do things you cannot, you can do things I cannot. Together we can do great things.” I believe that sentiment captures the essence of why diversity is a critical component of successful organizations. Ensuring that an organization embraces, seeks and celebrates diversity brings a richness to the organization. Variety of thought, gender, ethnicity and age makes the organization stronger. Finally, a key factor to achieving broad diversity is having an organization that is inclusive – all members have the same opportunity to participate, to be valued and to be successful.

We in Civil Air Patrol are placing special emphasis on inclusiveness and diversity. I believe that the former, inclusiveness, needs to be squared away before the latter, diversity, can be achieved. We are emphasizing inclusiveness through our

recruiting and retention initiatives and by promoting healthy, welcoming environments at all levels, especially in our local squadrons. We understand that we need to be proactive to work in communities to reach individuals who might not otherwise get the chance to experience this amazing organization.

Let me share two success stories that illustrate this outreach. The Michigan Wing worked with residents of inner-city Detroit who were interested in CAP. The wing effectively trained these individuals in neighboring CAP squadrons. Once these new members were trained, the downtown squadron was chartered. This unit is flourishing and providing young people with opportunities that the CAP cadet program can offer, opportunities these cadets might not otherwise have. Our national vice commander, Brig. Gen. Ed Phelka, has had the good fortune to meet with this amazing squadron.

Another success story comes from a completely different environment. The Arizona Wing worked with interested individuals from a small town in the Navajo Nation, where there were no nearby squadrons to help train new cadets and adult volunteers. To overcome this limitation, the wing has proactively gone to the new unit’s location, bringing in the experts

To my CAP Family,

My family and I would like to thank you for the outpouring of prayers, condolences and support we received upon the passing of my wife, Marjorie. Your support has helped us tremendously and demonstrates, once again, the caring and giving nature of the members of CAP. Thank you.

— *Maj. Gen. Mark Smith and Family*



Margaret (Marjorie) Anne Smith

July 11, 1950-March 15, 2019



Cadet Basic Airman Shyla Clark, a member of Codetalker Bahé Ketchum Composite Squadron 211 in Shonto, Arizona, gets her photo taken with CAP National Commander Maj. Gen. Mark Smith before going on her cadet orientation ride. Clark's squadron is located on a Navajo reservation and already has 40 members, many of them Native Americans like her. Go to page 52 of this issue to learn more about the squadron.



CAP National Vice Commander Brig. Gen. Ed Phelka (right) speaks with members of the Michigan Wing's Detroit 100th Composite Squadron Red Tails. There are 30 cadets in the squadron, which is supported by 19 senior members.

needed to train the unit's members. I have been fortunate to be able to personally participate in providing orientation rides to the squadron's cadets, taking two young Native American women up on their very first airplane flights.

These two success stories may seem modest, but they serve as examples of how CAP is innovatively seeking opportunities to serve in communities that might not otherwise have the chance to enjoy the richness of the CAP experience. Early returns, while modest, show that CAP's efforts are bearing fruit. Over the past year we have increased the ratio of women in

CAP by 2 percent and the ratio of nonwhite members by 1.2 percent. Although we are early in our efforts, the results are gratifying.

An indication of CAP's overall health is reflected in our continued growth. In contrast to many volunteer organizations that are seeing their membership decline, CAP is enjoying 4 percent year-over-year growth. In March our membership stood at 62,183, the highest we have seen in 16 years!

Finally, to further emphasize the importance of inclusion and diversity, I recently announced the appointment of Lt. Col. Liz Sydow as the national

diversity officer. Over the next few months, our regions and wings will also be appointing diversity officers to aid leaders in understanding local demographics, as well as to facilitate the most welcoming and inclusive atmosphere possible at all levels of CAP.

In glancing through this spring issue of the *Civil Air Patrol Volunteer*, you will see that CAP is always on the go. Our annual Legislative Day on Capitol Hill was highly successful. Over 500 adult volunteers and cadets visited their congressional delegations to tell the story of what CAP is doing in their home states. CAP continues to look ahead, and the adoption of small Unmanned Aerial Systems into our repertoire is an additional step we are taking to enhance capabilities and remain relevant. Disaster response, stories of our wonderful members and much more round out this issue.

Let me close by sharing that we in CAP are proud to serve as airmen, part of the Air Force's Total Force. We are dedicated to serving, and making a difference, in our communities, states and nation.

Thank you for your continued support.



Semper Vigilans!

Mark E. Smith

Maj. Gen. Mark Smith
CAP National
Commander/CEO

Earning their Cadet Wings

Led by Texas teen, Civil Air Patrol cadets take advantage of new Youth Aviation Initiative program

By Sheila Pursglove

On Jan. 24, the Texas Wing's Emma Herrington became the first Civil Air Patrol cadet to earn her private pilot's certificate through the new Cadet Wings program — part of the organization's Youth Aviation Initiative, funded by the U.S. Air Force.

She is the first of many young CAP pilots to come, starting this year.

“While Emma was the first to earn her certificate, there are now 17 other cadets on their way to achieving the same goal, and there are another 44 candidates in the process of being enrolled in the coming months.

The goal is for all 62 cadets to earn their private pilot certificates,” said Margarita Mesones, who is managing the program at CAP National Headquarters.

CAP, the Air Force auxiliary, implemented Cadet Wings to help solve an ongoing national pilot shortage. Youth nationwide have been enthusiastic about the initiative, which is designed to allow them to learn how to fly earlier, enhancing their experience and giving them a head start as they embark on military, commercial and other aviation-focused careers.

“It's been great so far,” Mesones said. “We are able to remove the financial barrier and allow them to focus on flying.”



Cadet Chief Master Sgt. Emma Herrington of the Texas Wing's Sulphur Springs Composite Squadron holds her temporary airman certificate after her successful flight, which made her the first graduate of CAP's new Cadet Wings program.

Herrington and her flight instructor, Lt. Col. Stephen Hundley, pose for a photo after she earned her private pilot certificate. Hundley is the Southwest Region's standardization/evaluation officer and was Herrington's instructor pilot during her enrollment in Cadet Wings.



“CAP CHANGED MY LIFE, AND I THINK THAT'S SOMETHING EVERYONE SHOULD EXPERIENCE. ASPIRING AVIATORS ESPECIALLY SHOULD TAKE ADVANTAGE OF THE CADET WINGS PROGRAM, AS THE OPPORTUNITY FOR A FULL-PAID RIDE IS ONCE-IN-A-LIFETIME.” — CADET CHIEF MASTER SGT. EMMA HERRINGTON



Currently serving as cadet commander of the Sulphur Springs squadron, Herrington has become an accomplished member of CAP. Here, she displays a citation from the Air Force Association recognizing her as her unit's Cadet of the Year.



Thanks to her experiences in Civil Air Patrol, Herrington hopes to become either a military or civilian pilot. She has applied to the U.S. Air Force Academy.

First in Her Flight

Herrington earned her certificate after passing her Federal Aviation Administration private pilot practical test. It was an early birthday present: She turned 18 the next day.

She first took to the skies in childhood, with her father — a pilot, an airframe and powerplant mechanic and owner of an aircraft ignition repair station. “Aviation is the family trade,” Herrington said. “These factors, combined with a fascination with anything that flew, nudged me in the right direction. I was 4 when I first started flying with my dad, and I’ve been hooked ever since.

“Flying is a sensation unlike anything else I’ve ever experienced — I love every aspect, from rotation to the chirp of the tires on the pavement. It’s my happy place. I love seeing the world from a different angle,

something many people don’t ever get to experience.”

Her passion for flight made Civil Air Patrol a natural fit for Herrington. She’s a cadet chief master sergeant with the Texas Wing’s Sulphur Springs Composite Squadron and is on her way to becoming a cadet second lieutenant.

She joined the Sulphur Springs squadron in April 2017 at age 16, drawn by its commander’s enthusiasm for her aviation aspirations and the fact the unit has a CAP Cessna 172.

“I knew CAP flew missions, but I didn’t know you could train out of CAP aircraft, so when orientation flights were first mentioned, I was ecstatic,” she said.

“I had no idea my first flight with CAP would lead to many more. O-flights are the most important part of a cadet’s journey through CAP. And most importantly, they are free.”

Opportunity to Fly with CAP

After taking advantage of all five orientation flights offered to cadets, Herrington attended the Shirley Martin Powered Flight Academy in Nacogdoches, Texas — one of CAP’s national flight academies. Through the Martin academy, where her instructor was retired Air Force Col. and current CAP Lt. Col. Brian “Jumper” Childs, assistant operations officer for the Texas Wing’s Sheldon Cadet Squadron, she received the opportunity to achieve her dream of earning her private pilot’s certificate in the Cadet Wings program.

The certificated flight instructor, or CFI, who finished up the bulk of her training was Lt. Col. Stephen Hundley, standardization/evaluation officer for CAP’s Southwest Region.

An important part of Cadet Wings is that acceptance is based entirely on merit and motivation, Herrington said. “It gives aviation-crazy cadets who have drive and discipline the chance to get their license. It’s the answer for those who cannot afford flight training but are desperate to fly.

“The best thing about Cadet Wings is that you’re trained to fly CAP aircraft and all expenses are covered. Without the help of Cadet Wings, I would have been unable to afford my flight training. Sadly, this is a problem many cadets face,” she said.

Cadet Wings is just one of many amazing opportunities in CAP that can be found nowhere else, Herrington added. “I recommend CAP to every teen I know,” she said. “CAP changed my life, and I think that’s something everyone should experience. Aspiring aviators especially should take advantage of the Cadet Wings program, as the opportunity for a full-paid ride is once-in-a-lifetime.”

High-Achieving Cadet

Although Herrington joined CAP at 16 rather than the earliest eligible age, 12, she has more than made up for lost time. Honor Cadet of the 2017 Texas Wing summer encampment, Honor Cadet of the 2017 Southwest Region Honor Academy, Air Force Association Cadet of the Year for her squadron and a distinguished graduate of the 2018 powered flight academy, she's also her unit's cadet commander.

"All of my greatest achievements have been through Civil Air Patrol — but the most rewarding is getting my

private pilot's license," Herrington said. "I've been fortunate to achieve much in the short time I've been involved, something others can do, too.

"I like the fact CAP is what you make it," she said. "The organization is overflowing with opportunities for all interests, all the while teaching important life lessons. The cadet program is geared toward the benefit of cadets and helping them find success whenever you join.

"CAP is a robust organization full of opportunities. It offers leadership positions no other organization does."

Herrington enjoys watching fellow cadets grow as individuals and as a team. "My favorite activities include aviation NCSAs (National Cadet Special Activities), staffing encampments and working one-on-one with cadets in my squadron," she said.

She has applied to the U.S. Air Force Academy; and if that doesn't pan out, she plans to attend flight school at LeTourneau University in Longview, Texas.

"I want to be a pilot, either military or civilian," she said. "Flying is my passion!" ▲

Cadet Wings Enrollees Set to Graduate:

Christopher Baker, Texas Wing

Connor Callaghan, New Jersey

Taylor Crisci, New York Wing

Tanner Gale, Georgia Wing

Ian Gonzalez-Munoz, Puerto

Rico Wing

Jacob Hannas, Maryland Wing

Patrick Jackson, New Jersey Wing

Jack Jones, Colorado Wing

Andrew Lizarraga, Tennessee Wing

Kevin Martinez, New Jersey Wing

Roi Norber, Illinois Wing

Taylor Nordman, Kentucky Wing

Kit Oney, Vermont Wing

Jordan Regalado, Maryland Wing

Hayden Roszell, Colorado Wing

Vivek Uppoor, Maryland Wing

Jackson White, Georgia Wing



Cadet 2nd Lt. Taylor Crisci of the New York Wing, seen here (at top left), is one of 17 candidates set to graduate from the Cadet Wings program this spring. Others include (clockwise) Cadet 2nd Lt. Taylor Nordman, Kentucky Wing; Cadet Maj. Roi Norber, Illinois Wing; and Cadet Col. Christopher Baker, Texas Wing.



Four CAP cadets to attend summer in-residence flight school at Purdue

By Shelia Pursglove

Cadet Maj. Dylan Gulla set his sights on becoming a U.S. Air Force fighter pilot from childhood. Having launched that career trajectory by joining Civil Air Patrol at 13, Gulla now is one of four cadets selected through CAP's new Cadet Wings program to attend the commercial in-residence flight school at Purdue University this summer.

"Saying this will be a fantastic opportunity is an understatement," said Gulla, a high school junior at Cox Mill High School in Concord, North Carolina, and cadet commander of the North Carolina Wing's 111th Search and Rescue Composite Squadron in nearby Charlotte.

"I couldn't believe when I was informed I'd been selected," he said. "It's truly a once-in-a-lifetime opportunity. It's unbelievable to me that the United States Air Force will be investing this kind of money into me for this flight training — it's a blessing and I plan on taking full advantage of it. The college credits will also be extremely beneficial."

The in-residence flight school opportunity in Indiana is one of many ways Air Force Junior ROTC and CAP are cooperating and leveraging their resources to address a critical need for more pilots in the U.S. military and commercial aviation. The eight-week program includes intense classroom training in Purdue's School

of Aviation and Transportation Technology and flight instruction from Purdue Aviation at West Lafayette's Purdue University Airport.

CAP's Youth Aviation Initiative panel, chaired by Col. Mike Cook, was unanimous in recommending four cadets, ranked by total objective scoring on their applications. Gulla is joined by Cadet Master Sgt. Genevieve Mckenzie of the

Idaho Wing's Nampa Composite Squadron, a high school junior from Nampa, Idaho; Cadet Capt. Danielle Stone of the Flathead Composite Squadron, a high school senior from Kalispell, Montana; and Cadet Lt. Col. Justin Ramey of the Montana Wing, a community college student from Fortine, Montana.

The selection process wasn't all smooth sailing. "One cadet had received her appointment letter to the U.S. Naval Academy and is to report in mid-July. This was a wonderful opportunity for her but did not help our selection. Another cadet had already made commitments to her church that prevented her from accepting," Cook said.

"It speaks volumes about our cadets that one couldn't accept because she was accepted to the U.S. Naval Academy, and one's

character made her place prior obligations over accepting this offer of a full flight scholarship."

Gulla had to adjust his school schedule to accept the offer. "Cadet Gulla is from North Carolina, and their school year was extended due to the number of storms that area endured



this past year,” Cook said. “He wouldn’t finish school until after the Purdue University program was in progress.

“His father went to the school system and explained the opportunity his son was being offered, and the school agreed to give Cadet Gulla his final exams the week before he was due to report to Purdue.”

Gulla’s desire to become a military pilot was sparked at a 2014 air show at Nellis Air Force Base, Nevada, where the Air Force Thunderbirds performed. “I’m fascinated by the concept of flight and look forward to pursuing a career in aviation,” he said.

For the past three years, he has photographed military aircraft and posted photos on Instagram. “You’ll often find me traveling the country with my dad, going to air shows and sometimes sitting outside of military bases just to see the aircraft flying around,” he said.

The first of Gulla’s five CAP orientation flights in a Cessna 182T was also his initial ride in a small aircraft. “I was amazed,” he said. “I couldn’t wait to get back up for my next flight, especially after the pilot let me control the aircraft.”

After those orientation flights, Gulla began his journey of becoming a pilot with instructor Capt. Gary Moore, a member of the North Carolina Wing’s Charlotte Senior Squadron. “I’m very grateful, as he’s volunteered many hours of his time to instructing me on becoming a private pilot,” the cadet said.

After high school graduation, Gulla plans to attend Embry Riddle Aeronautical University, participate in Air Force ROTC for four years and receive a commission in the Air Force.

“I’m looking to achieve as many flight ratings as possible at ERAU to help advance myself into an aviation-related career,” he said. “I’ve always wanted to be a fighter pilot, and plan on pursuing that dream to the best of my ability.”

Mckenzie, who joined the Nampa squadron at age 14 and has received two outstanding service awards, is eager to meet cadets from around the country and participate in a concentrated course of study.

“I can’t believe I’ll have my pilot’s license before I’m out of high school — I don’t even have a driver’s license yet! If I take advantage of this opportunity and do the work, I’ll have a foot in the door for my future,” she said.

Mckenzie would like to work for Mission Aviation Fellowship and is also interested in military piloting jobs. Her initial CAP orientation ride was her first experience in a small plane.

“It was obviously a completely different experience than any commercial airliner I’d been on — the biggest difference was the volume; you can barely hear anything other than the deafening wind,” she said.



Another of the CAP cadets attending Purdue’s commercial in-residence flight school this summer is Cadet Capt. Danielle Stone of the Flathead Composite Squadron in Montana, seen here during a promotion ceremony.

“I loved the unique perspective — the windows were much bigger, and flying at a lower altitude allowed me to see so much more of the beautiful country landscape than I’d ever seen before.”

Ramey, a Flathead Community College student who also hopes to become an Air Force pilot, is National Cadet Advisory Committee vice chair and Montana Wing

cadet activities officer. He joined the Flathead Composite Squadron in Kalispell at age 12 and received orientation rides in a Cessna 182.

“Getting the opportunity to control an aircraft for 25-40 minutes was an amazing opportunity,” Ramey said. “I’ve always enjoyed aviation and the science that surrounds it. Getting a 5-ton piece of metal into the air is no easy task and takes an exact science.”

Ramey is looking forward to flying at Purdue and making new friends and connections he expects will last a lifetime. “Learning alongside others is always an enjoyment, and while it may be tough, it’s bound to be a blast,” he said. ▲

◀ Dylan Gulla is all smiles following a glider ride taken early in his Civil Air Patrol career. Now Cadet Maj. Gulla, the North Carolina teen will join three other CAP cadets this summer at the commercial in-residence flight school at Purdue University. The opportunity, which will also involve U.S. Air Force Junior ROTC cadets, is being provided through CAP’s new Cadet Wings program.



Cheryl Stearns is right at home in the clouds, especially as a competitive parachutist and skydiver. She's set U.S. standards for parachuting accuracy and style, capturing gold and bronze medals in worldwide competitions. Photo courtesy of Capt. Cheryl Stearns, North Carolina Wing

Pilot and champion parachutist

Cheryl Stearns

helps stoke cadets' passion for flying

By Paul South

The low-hanging fruit in the story of Civil Air Patrol Capt. Cheryl Stearns has been harvested countless times. She's the first female member of the U.S. Army's Golden Knights parachute team, a world champion parachutist and skydiver, a 33-time national champion. And for 34 years, she's flown as a commercial pilot for American Airlines.

Symbols of those honors deck the walls of a large room of her North Carolina home amid a convocation of ceramic eagles scattered in every room.

Understandably, gleaming trophies made an impression on Cadet 1st Lt. Anthony Vagnozzi, then 17. He was at a party celebrating his mentor's triumphant two-year recovery from a Nov. 11, 2015, cycling accident that nearly claimed Stearns' life.

"Every time I talked to her, I learned something new," Vagnozzi said. "I could not believe all the achievements she had.

"But the story about her bike accident shows you the kind of person she is. She had a bike accident. They told her she would never fly again. But she completely

recovered. It took her a long time and a lot of hard work. She was told she would never do those things again, but it was her passion," the cadet said.

Now Stearns tries to ignite that same passion — desire she discovered at 17 as an Arizona high-schooler — in North Carolina Wing Shelby Composite Squadron cadets like Vagnozzi. And among younger cadets, Stearns' accomplishments strike a chord.

In her 46 years of parachuting, skydiving and flying, Stearns, 63, has not only landed on the glass ceiling, she's shattered it. Along with paving the way for women in the Golden Knights, she's set standards for parachuting accuracy and style, capturing a bronze medal at a competition in Japan in 2000. She captured gold in 1978 and 1994. She also holds the record for most jumps by a woman in a 24-hour period — 352 jumps on Nov. 8-9, 1994.

But don't call her a daredevil.

"Oh God, never," Stearns said. "I don't want my heart racing. I don't want the adrenaline in me. That was the whole thing about how I started learning flying. I didn't like riding in the airplane because I had lack of knowledge. Speed was what attracted me."

Whether flying, parachuting or skydiving, for Stearns safety and consistency are the bottom line. Consistency is critical in parachuting for accuracy, where 1 centimeter off — the size of a

nickel — can mean the difference between winning and missing the cut. And hubris in the chute or in the cockpit can trigger a foolish, deadly mistake.

“Consistency wins competitions,” she said. “To be good you must have consistency, which means you must have procedures down in terms of checklists, knowing rules and regulations — it’s all the same thing.

“When you’re flying and jumping, they’re very safe sports as long as you respect the sport and respect the flying, because they’ll kill you in a heartbeat. When I started skydiving at 17, it taught me respect about myself, respect about my equipment and respect for my other peers. If I didn’t do those three things, it would kill me.

“It’s the same thing with flying. You have got to respect Mother Nature, all the rules and regulations, and you better respect yourself and not do something stupid,” she said.

Courage also courses through Stearns’ story.

First, she had to break into a male-dominated profession. When she began to fly, her dreams of being a commercial pilot were nearly grounded by poor eyesight.

“They called me ‘Ding-a-ling’ because I had these big Coke bottle glasses,” she says. “I knew something had to change.”

Eight optical surgeries later, her vision was 20-20.

Stearns’ recovery after being struck by a motorist as she bicycled near her North Carolina home — ironically on Veterans Day, 2015 — is nothing short of amazing. The recovery was equal parts physical and mental. She suffered a traumatic brain injury in the area of cognition.

“My brain bounced around in my



Cadet 1st Lt. Anthony Vagnozzi, a member of the North Carolina Wing’s Shelby Composite Squadron, says he’s benefited greatly by having Stearns (in background) as an instructor pilot. He hopes to one day fly a commercial airliner, like she has for the past 34 years. Photo by

2nd Lt. Cheryl Vagnozzi, North Carolina Wing



Despite a cycling accident several years ago, Stearns recently completed her 20,000th jump — the most ever by a woman. Photo courtesy of Capt. Cheryl Stearns, North Carolina Wing

head,” she said. “Let me tell you, I could pack a parachute, I could jump. I could do anything athletic. I just couldn’t pack a suitcase or figure out where I’m going to go and how I’m going to get there.

“It took two years of rehab to get my brain back to function, to fly and get back to normal capacity.”

Initially, her injuries left her brain function at 50 percent and her IQ at 70. Within a year, her IQ was 128 and her function was 100 percent up to par for a woman her age. Slowly, language skills, discipline, decision-making, short-term memory and problem-solving skills returned.

“Even after I got back to flying, I began to see more and more little light bulbs come on,” she said.

Within six months of the accident, she completed her 20,000th jump — the most ever by a woman.

“I had to get the cobwebs off, the dust off and then I polished it.”

Stearns still competes part-time around the world as one of the marquee names in her sport. But she’s also giving to others, like Vagnozzi and his fellow Shelby Composite Squadron cadets. The woman who after her accident couldn’t pack a suitcase or know her destination is now helping young people find direction in their lives.



Competitive skydiving requires precision, as Stearns exhibits here. She is a 33-time national champion. Photo courtesy of Capt. Cheryl Stearns, North Carolina Wing



Vagnozzi recently earned his private pilot certificate, prompting a photo on the tarmac of the Shelby Municipal Airport with his instructor, Stearns, and the customary shirt-tail cut-out celebration with his mentor. Photo by 2nd Lt. Cheryl Vagnozzi, North Carolina Wing

Even before she was cleared to fly, she was mentoring cadets.

“When I found my passion, I went for it,” Stearns said. “What I’d like for them to do is find their passion. I found mine at 17. I hope by the time they leave the Civil Air Patrol squadron, they find that passion and strive toward that goal.

“However they figure it out, if they need help from advisers, senior

members, parents, wherever, I don’t want someone to leave going, ‘I don’t know what I want to do in life.’ No. I think you can have a very good idea if you’re able to play around some things. I can help them a little bit. But I want to help them find their passion and go with it.”

Stearns hopes training cadets may help stem a future shortage of pilots. By 2022, half the current crop of commercial pilots will be out of the profession. Stearns believes CAP can help fill the void.

“We need more support through organizations and through schools. It’s so expensive. But give kids their ground school free. I guarantee you the kids who can pass that, that’s where it starts. Then they get hours here and hours there. But if they can’t pass ground school, they don’t need to be pilots.”

She adds, “Hands-on is fine, but you’ve got to have the mentality, that drive, that desire.”

Stearns tries to fuel that desire

when a curious 5-year-old visits her American Airlines cockpit, or when she’s mentoring a CAP cadet on an orientation flight. Vagnozzi has experienced that firsthand.

Stearns pushes her students to excellence, Vagnozzi said. He wants to follow his mentor into commercial aviation. He calls learning with Stearns “a perfect experience.”

“You’re always talking, always learning. It was very easy to learn with her because she always pushed you so hard,” Vagnozzi says. “I’m a very visual learner. The harder you push me, the better the results will be.”

Vagnozzi is an Eagle Scout who’s already earned a two-year degree and has mapped his course in aviation. He also works while going to college. While he has moved, he and Stearns remain in close contact.

“Anyone in the squadron who asks for help, she’ll help you. That’s the kind of person she is,” Vagnozzi said. “One of the most inspiring things about her is how she overcame the challenges she faced after her bike accident. It took her two years to relearn all of her aviation skills, as well as writing and math skills. That’s one of the most inspiring things to me.”

One last note: When Stearns took her test to return to the airline after her injury, she scored higher than on her first try years before.

“It just goes to show that if you’re passionate about something, if you work hard, you’ll do it,” Vagnozzi said. “That pushes me on the path I’m going. I want to be a commercial pilot, so I have to work hard. If I slack off, I’m not going to make it there.”

Stearns’ CAP mission is clear.

“I want to help them find the love in their life, their passion.” ▲



LOCATED @ DONALDSON (KGYH)
 2288 Perimeter Rd
 Greenville, SC 29605
 864-360-0378
 John@pffly.com

PROVIDING ALL YOUR AVIONIC NEEDS

- IFR Certifications
- Transponder Certifications
- Avionics Installations & Sales
- Aircraft Sales & Export



DEALERS

- Garmin**
Dealer number (19069185)
- PS Engineering**
Dealer number (PF Flyers)
- L-3 Communications**
Dealer number (99065)
- Aspen**
Dealer number (PF Flyers)
- S-Tec**
Dealer number (PF Flyers)

CAPABILITIES

- Certifications**
91.411 and 91.413
- Sales**
Avionics and aircraft
- Installations**
Retro-fit on small aircraft up to business jets
- Aircraft maintenance**
- Avionic Engineering**

We salute the C.A.P.!



AIR-PARTS
of Lock Haven

Serving Aircraft Owners & Shops Around the World

P.O. Box 418
 Lock Haven, PA 17745

(570) 748-0823

www.airpartsoflockhaven.com



IMAGINE YOURSELF HERE

- Unmanned Aircraft Systems
- Aviation Maintenance Management
- Airport Management
- Professional Pilot

SCHEDULE YOUR **PERSONALIZED VISIT TODAY!**
polytechnicexperience.com



"The Name to Remember for Aircraft Engine Parts and Service"



Established 1970

\$345.00 Overhaul of Your Cylinders

Let Gibson Aviation return to Service your Cylinders in Overhauled, Yellow Tagged Condition. Cylinders must be crack free and the bore must be in manufacturer's specifications for return to service. The price is inclusive of all parts stationary in the cylinder. (Valve Guides, Seats, Studs, Bushings, etc.) Any moving parts, (Valves, Pistons, Rings, etc) constitute an additional charge which varies from each different make & model. Allow 2 working days.

1-800-992-4880 • 405-262-4880 • fax 405-262-2959

gibsonaviation@msn.com

P.O. Box 880 / 1821 W. Elm, El Reno, OK 73036

Same Day Shipment for Exchange Cylinder Stud Assemblies \$445.00

Also, we can provide complete Cylinder Assemblies!!

CALL for Prices for Your Engine



A Hurricane Season to Remember

CAP Tests New Technology in Wake of Category 4 Tropical Storms

By Russell Slater

This past fall, over 1,000 CAP members, representing 26 wings, responded to two powerful Category 4 storms, hurricanes Florence and Michael, that devastated lives in several states along the Atlantic Coast and the Gulf of Mexico. Combined, the storms resulted in 129 dead and an estimated \$49.1 billion in damages and economic loss. While disastrous for those affected, the two hurricanes also provided CAP with the opportunity to try out new technology vital for its missions.

CAP's Response to Hurricane Florence

Nearly 800 Civil Air Patrol members from 20 wings, along with CAP National Headquarters, responded to Hurricane Florence. They flew 672 hours in 43 aircraft, conducting 328 sorties and capturing nearly 12,000 aerial photographs that were uploaded for the Federal Emergency Management Agency.

Despite declarations of emergency from the various state governors, as well as the mayor of Washington D.C., and orders to evacuate, the storm caused 57 deaths. It eventually resulted in an estimated \$24 billion in property damage and economic loss.

Although Florence made landfall as a weakened Category 1 hurricane on Sept. 14 just south of Wrightsville Beach, North Carolina, its strong winds were still more than enough to cause widespread power outages and

◀ Last fall, CAP's air and ground crews responded en masse to two powerful Category 4 storms — Hurricane Florence in the Carolinas and then Hurricane Michael in the Florida Panhandle and southwest Georgia. Aircrews flew nearly 500 sorties in 68 CAP planes. One of the responding CAP aircrews documented this damage from Michael with new WaldoAir technology.

uproot many trees. Unprecedented rainfall — more than 30 inches were recorded in some locations — resulted in major flooding of main roads and highways, leaving some impassable. The amount of rain made Florence the wettest tropical cyclone ever recorded in the Carolinas.

In North and South Carolina and other neighboring states, CAP members staffed emergency operations centers. They distributed MREs (meals ready to eat), bottled water and other vital emergency supplies at FEMA Points of Distribution. Cadets as young as 15 contributed to the effort.

“We train regularly to serve our communities in times of emergency,” said Col. R. Jason Bailey, North Carolina Wing commander. “Our pilots, aircrews, ground teams and Points of Distribution personnel have all performed selflessly. They demonstrate daily to our communities that we are ready, willing and able to help them and serve their needs.”

Four members of the wing also delivered much-needed baby formula to sick infants when asked by the state's Department of Health and Human Services.

In South Carolina, several ground teams were deployed throughout the state to assist FEMA with measuring high-water marks at certain locations. They recorded, photographed and documented the marks by using measuring tapes and rulers before forwarding the collected information directly to a FEMA database.

“I am incredibly proud of all our



▶ In preparation for CAP's Hurricane Florence response, Lt. Col. Bill Shook (standing on wing strut) helps prep a CAP Cessna 182 for mission flights with Maj. Ben Cole, the pilot in command. The two are assistant directors of operations for the South Carolina Wing. Photo by 1st Lt. Rachael J. Mercer, South Carolina Wing



▶ Despite damage to his family home from Hurricane Florence and a lengthy evacuation, then-Cadet Tech. Sgt. Corbin Endre helped ensure storm and flood victims received much-needed disaster relief supplies. Here, the CAP cadet loads a box of Meals Ready to Eat for a family at a Points of Distribution site in Wilmington, North Carolina. Photo by Maj. Kathy Nicholas, North Carolina Wing



▶ Members from the North Carolina Wing's Cunningham Field and Tar River composite squadrons upload aerial damage assessment photos at Rocky Mount-Wilson Regional Airport. The images helped emergency agencies assess damages from Hurricane Florence. Photo by 1st Lt. Liz Dunster, North Carolina Wing



Lt. Col. George Stanley, commander of the South Carolina Wing's Sumter Composite Squadron, takes a high-water-mark measurement on the Sen. Roger W. Scott Memorial Bridge at the Little Pee Dee River in the wake of Hurricane Florence.



(From left) Cadet 2nd Lt. Micaiah Williams, Cadet Capt. Jonah Williams and Cadet Lt. Col. Jonah Torp-Pedersen prepare to hand out water bottles to Florence-affected North Carolina residents at a Wilmington supply center. The cadets are members of the Tennessee Wing's Murfreesboro Composite Squadron.



A Florida Wing plane gets refueled for yet another sortie as part of CAP's response to Hurricane Michael. CAP aircrews flew 141 sorties as part of the response, logging over 350 hours and taking more than 16,000 aerial photographs for FEMA.

deployed manpower and resources. The storm, which had wind speeds as strong as 155 mph, resulted in 57 deaths in Florida, Georgia, North Carolina and Virginia.

In support of the emergency response efforts, 251 volunteers from 18 wings flew 141 sorties in 25 planes. They logged 353 flight hours and uploaded more than 16,000 aerial photographs to FEMA for analysis.

"The rapid movement required a constantly evolving plan," said Col. Carlton Sumner, the Georgia Wing's director of emergency services. "From hour to hour, we had to update that information," he added, referring to CAP's aerial photography for federal and state officials.

High-Quality, User-Friendly Technology

While there were numerous aspects to CAP's responses to both storms, from distributing supplies to damage assessment on the ground and in the air, the significance of new aerial photography technology shouldn't be overlooked. WaldoAir camera pods were used in the responses to both



Lt. Col. Jerusha McLeod Dooley operates the advanced Surrogate Remotely Piloted Aircraft (SRPA) sensor technology that Civil Air Patrol maintains for training U.S. military and coalition forces. The technology was used in the Florida Panhandle to survey damage wrought by Hurricane Michael.

unpaid professionals," said Col. John Knowles, then-commander of CAP's Middle East Region, which includes both Carolina wings and the Delaware, Maryland, National Capital, Virginia and West Virginia wings.

CAP's Response to Hurricane Michael

In the aftermath of Hurricane Michael, which made landfall Oct. 10 as a Category 4 storm at Mexico Beach in the Florida Panhandle, CAP also

hurricanes, as was the older Surrogate Remotely Piloted Aircraft technology.

John Desmarais, director of operations at CAP National Headquarters, said the organization’s hurricane missions “continue to be important to assist in quick response and recovery efforts to help communities in distress.”

Imagery provided to GIS (geographic information system) professionals at FEMA can benefit affected residents in a variety of ways — like allowing officials to gauge the severity of damage and locations impacted so those needing assistance, like funding for repairs, can receive it swiftly.

“The use of the WaldoAir systems was a game-changer, as it provided much better imagery at a relatively inexpensive cost in comparison to other high-end systems,” Desmarais said.

WaldoAir Corp., based in Franklin, Tennessee, boasts that its equipment “performs like million-dollar camera systems, but at a fraction of the price.” Under agreement with WaldoAir, CAP Cessnas outfitted with XCAM Ultra50 camera pods were used in response to both hurricanes, collecting imagery with an advanced imaging sensor that then processed high-resolution 3-D models.

CAP members used the pods to survey heavily damaged areas of the Florida Panhandle after Hurricane Michael. The WaldoAir product provided volumetric measurements of debris piles and integration of the resulting digital elevation models into flood modeling.

Continued technological advancements in aerial photography equipment, such as the WaldoAir systems, can only help in future missions, helping CAP members assist those affected by hurricanes like Florence and Michael. ▲



South Carolina Wing pilots flying over the I-26/526 interchange observed lanes being cleared of traffic as the state’s Emergency Management Division worked to prepare evacuation routes for an influx of traffic before Hurricane Florence’s arrival. Photo by Lt. Col. Brett Grooms, South Carolina Wing

Lt. Col. Brett Grooms (left) and then-Capt. Brian Rawl perform a route evacuation flight over Interstate 26 as part of the South Carolina Wing’s preparations for Hurricane Florence. Grooms is the wing’s homeland security officer; Rawl, now a lieutenant colonel, commands the South Carolina Legislative Squadron.

“I AM INCREDIBLY PROUD OF ALL OUR UNPAID PROFESSIONALS.” — COL. JOHN KNOWLES, MIDDLE EAST REGION COMMANDER DURING CAP’S RESPONSE TO HURRICANE FLORENCE

An aerial, 3-D perspective view of a bridge and surrounding area. The bridge is a concrete structure with a central span supported by a pier. The surrounding area is heavily eroded, with large, dark, and light-colored mounds of earth and debris. A road runs parallel to the bridge, and a railway line is visible in the background. The scene is a result of a levee breach following Hurricane Florence in September.

'The capabilities these pods offer
are real game-changers for missions'

CAP-tested WaldoAir camera system provides interactive 3-D images

By Vicky Travis

Civil Air Patrol was asked to survey a bridge after a levee broke following Hurricane Florence in September. CAP used a WaldoAir camera pod, which created these 3-D images for emergency managers. Photo courtesy

of SkylineGlobe.com

In about 20 minutes a sleek 7-pound pod with two cameras inside attaches to the wing of one of Civil Air Patrol's signature red, white and blue Cessnas. Within an hour, a CAP pilot can be up and running to play a major role in disaster response, and an experienced CAP aircrew can gather hundreds of photos by following a determined flight path.

Then the real magic happens.

Within hours, the WaldoAir system they are using turns the hundreds of photos into interactive 3-D images of hurricane-torn areas or fire-wracked forests. Deep levels of information are made available for decision-makers like the Federal Emergency Management Agency and local governments. On a computer screen, emergency managers can zoom in to see an object as small as a quarter, measure debris piles, quickly assess flood depth, and more.

"It's the best thing I've ever seen," said mission pilot Lt. Col. Ande Boyer, one of four aircrew members deployed along with 16 ground crew members from the Tennessee Wing for the Hurricane Florence response in September. "It's so cost-effective, and we don't need months or weeks to train."

Sky-high possibilities

With about 560 single-engine airplanes, Civil Air Patrol occupies a unique position. Partnering CAP with WaldoAir, based in Franklin, Tennessee, could open new avenues for the U.S. Air Force auxiliary to serve communities. One idea is to use the cameras to help smaller municipalities perform tax assessments.

WaldoAir CEO James Summerville sees a lot of opportunity for CAP to

use the system.

"CAP has 560 aircraft," he said. "Nothing can touch that. No other entity has that capability across the U.S."

WaldoAir and CAP are working out details ahead of the 2019 hurricane season.

"We will likely be looking at leasing some systems later this year, as they are working on enhancing the capabilities of the systems," said John Desmarais, CAP's director of operations. "It probably makes more sense to lease systems at this time so that we can take advantage of developing changes. We're currently discussing ideas with WaldoAir with the intention of training personnel on systems ahead of the next hurricane season."

Summerville said leasing might be



Once installed on the wing, the WaldoAir camera pod connects with wires to a tablet in the cockpit. An experienced pilot follows the flight path set on the tablet.

Photo by Maj. Deming Gray, Tennessee Wing



the best option for CAP, since technology evolves so quickly. An XCAM Ultra system costs about \$54,000. WaldoAir now has about 85 pods in the XCAM family.

Col. Dent Young, Tennessee Wing commander, expects CAP will still use both handheld cameras and Garmin VIRB action cameras during disasters.

This graphic shows the circle patterns WaldoAir-equipped CAP Cessnas flew along the Florida coast on Hurricane Michael photo missions.



Tennessee Wing Lt. Col. Ande Boyer (left) and Col. Dent Young hold a WaldoAir camera pod before attaching it to the wing of a CAP plane. Photo by Maj. Deming Gray, Tennessee Wing



Young (left), a WaldoAir test pilot, and WaldoAir CEO James Summerville trained four CAP pilots on how to install and use a camera pod. Photo by Maj. Deming Gray, Tennessee Wing

“We will still need handheld for a long time, for oblique kind of shots,” he said.

“Our classic bread and butter has been Nikon DSLR held by someone in the backseat of the airplane,” Boyer said. “We also have Garmin VIRB mounted on a wing tip pointed at the ground, which gives us the ability to take a photo right underneath us.” Those images are geocoded, or imprinted with where the camera was on the face of the Earth.

“Now, the WaldoAir system can do both at the same

time,” Boyer said. A pod features two cameras, one pointing straight down and the other at an angle. “This is made for the end user in mind.”

“Not only do you know position of the camera, but you know what direction it’s going, the angle and field of view,” Boyer said.

First flights

CAP tested one of the WaldoAir systems for the first time after Hurricane Florence just days after four Tennessee Wing members — Young, Boyer, Maj. Deming Gray and Lt. Col. Rob Borsari — trained for a day at WaldoAir’s flight test facility in Lewisburg, Tennessee.

“The system is straightforward and took just 20 minutes to mount,” Young said. Control wires run up into the window of the plane, and software for mission planning is downloaded to a tablet inside the cockpit. Flight plans over an area are often overlapping circular patterns.

Days after the four Tennessee Wing members’ training, WaldoAir trained CAP crews in South and North Carolina in the wake of Hurricane Florence, then trained Florida crews after Hurricane Michael.

The system’s use after Florence is a great example of real-time decision-making. A levee had breached near Wilmington, North Carolina, and emergency managers were concerned a railroad bridge downstream was in danger of washing out. A CAP pilot used the WaldoAir system to survey the area during a 10-minute flight.

“What really blew me away was when I saw the end product,” Boyer said. “Once you have that 3-D model, emergency managers can measure elevations, distances and make decisions.”

The bridge, they found, was not in imminent danger.

“It was a hit,” Summerville said. Data is processed in the cloud on 200 computers for results to be used in hours. As they showed the resulting interactive 3-D image the next morning in Raleigh, South Carolina, emergency managers were astounded.

“After that, we got 100 requests from 10 different agencies like FEMA and state agencies,” Summerville said. “After CAP used it, it was exponential networking for us.”

“The capabilities these pods offer are real game-changers for missions,” Desmarais said. “For the complex needs for major disasters, tools like the WaldoAir camera pods really do a great job of providing imagery that GIS experts can employ to address those needs.”

Soon after, Summerville was on his way to a trade show in Germany when he learned Hurricane Michael was headed toward the Florida Panhandle. A couple of phone calls later, he headed to Florida with the system.

Two CAP Cessnas were outfitted with the XCAM Ultra50 camera pods, which collected images for about a month after the Category 4 storm hit the Florida Panhandle on Oct. 10 at Mexico Beach, Port St. Joe and Marianna.

“If we’d had this system in Puerto Rico (after Hurricane Maria a year earlier), we could have used it to model areas and that would have made so many decisions so much easier,” Boyer said.

Where Waldo began

Summerville and James Kain founded WaldoAir in 2013 with the purpose of creating low-cost aerial imaging systems.

Kain, chief technology officer, has a master’s from MIT in aeronautics and astronautics and more than 45 years of experience developing extreme signal processing components, software and system integration.

Summerville, president and CEO, directed aerial imagery collection with an imaging firm after serving in the Kentucky

Air National Guard from 2004-2014. As a navigator on the C130H Hercules, he served three combat tours in Afghanistan. He graduated from Middle Tennessee State University in Murfreesboro with concentrations in aerospace and math.

Since 2013, the business’ sales have increased 20-30 percent year over year, Summerville said. WaldoAir now has about 20 employees and a manufacturing plant in Seaside, Florida.

From small mom-and-pops to giants like Chevron Corp., client companies use WaldoAir systems for a plethora of purposes on six continents. National Geographic has used the system to monitor illegal poaching.

“We designed the system for ease of use,” Summerville said. “Behind the scenes, it’s very complicated.”

WaldoAir uses a Canon5 DSR, a \$5,000 camera off the shelf. The selling point for the company’s systems has been the technology that syncs the cameras and the software integration.

“A huge part of it is making two cameras sync with one GPS position,” Summerville said. “So there’s the cameras, GPS, IMU (inertial measurement unit), mission planning software. ... It’s a huge bucket of stuff.” ▲

The Indianapolis Airport Authority is proud to support Civil Air Patrol

Indianapolis Airport Authority

ONE OF A KIND

Not just another transponder... introducing the **STX 165 Mode A/C Transponder**

- Built-in Encoder**
Simplifies installations and lowers cost.
- Low Current Requirements**
- Professional 1/2 3ATI Bezel**
that compliments any aircraft panel.
- Three Timer Functions**
Elapsed Flight Time, Up Timer, Down Timer
- Pressure Altitude Display**
- Optional OAT Probe**
provides Density Altitude and Icing Alert Displays
- Bright OLED Display**
is readable in virtually all lighting conditions and automatically dims for night time operations.
- Small and Light Weight**
7.4" behind the panel depth, 1.3 lbs.

Visit our website to learn more about STX 165 and other quality Sandia Aerospace products!

SANDIA aerospace
www.sandia.aero 505.341.2930



An Alaska Wing aerial photo shows road damage from a 7.2 magnitude earthquake in Anchorage. The road damage occurred near Minnesota Drive and West International Airport Road. The photo was one of about 700 images taken by CAP aircrews following the November quake.

Alaska Earthquake to Hawaii Volcano Eruptions, CAP Always Ready to Respond

By Russell Slater

The CAP motto of *Semper Vigilans*, “Always Vigilant,” holds especially true for the Pacific Region. While hurricanes, tornadoes and flooding have kept members from other CAP regions continuously busy along the Eastern Seaboard, Gulf Coast and elsewhere, those in areas like Alaska and Hawaii, while active in their own right, were not called upon as often — until 2018, that is.

“The Pacific Region doesn’t have to respond to natural disasters as frequently as some other regions,” said Col. Jon Stokes, commander of CAP’s Pacific Region. “But our wings continually train nonetheless, and this was evident in their responses in both Alaska and Hawaii.”

“Much Spreading” In Hawaii

Hawaii’s Kīlauea volcano, which is the most active of the volcanoes that form the island, has been continuously active since 1983. It was recently ranked by the U.S. Geological Survey National Volcanic Threat Assessment as the first among active volcanoes most likely to threaten lives and property. In the Hawaiian language, “*Kīlauea*” means “much spreading,” referring to its regular spewing of lava.



It lived up to its name and erupted violently last May 3, triggered by a 5.0 earthquake earlier in the day. Major lava flows followed several explosive eruptions that produced a massive ash plume reaching 30,000 feet into the air. Residents were warned to evacuate earlier in the month after several hundred smaller quakes, but over 700 homes were still lost.

Green Lake, a 2-acre, 20-foot-deep body of fresh water — one of the largest in Hawaii — was destroyed when immense lava flows boiled away the water and filled in its basin.

A dangerous haze also formed because of the lava flowing into the ocean, and it contained microscopic glass shards, creating a breathing hazard for anyone nearby.

Members of CAP’s Hawaii Wing made damage assessment flights over the Kīlauea eruptions, providing vital aerial photography to the state’s Emergency Management Agency, per their memorandum of understanding. They took photos of the active lava eruptions and also carried out a flight to provide a visual height estimate of the summit ash eruption.

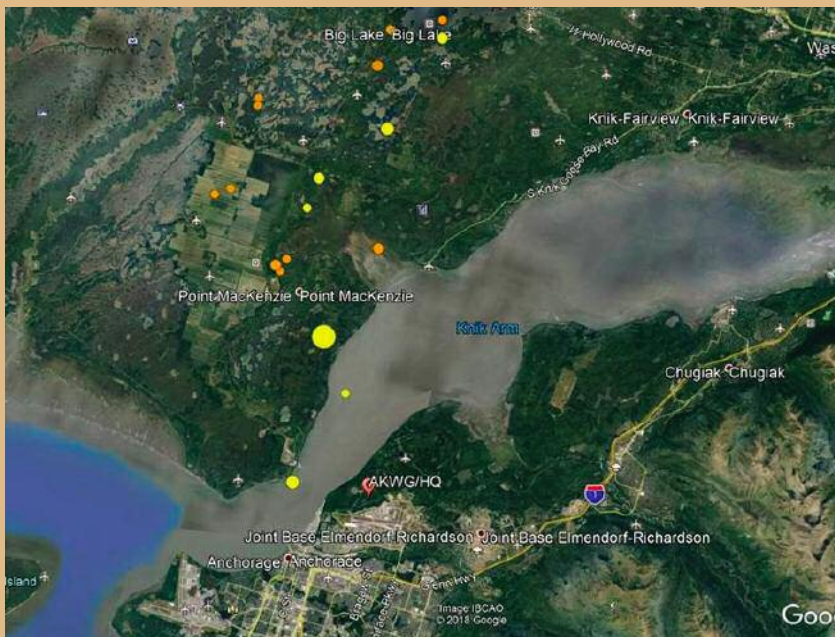
“It was an intense time during the eruption,” said Capt. Paul Hirst, commander of the Lyman Field Composite Squadron. The squadron is based in Hilo, about 20 miles from the eruption area, also where all the CAP

sorties for the lava originated.

“We’re a relatively small community here; everyone knows people who lost their home or were otherwise directly affected by the eruption. Several members of my squadron lost their homes,” Hirst said.

In some ways, CAP members were privileged to operate inside the Temporary Flight Restriction zone, Hirst explained, which was closed to aircraft not participating in the emergency response. As a result, they got an up-close view of the volcanic activity. “There’s no denying that the eruptive activity was spectacular — we were flying over 200-foot-high lava fountains and huge, fast-flowing rivers of molten lava that were bigger than any water river on the island. But we also witnessed heartbreaking destruction.”

Hirst recalled one especially somber moment was flying into the area and seeing a huge lava flow bearing down on the community of Kapoho. “As we circled around for our photos, it became obvious that hundreds of houses would be lost. The eruption had destroyed many homes prior to this, but not at such a rate. Over the next few days we witnessed destruction so complete that even the previous shoreline was erased. Kapoho Bay filled with lava, and the new land juts out almost a mile into the ocean from



A Google Earth image with an overlay from the U.S. Geological Survey shows the initial shock and the aftershocks from the 7.2 magnitude earthquake near Anchorage.



A Hawaii Wing photo taken May 15 and shared with the U.S. Geological Survey shows a plume as high as 9,500 feet above Kīlauea, with dispersed plume up to 11,000 feet.

the former shoreline.”

The U.S. Geographical Survey used photos from the missions and shared the CAP aircrew’s height estimate, seen on media outlets around the world.

Mission pilots included Hirst, 1st Lt. John Bassett and Capt. Carol Murray. In addition to that trio, mission observers, scanners and airborne photographers included 2nd Lts.

Susan Bassett, Jason Dzurisin, Gail Ferguson and Jason Ozbolt. First Lt. Paul Ducasse was mission radio operator, and Hirst, Murray and Lt. Col. Dana McLaughlin served as incident commanders. CAP members logged a total of 25.4 hours of flight time during their 15 tasked sorties from May-August.

Stokes confirmed the wing’s trying year when he said, “Hawaii Wing has had to respond to quite a few disasters this last year with flooding, volcanoes and two hurricanes. They responded well to each.”

North, To Alaska



Those in the Aloha State weren’t the only ones to contend with unique challenges due to their location. In the largest geographic wing in CAP, Alaska members have responsibilities that cover a wide variety of terrain, facilities and unique weather conditions.

First Lt. Jacob Baugh, assistant public affairs officer and assistant director of cadet programs for the Alaska Wing, said, “Major earthquake response is one of our largest training focuses in Alaska Wing. With an average of one magnitude 7-8 earthquake and 45 magnitude 6-7 earthquakes per year, this is an everyday danger in the Last Frontier. Our response capability covers the entire state, whether it is for a missing aircraft or person or if there is another significant natural event.”

Aircrews from that wing responded to a 7.2 magnitude earthquake near Anchorage on Nov. 30 (the initial quake was followed by more than 50 aftershocks greater than 3.0 on the Richter Scale in the 8 hours that followed). They proceeded to survey

approximately 200 miles of highway as well as 150 miles of railway and gas lines.

Three CAP planes already in the sky at the time were also called upon by the Alaska Joint Rescue Coordination Center to provide search and rescue support for stranded motorists along secluded stretches of highway in the wilderness.

“CAP launched three aircrews within hours of the earthquake,” Capt. Ben Padgett said. “They provided damage assessment and photographs for the Anchorage area, Mat-Su Valley highways and bridges, and railroad assessment between Anchorage and Talkeetna, despite the fact that the members were affected by the earthquake themselves.”

They were able to produce about 700 photos for emergency officials to



“OUR WINGS CONTINUALLY TRAIN... THIS WAS EVIDENT IN THEIR RESPONSES IN BOTH ALASKA AND HAWAII.” — COL. JON STOKES, PACIFIC REGION COMMANDER

use in evaluating potential damage and formulating a plan of response. Many of the photos showed overpasses, bridges and other critical infrastructure along vital routes, which were forwarded to the FEMA website for further evaluation.

Aircrews also surveyed two ports to verify there were no immediate threats to ocean vessels or the environment. Aircrews tracked two emergency locator transmitters in the disaster area

and coordinated with ground teams to ensure a prompt response.

“The Alaska Wing is one of the busiest wings in the nation for search and rescue and has fostered a great working relationship with the Alaska Rescue Coordination Center and the Alaska Division of Homeland Security and Emergency Management,” Stokes said. “Those relationships paid dividends when the earthquake struck.” ▲



CIRRUS PERCEPTION®

INTELLIGENCE - SURVEILLANCE - RECONNAISSANCE

Introducing Cirrus Perception™, an all-new cost-effective, multi-mission platform. Now FAA certified, learn more about Cirrus Perception at cirrusaircraft.com/fleet.



 CIRRUS AIRCRAFT

© 2016 CIRRUS DESIGN CORPORATION. ALL RIGHTS RESERVED.



ACE Turns **70** Gets Top Marks

By Jennifer S. Kornegay

Seeing children come alive when a topic or concept finally makes sense is one of teaching's greatest rewards. It's something that those involved in Civil Air Patrol's aerospace education mission relish, and the Aerospace Connections in Education (ACE) program provides continual opportunities to savor the sensation.

Designed for educators of students in grades K-6, ACE provides cross-curricular aerospace lessons that support STEM (science, technology, engineering and math) initiatives. It launched in 2007 in Boaz, Alabama, as the Junior Cadet Program. For the next school year (2008-2009), the program's name was changed to ACE, and in the decade since it has grown greatly in depth and breadth.

"That first year, we had 4,500 students involved in ACE," said Susan Mallett, who founded the program and is the educational outreach coordinator at CAP National Headquarters. "This year, we'll hit 50,000 students in 340 schools, with over 900 teachers implementing ACE lessons across 47 states."

Over its 10 years in existence, ACE has reached approximately 227,000 students.

2018-2019 Lift-Off (the annual kick-off event for the program across the country) after being named 2018 National CAP ACE School of the Year. She's witnessed scores of inquisitive expressions on the faces of both students and teachers while watching ACE at work, first in her classroom in Florida, next in a school she helped start in California, and today in Virginia.

"I'm so passionate about ACE and what it offers students," Tucker said. "It opens up many, many aerospace career options beyond being a pilot, like robotics, engineering and more. And not all students even want to go into aerospace, but so much of what ACE teaches is needed across the board. Thanks to ACE's hands-on, engaging lessons, they're all having so much fun learning that they're internalizing the information and retaining it so much better."

Every ACE teacher at each grade level gets a class set of manipulative materials as part of the program. In first grade, students learn about the parts of airplanes, so their ACE lessons include balsa wood planes that they assemble. By fifth grade, they're learning the basic principles of flight, so they have propeller planes to illustrate

the concepts of lift, force and drag.

ACE program manager Sue Mercer is also a former teacher, and ACE's interactive aspects instantly appealed to her. "It's something different," Mercer said. "That's what really sparked my interest, watching the kids get so involved. They are not passive but are

By the Numbers

Now in its 11th year, the Aerospace Connections in Education program currently involves:

51,170 students and

920 teachers at

344 schools in

46 states, and

1 school on a U.S. Department of Defense base in Japan.

About **227,000 students** have been impacted by the ACE program in the past **10 years**.



ACE students study clouds and learn about weather with their teacher, Rosanna Chiarella, at Palm Springs North Academy in Hialeah, Florida.

◀ This ACE student is helped inside a CAP plane by a cadet from the Auburn Composite Squadron in Auburn, Alabama. Photo by Susan Mallett, CAP National Headquarters

ACE has racked up some impressive figures for its 10th anniversary, but the program is about so much more than numbers, as Megan Tucker stressed. Tucker is the STEAM (STEM plus art) specialist at Hillsboro Charter Academy in Hillsboro, Virginia, the school that hosted ACE's



ACE students like these at Hillsboro Charter Academy in Hillsboro, Virginia, often get the opportunity to operate a CAP STEM Kit flight simulator. Photo by Susan Mallett, CAP National Headquarters

willing participants in the lessons. It's amazing to see the lights turn on in their eyes."

The success of hands-on, inquiry-based teaching caught ACE program founder Mallett's attention quickly, too, when she was principal of a Montgomery, Alabama, school, near CAP National Headquarters. "In 1986, I started incorporating CAP aerospace lessons into my curriculum," she said. "CAP volunteers assisted at the school, which helped make our aerospace program a great success."

Mallett saw her school's overall test scores increase, placing second in the system behind the area's academic magnet school. "This was a lower socio-economic school," she said. "We could clearly see the evidence of the aerospace education working in the lives of our students."

CAP took note as well and asked Mallett to join its national team so she could create a similar educational program for use across the nation. She assembled a group of teachers, and together they built the ACE program.

The proof of ACE's effectiveness keeps coming. "Teachers tell us they have seen a 27 percent increase in science thinking skills on standardized tests due to ACE," Mallett said.

ACE makes abstract ideas more concrete and easier to absorb — obvious benefits for students. But ACE is also making things easier on teachers, particularly those without a STEM background.

Ensuring everyone would feel confident implementing the ACE program was a goal from the beginning, Mallett said. "We realized lots of teachers, especially in elementary school, were not comfortable with 'aerospace,'" she said. "So we made it easy for the teachers to learn as they go and not be intimidated by these topics."

Mercer echoed Mallett: "We've tried to make ACE very teacher-friendly."

The program also encourages teachers to seek outside assistance. "We want them to invite community leaders, parents and local CAP and Air Force Association volunteers into the classroom to help them teach the lessons and provide aviation-related career information," Mallett said.

Tucker has taken this advice to heart, arranging for a parachute team from an area military base to descend on her Florida elementary school as the finale of her school's end-of-year ACE celebration. "The kids were awestruck," she said. "It was really cool."

Mallett pointed to the value these experiences bring. "Having CAP, AFA and other volunteers in the schools conducting demonstrations and coordinating aviation-related field trips makes the students feel special," she said. "It gets them excited, and it builds confidence."

While these efforts add even more interest to the ACE program, they also form bonds with the community and with CAP. "It aids the teachers but also increases wider involvement and engagement in the schools, which is beneficial to all," Mallett said.

ACE is also strengthening CAP's relationship with the Air Force Association. "AFA is our strongest STEM partner, as it has a similar aerospace education mission, so we reached out to the association in the beginning," Mallett said. "ACE has enjoyed such strong support from the AFA; many AFA chapters and CAP squadrons are collaborating on engagement with the ACE program schools and teachers."

For example, local CAP squadron pilots come into Tucker's classroom to give flight lessons to her students using flight simulators obtained through a CAP STEM grant.

AFA has also provided grant money to CAP to use in the ACE program, including funds for the annual ACE awards, which recognize the work of standout ACE educators and students. AFA has provided funding for unique ACE shirts for the participants, too. “The ACE program has solidified the alliance between all of CAP and AFA, which is exciting,” Mallett said.

Maintaining a close-knit connection between ACE and local CAP units is particularly important, since another ACE purpose is to foster interest in CAP’s cadet program.

“ACE was designed to serve as a feeder program for the cadet program,” Mallett said. “Squadron adults and cadets are working with fifth- and sixth-grade ACE students to provide awareness of and interest in the cadet program. We have also had wing commanders, region leaders and other top-level CAP leaders engage with ACE schools.”

Building the cadet program was also the inspiration behind ACE’s architecture, which was modeled on the program’s focus on aerospace, physical fitness and character. Character education messages are embedded throughout the ACE lessons.

“Character education and physical



ACE students at Wetumpka Elementary in Wetumpka, Alabama, enjoy experimenting with parachutes. Photo by Susan Mallett,

CAP National Headquarters

fitness are both crucial in developing the next-generation STEM workforce,” Mallett said.

While ACE includes a pre- and post-test for each grade level that indicates exactly how well the program works, no hard numbers are available on how many students participating in ACE end up as CAP cadets. But Mallett sees a strong link.

“We haven’t been able to track this in cadet registrations, but anecdotally, we do know that there are ACE students becoming cadets,” she said. “There is a strong connection to CAP, and we know it’s working when it

comes to better outcomes for students.”

Mallett continually hears success stories that bear this out. Ninety-eight percent of ACE teachers say the ACE program skills fit well with the content skills they have to teach. “We know that ACE days are days that students are much less likely to miss school, and it’s also been shown to decrease behavior issues,” Mallett said.

And the future of ACE is moving beyond the school walls and school hours. After-school, summer, church and museum ACE programs are now offered.

“It’s really exciting to see ACE expanding and impacting students academically, morally and physically,” Mallett said. “If our program continues to help introduce young students to potential aviation and/or other STEM-related careers, we will view our efforts as successful.” ▲

MANN & SONS AG AVIATION
AERIAL APPLICATORS

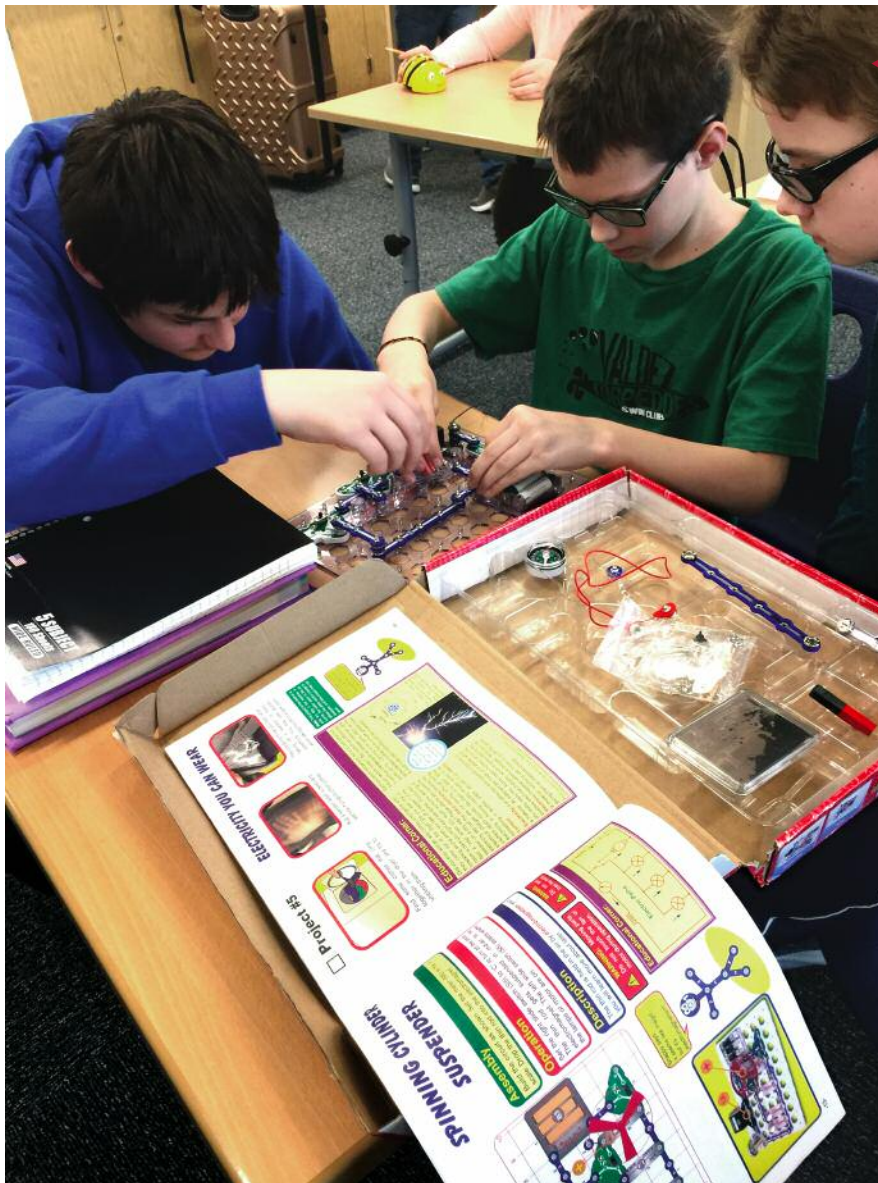
Willows Airport • 175 County Rd. G
 Willows, California 98988

(530)
934-5786
 Fax: 530-934-5380

SKYPARK
 WADSWORTH • OHIO

Learn to Fly! Flight Instruction
330-334-9921 Basic & Advanced

www.flyskypark.com 3071 Greenwich Rd.
 Wadsworth, OH 44281



Students at Valdez Middle School enjoy hands-on fun with one of CAP's 15 STEM Kits, which was provided by 1st Lt. Lynda MacPherson and the Alaska Wing aerospace education program. Valdez is a small fishing community in southern Alaska at the head of a fjord on the eastern side of Prince William Sound.

Probably not many CAP aerospace education presentations get nixed by an earthquake — but that's what happened to 1st Lt. Lynda MacPherson of the Alaska Wing in November. She was about to give a presentation on CAP's aerospace education and "Cadets at School" programs at the Afterschool Network Conference, when a magnitude 7.2 earthquake struck north of Anchorage.

That's just one of many challenges MacPherson takes in her stride as director of aerospace education in the Land of the Midnight Sun. Challenges to achieving successful AE outreach include the weather as well as the remoteness of many locations.

"I've had to unfortunately cancel or reschedule visits to areas because the weather made it impossible to fly into, or the remoteness makes using a CAP aircraft difficult," MacPherson said. "For those areas, I've sometimes been able to use video conferencing to get the information to those village teachers."

She has made tremendous strides since joining Civil Air Patrol in September 2017, when she started dating retired U.S. Air Force noncommissioned officer Derk MacPherson, who was the Polaris Composite Squadron commander. Derk MacPherson, now a CAP lieutenant colonel serving as the

Every Wing Needs a Lynda MacPherson

Alaska's Director of Aerospace Education Excels in Her New Role

By Sheila Pursglove

Alaska Wing's vice commander, encouraged her to come to a few meetings.

The couple, who wed in March 2018, started the Mat-Su Composite Squadron in Wasilla at the beginning of August 2017 with only 17 members. The squadron, where Lynda MacPherson serves as commander, has since grown to 55 cadets and 22 senior members. Its cadet corps is the largest in the Alaska Wing, which overall has 498 senior members and 259 cadets.

"I enjoy seeing the cadets move through the program and how much they've changed in just a few months of being in CAP," MacPherson said. "I also enjoy seeing our senior members stepping up and working with the cadet program to make it grow."

From small beginnings, MacPherson has made tremendous headway in aerospace education outreach.

"The most rewarding benefit of being DAE (director of aerospace education) is getting to bring this remarkable program to our Alaskan educators and students," she said. "Seeing the excitement in the students and teachers when they get their STEM Kits, or I'm doing a STEM activity, is priceless for me."

According to Debbie Dahl, aerospace education program manager at CAP National Headquarters, the aerospace education member (AEM) numbers from Alaska are soaring.

"Lynda has done some incredible things as director of aerospace education in a few short months," Dahl said. "She became DAE the 10th of October, and Alaska had 81 aerospace education members as of Oct 1. As of March 25, they have 350 AEMs. She has worked diligently with schools and teachers to help them get their curricu-

lum and STEM Kits once they join.

"We would love to have a Lynda MacPherson in every wing who truly understands that when you get a teacher excited about what CAP has to offer, then all students benefit greatly."

MacPherson's most rewarding outreach effort to date has been her success in getting several educators with the North Slope Borough School Dis-

(Teacher Orientation Program) flights and AEM/aerospace education officer workshops throughout the year.

"Internally, I'd like to see more cadets earning their STEM badges, and I'd like to organize AE weekend events for both cadet and senior members," she said.

One sad challenge in the state known as the Last Frontier is the tragedy of



Students attending the Bristol Bay K-12 School test the candy parachutes they made after MacPherson's "Uncle Wiggly Wings" presentation. Like many cities in Alaska, Bristol Bay is accessible only by boat or plane.

trict, headquartered in Utqiagvik, who teach in remote locations at the top of Alaska, signed up as AEMs.

"The school district has been so accepting of the CAP program," she said.

"In fact, they flew in nine educators and asked that I put on a half-day workshop with them to go over the AEM and Cadets at School programs.

"All of the schools, home schools and various youth organizations I visit are always rewarding for me."

MacPherson's external goals are to promote AE/STEM and to host TOP

teenagers taking their own lives.

"Teen suicide is so incredibly high in Alaska, especially with our long winters and the remoteness of villages throughout the state," MacPherson said.

"The Cadets at School program is an exceptional way to help build the leadership skills, character development and overall self-esteem of these young Alaskans," she said. "When I go out to rural areas I always promote the Cadets at School program and how it's an excellent way to help reduce the suicide rate of our Alaskan youth.

MacPherson receives the CAP Meritorious Achievement Award from the Pacific Region's commander, Col. Jon Stokes (left), and the interim Alaska Wing commander, Col. Tim Hahn. In her short time as Alaska Wing's director of aerospace education, she has more than tripled the number of aerospace education members serving in the state, greatly enhancing the aerospace education program's outreach.



she received the CAP Meritorious Achievement Award from Cols. Jon Stokes, Pacific Region commander, and Tim Hahn, Alaska Wing interim commander, for her work in aerospace education.

She is grateful to Lt. Col Nick Ham, the Pacific Region deputy chief of staff for aerospace education, who inspired her to move forward in the AE field

“I’m currently working with a few native corporations to see about getting the cadet program started in rural villages and how much it can help combat the suicide rate and to also develop young Alaskans into leaders of tomorrow.”

MacPherson, who enjoys flying with her husband, retired from the health care field in 2017 after 30 years of doing medical billing and coding. A native of Danville, Illinois, who grew up in San Jose, California, she has made Alaska her home since 1991. She lives in Wasilla, a city in Matanuska-Susitna Borough with about 10,000 residents, making it the sixth-largest city in Alaska.

Her blended family includes Katelyn, 25; Sierra, 23; Hunter, 22, a member of the Alaska National Guard who went through Air Force ROTC in high school; stepdaughters Melanie, 18, and Megan, 20, who is also a CAP member; and two grandchildren she adopted, 8-year-old Isabella and 4-year-old Aiden.

“They keep me plenty busy,” she said. “I’ve taken on teaching CAP’s ACE [Aerospace Connections in Education] program at my granddaughter’s school and enjoy watching the students learn new ways to have fun with STEM.”

MacPherson recently returned from Kauai, Hawaii, after attending the Pacific Region Command Call. While there

when the two met at CAP’s National Conference in Anaheim, California, in August 2018. “Without his guidance and encouragement, I wouldn’t be where I am today,” she said.

Her husband has also played a huge role in her success. “He’s been so extremely helpful and supportive of my AE outreach, letting me bounce ideas off him and helping me fine-tune my outreach,” she said.

“He says he knows more about AE now than he ever did, and he started as a cadet many years ago,” she added with a smile.

MacPherson also has received tremendous support from Hahn. “He’s been extremely supportive in my AE outreach and has asked me to work on a few more projects this year — and continues to set the bar high for me to continue reaching for new levels,” she said.

Brig. Gen. Ed Phelka, CAP’s national vice commander, said the Alaska Wing has one of the strongest external aerospace education programs he has ever seen.

“Lt. MacPherson is inspirational,” he said. “When I visited the Alaska Wing Conference and spent time talking with her about the Alaska Wing AE program, I was highly impressed.

“Lynda truly makes a difference in people’s lives. Her program is so strong, teachers call her and invite her to their meetings to talk about CAP and aerospace education.”

MacPherson is modest about her achievements. “I’m actually a very quiet person who does not like being put in the front,” she said. “I’m satisfied seeing others benefit from my help while standing on the sidelines.

“I don’t consider what I’ve done as extraordinary, because the AE program is such a remarkable program and I’m excited being able to share it with so many others who can benefit from the program like I have. I’m honored that Gen. Phelka is pleased with the work I’ve done, and his words of thanks are greatly cherished.” ▲

HAWTHORNE
GLOBAL AVIATION SERVICES
www.hawthorne.aero

- FBO SERVICES
- JET CHARTERS
- AIRCRAFT MANAGEMENT
- AIRCRAFT MAINTENANCE

5815 Mitchell St.
Sioux City, IA 51111
712. 258.6563



Maj. Darrell Tade of the Kentucky Wing conducts positioning drills with his Endurance Quad UAS as Lt. Col. Austin Worcester looks on.

CAP's small UAS program:

It's the Future

By Jennifer S. Kornegay



The use of drones, or Unmanned Aerial Systems (UAS), for myriad purposes continues to grow, and right alongside this increase is a never-ending stream of technological advancements pushing the speed, accuracy and efficiency of these systems even higher and making them valuable tools for Civil Air Patrol.



Left, Cadet Senior Master Sgt. Joshua Rich uses a Phantom 3 simulator as a part of CAP's sUAS operations training. Right, Cadet Lt. Col. Justin Smith lands his sUAS on a target.

With its new small UAS (sUAS) program, CAP is once again on the leading edge, according to Lt. Col. Austin Worcester, senior program manager. "CAP is breaking new ground with these aircraft, and we'll continue to," he said.

CAP is the largest operator of sUAS in the country, with over 1,200 Federal Aviation Administration-registered small UAS — a number that's on the rise. CAP is investing additional time and resources to expand the program, and things are moving even faster than anticipated, as Worcester explained.

"Our original goal was to have an sUAS response kit in every wing in CAP and have them started on the process to become mission-capable by 2020," he said. "We hit that goal in March 2019."

The program had its beginnings in 2015 in the aftermath of devastating tornadoes in Oklahoma. The U.S.

Department of Homeland Security's Science and Technology Division, in conjunction with the Federal Emergency Management Agency, was looking to enhance CAP's abilities for assistance with damage assessment and turned to sUAS. The drones worked wonderfully, and the result has been "truly game-changing," said Maj. John Ralph, Maryland Wing deputy chief of staff for operations.

"They give us such a huge advantage on one of our primary missions, photos for damage assessments after natural disasters," Ralph said.

While flying conventional aircraft to gather images requires waiting for appropriate weather, with a drone the threshold for what is safe and workable is much lower. "We can get out there faster, fly more and get the needed images and data to our customer almost immediately," Ralph said.

The primary product CAP is

generating with its sUAS is geo-referenced orthomosaic images that provide near real-time information to emergency responders. "They are very high-quality," Worcester said. "One sUAS we are using has the ability to fly with 6K-resolution cameras. That lets us identify something as small as a cigarette lighter on the ground."

Ralph has been flying sUAS for several years. "One we use is a quadcopter. It's fairly small; it only weighs about 4½ pounds and rotor tip to rotor tip measures about 12-14 inches across." He compared the control box to those used to fly radio-controlled airplanes.

"There are two sticks and several buttons for controlling the camera, and you hold it in your hands and drive with your thumbs," Ralph said. An attached Samsung tablet provides visual indications of altitude, speed and distance as well as the camera's view.

"You can manipulate the tilt of the camera in addition to moving and rotating the drone itself, which gives you multiple perspectives and angles," he said.

When it comes to teaching others how to use sUAS, Ralph stressed that it's not hard, but he said already being a pilot makes it easier. "We're already familiar with each hand doing a different thing," he said. "The biggest challenge is teaching people how to visualize what is going on with the drone, what left is, what right it. That's easy when the drone is flying away from you, but bringing it back is a little harder at first."

Some trainees have also experienced trouble with depth perception. "When you're in a cockpit flying a plane, you can see what is going on, but it's different with a drone, and that can

be an issue when trying to land it,” Ralph said.

While small drones are proving an integral part of CAP’s emergency services and disaster assessment, they also line up nicely with CAP’s other missions, too, Worcester said.

“The big popular and visible one is emergency services,” he said. “But they’re also a great fit for our aerospace education mission.”

Two of the STEM Kits that CAP provides for teachers, students and cadets feature quadcopters, one micro and one medium-sized. Another provides a radio-controlled airplane, still another a Raspberry Pi computer kit. “And one of our UAS camera systems is controlled by a Raspberry Pi computer,” Worcester said.

The program will also be able to allow cadet participation in missions. “That’s another big advantage of the drones, and it’s a win-win,” Ralph said. “Cadets [16 years or older] can be operators of these drones, and in almost all missions that is going to be a great value because it increases our force size.”

And cadets younger than 16 can be trained to be sUAS technicians.

Worcester echoed Ralph. “We’re creating pathways to get cadets listed



Maj. Marc Sobel (left) of the California Wing and Capt. Carl Wiley of the Washington Wing are all smiles after successfully completing their sUAS sorties.

as UAS pilots with the FAA, and then preparing them to go on to a university with a UAS engineering program — and there are many, including the Air Force Academy,” he said.

Currently, CAP is flying several different types of drones: hexcopters, some kit-built quadcopters and a fixed-wing model able to fly for up to 90 minutes.

In the future, Worcester believes drones will become an increasingly

larger part of CAP’s search and rescue missions. “I hope by 2023 to have thermal imaging capabilities on some of them,” he said.

Ralph also sees them playing a key role in search and rescue missions. “I’d like to have a drone team embedded with a ground team to provide immediate close air support in any sort of a search,” he said. “As long as we keep the drone in line of sight of the operator, we can go to whatever altitude we need and go some distance ahead to provide better info on routes to the objective.”

While much progress has already been made, more remains to be done. Specific guidelines for mission capability as well as flight evaluation check-offs are still being developed, though they are being used in draft form.

Meanwhile, the fledging program has hit milestones and accomplished a lot in a short time. Once a wing has five UAS pilots and five UAS technicians, it gets initial operational capacity from CAP; once it reaches 10 of each, it’s granted full operational capacity.

“We’ve already got multiple wings at that point, giving us a regional and national operational capacity right now,” Worcester said. ▲

An advertisement for ROTC Scholarship Consulting. The top half features a blue sky with a white fighter jet flying. Below the jet is a photograph of a large white aircraft carrier at sea. The text on the right side of the ad reads: "ROTC SCHOLARSHIP CONSULTING", "Expertise to help you win an ROTC Scholarship!", "Robert Kirkland, LtCol, U.S. Army (Retired) Spaatz #694", "Professor of Military Science: Claremont McKenna College (2006-2009) and University of Southern California (2010-2013)", "Website: www.rotcconsulting.com", "Telephone: 909-332-1352", and "Check out my books on Amazon!". There are several logos, including the ROTC crest and a circular logo at the bottom left.

An advertisement for Paragon Aircraft Service, Inc. The top half features the word "PARAGON" in large, bold, black letters, followed by "AIRCRAFT SERVICE, INC." in smaller, bold, black letters. Below this is the Cessna logo (a red and blue stylized 'C') and the Cirrus Aircraft logo (a black square with a white stylized 'C'). The text in the middle reads: "19 Wright Way, Fairfield, NJ 07004", "www.paragonaircraft.net", and "972-575-0364". At the bottom, it says "AUTHORIZED PARTS & SERVICE".

MEMORIAL GIFTS & GIFTS OF HONOR

GIFTS MADE FROM
SEPTEMBER 2018-FEBRUARY 2019

IN HONOR OF:

Lt. Col. Patricia L. Kemp
by Mr. Robert Fineman

Maj. James Orgettas
by Ms. Julie Orgettas

Mr. and Mrs. Marion and Nick Orgettas
by Mr. Shaun Spadafora

Mr. Richard "Dick" Wharton
by Mr. Tracy Byington

1st Lt. Harlan Bloom and Ms. Michelle Ziemann
by Ms. Tami Kramer

IN MEMORY OF:

Capt. Richard Abbate
by Ms. Cassandra Casey

Maj. Richard Finkelstein
by Fresno Composite Squadron 112, Civil Air Patrol

Maj. Leroy Haws
by the Deges Family
by Dr. Timothy Reynolds

Mr. William L. Mack
by Teterboro Users Group
by Tishman Speyer

Mr. Jim Mallett
by Mrs. Susan Mallett

Maj. Stephen J. Mayer
by Ms. Christina Lenti
by Ms. Kristin Martinez
by Mr. Taylor Surface
by Miss Candice Von Ins

Lt. Col. Edward Myzie
by the Twin Pine Composite Squadron, Civil Air Patrol

Mr. William Charles Pecknik, Sr.
by Mr. Robert Buckheit
by Mr. and Mrs. Melissa and Tod Eliot
by Ms. Sharon McCarrick
by Mrs. Betty Moretti

Mr. Thomas Prickett
by the Indiana Wing, Civil Air Patrol

To dedicate an online gift in honor or memory of someone special, visit www.gocivilairpatrol.com/tributes

Civil Air Patrol-Tributes
105 S. Hansell Street, #714 • Maxwell AFB, AL 36112
tributes@gocivilairpatrol.org • 833-426-4227

Family's memorial scholarship helps cadets learn to fly

By Sheila Pursglove

Lt. Col. William E. Hanna Jr., a U.S. Air Force veteran and longtime Civil Air Patrol member, served in both peace and war. After his death in 2011, his family looked into creating the Lt. Col. William E. Hanna Jr. Memorial Flight Scholarship to help one cadet each year earn a private pilot's certificate.

"We wanted to do something to honor him," said Col. John Knowles, husband of Maj. Teri Hanna Knowles, one of Hanna's seven daughters. "He spent his life serving others while at the forefront of innovation. Teri and I had the idea of establishing a scholarship in his name. While he wasn't a pilot, he was a navigator in World War II, and he loved aircraft."

Two of Hanna's daughters — Patty Hanna Fourcade and Teri Hanna Knowles — have been the principal donors.

"So far two cadets have received the scholarship, and we're delighted that both have completed their flight training and hold a private pilot's certificate," Col. Knowles said. The family has also enjoyed getting letters and photos from the two cadets — Cadet Col. Caleb Cheshire of the Oregon Wing's Medford Composite Squadron, the 2017 recipient, and his 2018 counterpart, Cadet 2nd Lt. Bryce Moran of the Florida Wing's Seminole Composite Squadron.

Until CAP's new Cadet Wings program launched, Knowles said, this was the only scholarship set up to fully fund a cadet's completion of their private pilot's certificate after soloing.

The scholarship provides up to \$5,000 for cadets who have graduated from a national, regional or wing-level flight academy by flying solo and who plan on continuing in an aeronautical



This is William E. Hanna's flight school graduate photo. He went on to become a U.S. Air Force veteran and longtime CAP member. His family established a CAP scholarship fund in his memory.

LT. COL. WILLIAM E. HANNA JR.

spent two years as a navigator in World War II in the Pacific theater. Assigned to the Army Air Forces' Emergency Air Rescue Squadron, he flew numerous combat search and rescue missions along with intelligence duties.

With a bachelor's and master's degree in economics, his career included working at the Department of Defense, for NASA and for the Social Security Administration.

Hanna served for 38 years in the U.S Air Force. His last assignment was as a reservist assigned to the Civil Air Patrol, Middle East Liaison Region,

before retiring in 1981. He served in several advisory roles with CAP and as squadron commander of the Maryland Wing's Bethesda-Chevy Chase Cadet Squadron.

He also served as a city councilman and mayor of Rockville, Maryland, and as a Montgomery County councilman.

Hanna and his wife, Annette, had seven daughters, six of whom were CAP cadets.

Teri Hanna Knowles was the first female cadet commander of the Bethesda-Chevy Chase squadron. All three Knowles children — Michael, Rachel and Daniel — were CAP

cadets. Rachel, a CAP major, is the Maryland Wing's deputy chief of staff for cadet programs.

The legacy of service continues: One grandson, a graduate of the Air Force Academy, is an F-15C pilot and a colonel in the Massachusetts Air National Guard. Another is a Naval Academy graduate and a naval aviator flying the E-2D Advanced Hawkeye. Another will graduate from State University of Maritime College in May and has passed his U.S. Coast Guard licensing exams as a third mate. A granddaughter served as an aviation maintenance technician in the Navy.



President Gerald Ford (left) shares a laugh with William E. Hanna Jr., the namesake of a CAP flight scholarship that annually helps a cadet earn a private pilot's certificate.

field. The scholarship can be used for local flight training at an airport fixed-base operator or for training in a CAP plane with a CAP instructor.

“We think creating a memorial scholarship is a wonderful way to honor a specific person,” Knowles said. “Besides



Hanna (center) is pictured with his grandson, Daniel Knowles, and daughter, Teri Hanna Knowles. The occasion was a ceremony honoring Hanna with a Lifetime Achievement Award in Arts and Humanities from the Arts and Humanities Council of Montgomery County, Maryland. He was a supporter of the arts and was responsible for legislation supporting arts in public places as well as the major force behind building the Music Center at Strathmore, a nonprofit multidisciplinary arts center and presenting organization in Montgomery County.

opening the doors for a future career in aviation, scholarships help those who need financial help to finish a goal. They provide a tangible physical example of helping others that may, one day, encourage them to give back to help others.”

“Col. Hanna’s legacy lives on in his family and in the many good works he performed,” he added. “A center for innovation was named for him in Montgomery County (Maryland), and the foyer of the Strathmore Mansion,

part of the Strathmore Arts Center, is named in his honor. I think he would be most proud of the scholarship set up in his name that helps others.”

Knowles, who has served in many leadership positions in CAP, started working with CAP Chief of Philanthropy Kristina Jones and the development team of Donna Bass Maraman and Rebecca Stovall in 2018 after serving as Middle East Region commander.

“We’re expanding the CAP Alumni

Association, reconnecting with the millions of former members as well as looking for ways to help make a difference in our nation and in our members’ lives,” he said.

“Our family is fortunate to be able to share some of our success to help others. The development team is doing a lot of great things. It’s a real privilege to be able to help and to be a voice for anyone who is a member, an alumnus or just a friend of CAP.” ▲

Leave a Legacy to CAP

You can create a lasting legacy, investing charitable dollars directly in the future of cadets and aerospace education.

To set up a scholarship fund or for more information, visit www.gocivilairpatrol.org/giving, contact Kristina Jones at legacy@gocivilairpatrol.org or call us at 833-IAM-4CAP or 334-953-9003.

EARN YOUR WINGS
AT AVIATION CHALLENGE CAMP

AVIATION CHALLENGE CAMP
Located in Huntsville, Ala., Aviation Challenge Camp is a weeklong program that includes authentic fighter pilot simulations and interactive training in aeronautics – fixed wing, rotorcraft and unmanned aerial.

New for 2018:
Drones and Unmanned Aerial!

Visit spacecamp.com or call 1-800-637-7223 to register.

spacecamp.com/aviation

Are you at least age **70½**

Make a tax-free gift from your IRA by Dec 31!

How do you benefit?

- It counts toward your required minimum distribution (RMD) by the IRS
- You can donate any amount (max \$100,000 per person or \$200,000 per couple)
- The distribution is not counted as income = tax savings
- Make a positive impact for Civil Air Patrol in 2019

For more information, talk to your tax advisor, investment manager or contact Kristina Jones toll-free at 833-426-4227 or by email at legacy@gocivilairpatrol.org.

Reporting to Congress...

and other CAP legislative week activities in the nation's capital

By Steve Cox

Delegations from all 52 Civil Air Patrol wings were in Washington, D.C., on Feb. 28 for 2019 Legislative Day. About 500 members — nearly half of them cadets — gathered on Capitol Hill to brief members of Congress on outstanding CAP missions from the past year and thank them for their support.



Col. Rajesh Kothari (left) and other members of the Michigan Wing delegation pack the subway station en route to Capitol Hill, where they met with senators and representatives from the state. Photo by Susan Schneider, CAP National Headquarters.

As the U.S. Air Force auxiliary performing missions for federal government agencies and a nonprofit helping states and communities, CAP is an organization of “national interest” to Congress. Fiscal 2018 was a record year for CAP, with 158 lives saved and over 89,000 hours flown on a wide range of Air Force-assigned missions, including emergency response and disaster relief, homeland defense and homeland security, support for state and local programs and youth orientation flights. In addition, the organization helped 320,000 cadets

and non-CAP students learn more about aerospace and STEM careers. Eighty percent of those young people have expressed greater interest in seeking STEM careers because of CAP’s efforts.

“Civil Air Patrol saves the government tens of millions of dollars when supporting these critical missions with its own aircraft that average \$165 per hour versus thousands for military aircraft,” said Maj. Gen. Mark Smith, national commander and CEO, adding that CAP’s volunteer service to communities, states and the nation in the past year was valued at more than

\$187 million. “Overall, CAP’s return on the government’s investment is more than 4-to-1, which is an exceptional value,” he said.

Here’s a glance from just a few of the more than 400 meetings held on Legislative Day, as well as a look at other behind-the-scenes activities like Civic Leadership Academy, the Winter Command Council, ceremonies to honor the new commander and vice commander of the Congressional Squadron, the Spatz Association Mid-Winter Dinner and CAP legal officers’ annual appearance before the U.S. Supreme Court. ▲

Damon Penn, assistant administrator of the Federal Emergency Management Agency's Response Directorate, addresses members of CAP's Winter Command Council.

Photo by Susan Schneider, CAP National Headquarters



Cadet Capt. Alexander Pantaleo (left) of the Georgia Wing and Col. Deborah Pierce of the Nevada Wing pose for a photo with U.S. Rep. John Lewis, D-Ga., in the hallway of the Cannon House Office Building.



Members of the Arizona Wing delegation, including Wing Commander Col. Martha Morris (right), meet with U.S. Rep. Tom O'Halleran, R-Ariz. Other wing members (clockwise from left) are Cadet Chief Master Sgt. Kelci Knigge, Cadet 2nd Lt. Brandon Sarrasin and Capt. Gordon Helm.

Photo by Capt. Margot Myers, Arizona Wing



Civil Air Patrol members meet Gen. David Goldfein, the U.S. Air Force's chief of staff, before the Spaatz Association's Mid-Winter Dinner on March 2 in Washington, D.C. The event was the capstone of CAP's legislative week, during which members visited their congressional representatives to brief them on the Air Force auxiliary's missions. Photo by Lt. Col. Robert Bowden, CAP National Photographer



U.S. Sen. Joe Manchin, D-W.Va., shakes hands with Cadet Lt. Col. Nysha Hongpaisan before the West Virginia delegation's meeting with him. Later, Manchin was named vice commander of CAP's Congressional Squadron. Photo by Susan

Schneider, CAP National Headquarters



The Connecticut Wing delegation, led by Wing Commander Col. James A. Ridley Sr. (center), prepares to meet with one of its state's congressional representatives. With Ridley (from left) are Cadet Chief Master Sgts.

Christopher Reed and Brion Henry, Cadet Capt. Liam Waldron and Cadet Chief Master Sgt. Daniel Kim. Photo by Susan Schneider, CAP National Headquarters

U.S. Sen. Tom Carper, D-Del. (right), a former CAP cadet, poses for a photo with cadets from the Delaware Wing delegation — (from top down) Cadet Capt. Trey Ketzner, Noure Sydney and Travis Tuson, Cadet 1st Lt. William Robert Stanton and Cadet 2nd Lts. Kylee Masten and Megan Traver.



U.S. Sen. Shelley Capito, R-W.Va., greets members of the West Virginia delegation in the hallway outside her offices on Capitol Hill. Photo by Lt. Col. Robert Bowden, CAP National Photographer



Cadet Lt. Col. Jacquelyn Hasha of the Oklahoma Wing shakes hands with U.S. Sen. James Inhofe, R-Okla., as Lt. Col. David McCollum looks on. Photo by Susan Schneider, CAP National Headquarters



U.S. Rep. Lisa Blunt Rochester, D-Del., shakes the hand of Cadet 1st Lt. William Robert Stanton during her meeting with the Delaware Wing delegation.



Members of CAP's Southwest Region discuss evolving missions with Nick Runkel, military legislative assistant, and Levi Hofts, military fellow, for U.S. Rep. Steve Womack, R-Ark. Photo by Lt. Col. Robert Bowden, CAP National Photographer



CAP National Commander Maj. Gen. Mark Smith (left) and members of the Montana Wing meet with U.S. Sen. Steve Daines, R-Mont. Photo by Susan Schneider, CAP National Headquarters

Lt. Col. Mark Davalos (left) of the Michigan Wing waits for a Legislative Day appointment with one of his state's representatives. Accompanying him are Cadet Airman Genevieve Grace Jones and Cadet Chief Master Sgt. Jared Staib.





U.S. Sen. John Boozman, R-Ark., speaks with Cadet Capt. Zachery Probus of the Arkansas Wing. Photo by Susan Schneider, CAP National Headquarters



Christopher Romero, defense fellow for U.S. Rep. Ken Galvert, R-Calif., reviews CAP's *Report to Congress*. Romero is a former CAP cadet technical sergeant. Photo by Lt. Col. Robert Bowden, CAP National Photographer



Cadet Maj. Noah Jones and Cadet 2nd Lt. Baylee Beightol admire a challenge coin display in the office of U.S. Rep. Trent Kelly, R-Miss. (center). Photo by Lt. Col. Robert Bowden, CAP National Photographer

Cadet 1st Lt. Katherine Tostenson of the Minnesota Wing presents U.S. Rep. Dean Phillips, D-Minn., with his membership certificate for CAP's Congressional Squadron, which carries with it the honorary rank of lieutenant colonel. The presentation was made in the Longworth House Office Building on Capitol Hill. Photo by Lt. Col. Robert Bowden, CAP National Photographer



Members of the Tennessee Wing delegation pose for a photo with U.S. Rep. Tim Burchett, R-Tenn. (third from left), in the hallway outside his offices in the Longworth House Office Building. With Burchett (from left) are Wing Commander Col. Dent Young, Southeast Region Commander Col. Barry Melton, Maj. Scott Alley, Cadet Lt. Col. Jonah Torp-Pedersen and Lt. Col. Morgan Torp-Pedersen.

Cadet Chief Master Sgt. Katia Ann Van Horn prepares to capture a memento of her Capitol Hill visit, photographing her fellow cadets, (from left) Cadet 1st Lt. Reagan Marie Hess, Cadet Senior Airman Zachari Holt and Cadet Chief Master Sgt. Nicholas Handza. The cadets were part of the Missouri Wing's Legislative Day delegation.



CIVIC LEADERSHIP ACADEMY

and the power of relationships on full display in the nation's capital

By Lt. Col. Brenda A. Reed

February marked the 16th year of Civic Leadership Academy, Civil Air Patrol's national special cadet activity in Washington, D.C., that introduces cadets to the workings of the government. Often hailed as "not just another field trip," CLA cadets are exposed to all three branches of government as well as the agencies within the branches.

In a year when CAP is celebrating partnerships, graduates returned to CLA eager to give back to the activity that offered motivation and encouragement for their respective government careers. Speaking to the current class, the graduates offered not only information but also insights on how cadets can pursue their goals and dreams of service.

The CLA Class of 2019 consisted of 23 cadets from around the nation and one from an overseas squadron in Japan. Many of these cadets are considering careers in politics, government service and even the presidency. The majority had been to Washington before on family vacations, but this time they came to the nation's capital seeking knowledge, guidance and experiences to assist in making life-changing decisions. Coming to their aid were former cadets and CLA graduates who had similar dreams.

Maj. Matthew Frame, a 2011 participant in the event, returned to CLA staff for a second year. As a law student, Frame rewrote the online curriculum that cadets completed before arriving in D.C. His experiences in CLA allowed him to connect with the cadets while also offering expertise as a law student.

Frame, CLA deputy director and faculty adviser for this year, began the weeklong activity by briefing the cadets on the judiciary and ended it by leading a post-graduation walking tour of the Washington memorials at night for those brave enough to head out into the cold. Each day he supported and inspired the cadets while bringing fun to the classroom with rousing knowledge competitions.

This year the historically long federal government shutdown provided challenges requiring some last-minute changes to the schedule. What seemed a negative at first



Three CAP cadet lieutenant colonels — (from left) Harley Jones, Annika Walukas and Sara Schofield — have a bit of fun at the U.S. Air Force Memorial during the 2019 Civic Leadership Academy. Photos by Lt. Col. Brenda A. Reed, Maryland Wing



As part of their CLA experience, Cadet Maj. Tomas Maldonado (center) and Walukas (right) salute the Tomb of the Unknowns alongside the honor guardsman at Arlington National Cemetery.

turned into a positive as former cadets used their partnerships with government agencies to fill out the schedule and open doors to the CLA participants.

Despite the cancellation of the group's scheduled day at the State Department, Lt. Col. Steve Foster came to the CLA classroom and not only spoke with the cadets about the



Cadet Lt. Col. Mathias Gilliam reflects on the names inscribed on the Vietnam Veterans Memorial.

CLA cadets listen intently as a docent explains the art and architecture of the U.S. Capitol Rotunda.



department's mission but also led a lively discussion of his many experiences overseas with State. Cadets gained an appreciation for cultural differences as Foster described living in a foreign country, acquiring supplies and dealing with locals.

Lt. Col. Paul Cianciolo, former cadet and current vice commander of the National Capital Wing, hosted the cadets at his Federal Aviation Administration workplace for a briefing on the role of regulatory agencies, using FAA safety as a backdrop. The high-interest aviation theme and Cianciolo's knowledge of CAP aided the cadets'

understanding of how agencies create regulations based on laws enacted by Congress.

The cadets listened to oral arguments at the U.S. Supreme Court, organized by Lt. Col. Elliott Korona, former cadet and current Virginia Wing legal officer. Also, armed with prior knowledge about the court from their CLA homework, they listened to a briefing on the two oral arguments scheduled by 2007 CLA graduate and lawyer Jake Reed. The next morning, cadets entered the courtroom with an understanding of the cases and were able to follow the lively exchange

between the justices and lawyers.

Following oral arguments and a docent-led tour of the court, the cadets had a one-on-one session with Scott Harris, clerk of the Supreme Court. Harris discussed his role as clerk, gave career advice and offered cadets the opportunity to ask questions. For those looking to go into law, this was a rare treat.

Several former CLA graduates met up with the group and spoke during the evening classroom sessions, inspiring this year's class with career planning ideas and tips for using their CLA experiences in the future. Capt. Kathleen Crockett, Class of 2009, offered some ideas on enjoying the CLA week while Capt. Jared Mohler, Class of 2012, talked about his time in CLA and beyond in his current government position.

Cadet Col. Laivi Grossman, CAP's most recent recipient resident of the organization's top cadet honor, the Gen. Carl A. Spaatz Award, stopped by to share how his 2017 CLA experience influenced his college and career choices, reflecting on poignant memories from his CLA class.

Civic Leadership Academy offers cadets the opportunity for an up-close and personal look at government, including once-in-a-lifetime tours such as the CIA. Once again, partnerships aided the cadets' opportunity as a current CAP member planned the visit, which can be a logistical headache to make happen.

In previous years, similar relationships have enabled cadets to visit the FBI and National Security Agency. As with most places 24 sharp cadets go, they attract attention, and the CIA was no different. During lunch, a former CAP cadet now working at the

agency approached the group and, after getting acquainted, offered to partner with them for future CLA tours.

CLA isn't all study and briefings, since cadets have opportunities to explore D.C. and its museums, monuments and memorials. On the first full day of CLA, cadets lay a wreath at the Tomb of the Unknowns in Arlington National Cemetery, a moving experience for all. Two cadets are selected to assist the guard, an honor

Memorial and the U.S. Air Force Memorial. At each location, the cadets were exposed to another aspect of the nation's history and governance, providing them with a unique perspective and memories to take back home, share with their squadrons and bring to mind as they continue to pursue college and career options.

As the Maryland Wing's Cadet Capt. Zara Williams said, "I have been



The 24 cadet members of the Civic Leadership Academy Class of 2019 pose for a photo in front of the U.S. Capitol.

neither will ever forget. This year the cadets were Cadet Lt. Col. Annika Walukas from the Wisconsin Wing and Cadet Maj. Tomas Maldonado from the Texas Wing.

"The opportunity to honor those who have given everything in service of the United States through laying a wreath on behalf of CAP was one of the most humbling and solemn moments of my life," Maldonado said. "The professionalism of the tomb guards and the honorable reverence for the Unknown Soldier was beyond awe-inspiring. This experience was truly unforgettable."

Filling out the schedule were visits to the Pentagon and 9-11 memorial, Government Accountability Office, Library of Congress, National Archives, U.S. Capitol, the Women's Military

to D.C. multiple times, but this has been the best and most memorable visit I've had so far. I feel like now I have a better understanding of our nation's government than most my age, and I have had amazing once-in-a-lifetime experiences!"

Throughout the week, the cadets learned about partnerships, but clearly the most important relationships were the friendships they formed among themselves. "Civic Leadership Academy has given me wonderful insight on what it really takes to lead a nation," Maldonado said. "The experiences I had at this activity have broadened my perspective on leadership, liberty and the democratic process. The memories, friendships and lessons from my time at CLA will certainly last a lifetime." ▲

2019 Academy Participants

Alabama Wing

Bessemer Composite Squadron —
Cadet Maj. William Jenson Sawyer

California Wing

Los Alamitos Cadet Squadron 153 —
Cadet 1st Lt. James Anhlinh Nguyen

Florida Wing

Patrick Composite Squadron —
Cadet Capt. Jordan J. Wiggins

Illinois Wing

Col. Shorty Powers Composite Squadron —
Cadet Lt. Col. Sara Jordan Schofield

Iowa Wing

Davenport Composite Squadron —
Cadet 1st Lt. Anton John Joseph Dahm

Maryland Wing

Bethesda-Chevy Chase Composite Squadron —
Cadet 2nd Lt. Richard P. Baker
College Park Composite Squadron —
Cadet Capt. Rebecca Akhigbe
Col. Mary S. Feik Composite Squadron —
Cadet Capt. Zara Williams
Towson Composite Squadron —
Cadet 1st Lt. Benjamin Mullen
Upper Montgomery Composite Squadron —
Cadet 1st Lt. Katherine Weinhold

Michigan Wing

Van Dyke Cadet Squadron —
Cadet Lt. Col. Harley A. Jones

Minnesota Wing

Anoka County Composite Squadron —
Cadet Maj. Iva Jean Hammitt-Kess and
Cadet 2nd Lt. Edward Daniel Christian
Viking Composite Squadron —
Cadet 1st Lt. Katherine Lee Tostenson

National Headquarters

Yokota Cadet Squadron —
Cadet Capt. Rowan Goble

New Hampshire Wing

Greater Nashua Composite Squadron —
Cadet Capt. Elizabeth Tena Forbush

New York Wing

Canandaigua Composite Squadron —
Cadet 1st Lt. Gavin W. Davis

South Carolina Wing

Low Country Composite Squadron —
Cadet 1st Lt. Lydia Eudy

Texas Wing

Black Sheep Composite Squadron —
Cadet Capt. Melina Peters
Delta Composite Squadron —
Cadet Maj. Tomas Fernando Maldonado

Wisconsin Wing

Col. R.C. Jaye Memorial Composite Squadron —
Cadet 1st Lt. Sophie Thompson
Eagle River Composite Squadron —
Cadet 2nd Lt. Billie Ruth Botes
Eau Claire Composite Squadron —
Cadet Lt. Col. Annika Jeanette Walukas
La Crosse Composite Squadron —
Cadet Lt. Col. Mathias Duane Gilliam



Abraham, Manchin to Lead CAP's Congressional Squadron

By Steve Cox

Civil Air Patrol's "flying congressman," U.S. Rep. Ralph Abraham of Louisiana, has been tabbed to command the U.S. Air Force auxiliary's Congressional Squadron, based at Joint Base Andrews, Maryland.

Abraham, R-La., becomes only the fourth commander in the 51-year-old history of the squadron, succeeding U.S. Sen. Tom Harkin of Iowa. Previous commanders were Reps. Nick Rahall of West Virginia and Lester Wolff of New York.

Known in his home state of Louisiana and in CAP circles for his dedication to the military, aviation and volunteerism, Abraham flies often in service to his country when not at work on Capitol Hill representing Louisiana's 5th Congressional District in the U.S. House of Representatives. A veteran of the National Guard, he now flies for CAP as well as the U.S. Coast Guard Auxiliary.

Serving along with Abraham will be Sen. Joe Manchin, D-W.Va., as the squadron's new vice commander. Manchin was a key sponsor and supporter of legislation to present the Congressional Gold Medal to CAP in 2014 for its founding members' service during World War II.

Both men were promoted to colonel and sworn in during legislative week



Brig. Gen. Ed Phelka (left), CAP national vice commander, and Maj. Gen. Mark Smith, national commander and CEO, hold the colonel's shoulder boards signifying U.S. Rep. Ralph Abraham's new rank as commander of CAP's Congressional Squadron.

Photo by John Swain, CAP National Headquarters

activities in the nation's capital.

"Throughout my life, I've always sought opportunities to serve," Abraham said. "The Civil Air Patrol has allowed me a chance to give back to my country and assist our active duty service members. I am grateful for the service this organization provides, and I am very honored to have been tabbed with this command."

"I am honored to be able to lead the Congressional Squadron and support this admirable organization," Manchin said. "As a pilot myself, I look forward to watching the accomplishments of the Civil Air Patrol as pilots and as citizens as they continue to serve their country."

The Congressional Squadron provides members of Congress and

staff an opportunity to support CAP nationwide as well as in their district/state. For those interested, it gives a chance to participate in the CAP program.

"The majority of our members have joined to show support for Civil Air Patrol, especially in their home states," said John Swain, CAP's director of government relations and a longtime member of the squadron. "Others, however, have become active participants in the CAP program over the years, some even becoming rated mission aircrew."

The squadron operates CAP Cessna 182 planes on public missions and consists of 200-plus congressmen and congresswomen and staff as members. The squadron participates in vital CAP missions, including homeland security, search and rescue, disaster relief, air defense training and photo reconnaissance.

"Some of our missions have been in support of other CAP units," Swain said, "and we have, on occasion, provided practice targets for the U.S. Air Force F-16s that defend our nation's capital as part of Fertile Keynote missions.

"We've also flown with other members of Congress and staff, Air Force generals and FBI special agents, among others," he said. ▲

Gen. Goldfein Reunites with 1999 Rescuer

By Lt. Col. Morgan Torp-Pedersen



Gen. David L. Goldfein, chief of staff of the U.S. Air Force, received a surprise at the 17th annual Spaatz Association Mid-Winter Dinner and Awards Gala in Arlington, Virginia, held during the closing day of CAP legislative week activities in the nation's capital.

It happened as U.S. Army Maj. Lee Chase spoke about the importance of relationships to Civil Air Patrol members gathered from across the country for the event.

"I met Gen. Goldfein several years ago at a retirement ceremony he initiated for a good friend of mine. This friend of mine was in Civil Air Patrol as a cadet and graduated from Civil Air Patrol's pararescue orientation course about the same time frame that I did," Chase said.

"This friend went on to rescue Gen. Goldfein in 1999 in Serbia. He then went on to become a pararescue chief and was the first PJO (Parares-

cue and Survival Orientation Course) graduate to become a pararescue chief."

Retired U.S. Air Force Chief Master Sgt. Jeremy Hardy, who served as a cadet in CAP's Indiana Wing, walked toward the stage to once again reunite with Goldfein before the four-star general gave his keynote address.

"I've been the chief for about 2½ years, and this is the best surprise I have ever had," said Goldfein, whom Hardy rescued after Goldfein's F-16CJ fighter jet was shot down over Serbia early May 2, 1999.

"Under the steadfast leadership of [Civil Air Patrol National Commander and CEO] Maj. Gen. [Mark] Smith

Retired U.S. Air Force Chief Master Sgt. Jeremy Hardy (right) reunites with Gen. David Goldfein, chief of staff of the U.S. Air Force, before Goldfein's keynote address at the 2019 Spaatz Association Mid-Winter Dinner and Awards Gala on March 1 in Arlington, Virginia. Hardy — a former CAP cadet who went on to become a pararescue chief — was the team leader who helped rescue Goldfein after his F-16 was shot down in Serbia in 1999. Photo

by Lt. Col. Robert Bowden, CAP National Photographer

and Chief [Master Sgt. Robert] Dandridge, this all-star team takes young men and women from diverse upbringings and prepares them to live and learn and lead as the eyes of the home skies," Goldfein said of CAP. "The Civil Air Patrol mission remains vital to protecting the homeland. It's what makes this one Civil Air Patrol an essential part of our One Air Force — the best in the world."

"It's no surprise to me that so many Civil Air Patrol cadets go on to continue serving our nation either in or out of uniform. So as our nation's warriors, it's our moral obligation to be ready to fight and win in order to preserve the freedom that was handed to us by those we are privileged to follow," Goldfein said.

He cited "a certain Royal Air Force pilot who served in World War I, and then transitioned to serve in the New Hampshire Wing during World War II. If it wasn't for George 'Scotty'



Goldfein helped present Gen. Carl A. Spaatz Awards, seen here at the dinner, to four cadets — Cadet Cols. Julie Demyanovich, Jacob K. Erdman, Laivi Y. Grossman and Jared F. Harrison.

Wilson’s enduring love for the skies and aviation which he passed down to his grandchildren, we probably wouldn’t have won the lottery with our current secretary of the Air Force, his granddaughter, Dr. Heather Wilson,” Goldfein said.

“Together, all of us here tonight, we share a special calling — because we take the greatest treasure in our nation — young men and women who stand and sign up to serve their nation in a

time of war — and we organize them, we train them, we lead them and we marry them up with the best technology on the planet, and working together we

make the world a better place for our children and for our grandchildren.”

Goldfein finished the evening by thanking CAP members for their legacy, courage and patriotism.

The Spaatz Association gathering was the capstone of CAP’s legislative week, during which members visited Capitol Hill to present its *Report to Congress*. The association was formed in 1994 to promote and maintain the

prestige of the Gen. Carl A. Spaatz Award, CAP’s highest cadet achievement, earned by less than one-half of 1 percent of all cadets.

After his address, Goldfein presented four cadets with their Spaatz awards:

- Cadet Col. Julie M. Demyanovich of the Virginia Wing’s Burke Composite Squadron.
- Cadet Col. Jacob K. Erdman of the Wisconsin Wing’s La Crosse Composite Squadron.
- Cadet Col. Laivi Y. Grossman of the Illinois Wing’s Palwaukee Composite Squadron.
- Cadet Col. Jared F. Harrison of the Virginia Wing’s Langley Composite Squadron. ▲



CIVIL AIR PATROL

...IS SEARCHING FOR ALUMNI

JOIN TODAY!






FREE TO JOIN

www.capalumni.org

OUR VISION:

To engage, re-connect and celebrate alumni and friends of the Civil Air Patrol.

By Capt. Mike Painter

CAP Legal Officers Admitted to Practice Before the United States Supreme Court



Standing before the nine U.S. Supreme Court justices and a packed courtroom, six Civil Air Patrol members were admitted to practice before the high court by Chief Justice John Roberts on Feb. 27.

The six were Lt. Col. Marvin Owen, Louisiana Wing legal officer; Maj. Benjamin Karabian, California Wing assistant legal officer; and Capts. Michel Curtis, Oregon Wing legal officer; Anne Formanek, Arkansas Wing legal officer; Mike Painter, Texas Wing assistant legal officer; and Suzanne Veta, California Wing assistant legal officer.

For the past seven years, Col. Robert M. Karton, now assistant legal officer for the Great Lakes Region, has organized the trip to the nation's capital and arranged for the admission of several CAP legal officers each year. Karton first visited the court at age 7, when he watched his father argue a precedent-setting free speech case in 1949.

"It's just an indescribable emotional and intellectual exercise," Karton said, who eventually became a lawyer and a CAP legal officer. He served as both Great Lakes Region commander and as CAP's national legal officer.

Karton wanted to share the experience with others — because, he said, "for a lawyer, the Supreme Court represents the legal pinnacle."

To be admitted to practice before the Supreme Court, a lawyer must have been admitted to practice in the highest court of a state for at least three years before the date of application, must not have been the subject of any adverse disciplinary action during that three-year period, and must



A courtroom sketch by Supreme Court artist Art Lien included CAP legal officers Capts. Mike Painter, Michel Curtis and Anne Formanek and Maj. Benjamin Karabian.

CAP legal officers admitted to the Supreme Court included, (front row, from left) Curtis, Formanek and Capt. Suzanne Veta; (back row) Lt. Col. Marvin Owen; Col. Robert Karton; Painter; and Karabian.

appear to the court to be of good moral and professional character. Other requirements must be met as well.

"This will be a time that I will not soon forget," Owen remarked. "Sitting on the front row in the highest court in the United States was amazing."

According to Col. John Maxfield, chief of CAP's Legal Officer Corps, the corps includes 175 licensed attorneys. Their mission, Maxfield said, is "to provide legal advice and assistance to CAP commanders, staff and members regarding federal and state law, CAP policies and regulations, leases and contract issues, civil liability issues, fundraising issues and personnel matters. The corps also provides assistance to the Office of the CAP General Counsel at National Headquarters." ▲

Lifted by the Winds of History

Shonto's Bahé Ketchum CAP Squadron Follows in Footsteps of the Heroic Navajo Code Talkers

By Paul South

On the flight line, even as a piercing glare bounced off the cockpit windshield of the rising single-engine Cessna, Frederick Fout could see smiles brighter than the early morning sun.

"I was on the flight line when they were landing, and you could see the kids' faces even as they were pulling up through the glare. . . You could still see the excitement on their faces. And that was amazing. And after they landed, they wouldn't stop talking forever — and that's rare."

The smiles belonged to the cadets of Arizona's first new Civil Air Patrol squadron in 20 years. Codetalker Bahé Ketchum Composite Squadron 211, named for one of the legendary "Code Talker" Navajo heroes of World War II. Cpl. Ketchum and his comrades distinguished themselves in the Pacific Theater during bloody battles like Guadalcanal and Okinawa.

The Code Talkers made their mark and changed the course of the war by crafting a Navajo language-based code that confounded the Japanese. The Code Talkers' story has been immortalized in books and on film.

Ketchum, who died in 2015, lived near Navajo Mountain, sacred ground for the Navajo Nation and located near the school. The sacred peak's Navajo name, *Naatsis'áá'n*, means "Head of the Earth."



Cadet Airman Amaris Tracy settles into the cockpit and prepares for an orientation ride in a single-engine CAP Cessna over the Grand Canyon.

Photo by Olivia Richard/Cronkite News

Fittingly, the young pilots-to-be flew over Navajo Mountain and the Grand Canyon, also sacred ground for the Navajo, as well as the kids' own homes.

Formed in 2018, the squadron is the result of collaboration between Fout, then principal at Shonto Preparatory School, the school superintendent and school board, and the community.

"When I was hired there by the board and accepted by the board, one of the board members expressed an extreme interest in having this for their kids," said Fout, now the head of school at Sarasota Military Academy in

Florida. He served K-8 students at Shonto Prep for three years.

"At first, they were just looking for some kind of military-type service opportunity for the kids, like an ROTC or something like that," Fout said. "And through my research, Civil Air Patrol was the one that was most successful to us, primarily because it addressed a wider range of kids. It goes all the way down to sixth grade. Junior ROTC programs don't start until they're in high school.

"That was one of the real draws of the program," he said. "We were able to include more kids and start at a

younger age. Plus the fact that the CAP was completely volunteer, whereas the JROTC program requires that you actually hire an employee — retired military personnel — to lead the group.”

The CAP aerospace curriculum also dovetails with Shonto Prep’s STEM curriculum — science, technology, engineering and math. While teaching young people to fly is the exciting size of CAP’s cadet mission, education is the meat.

“The great thing about the CAP is it lent very nicely to our desire to open our kids’ minds to careers that had something to do with science and technology, engineering and math,” Fout said.

“The curriculum that comes along with Civil Air Patrol is just spectacular. The kids had a lot of hands-on activities to do, dealing primarily with aerospace engineering. The aerospace education portion of the Civil Air Patrol was an excellent addition to our curriculum.

“When I see these kids doing some of these STEM projects based on the aerospace curriculum, they’re learning physics,” he said. “They’re learning things that are applicable across the board everywhere. And they’re learning it in a fun way.

“It’s really an opportunity for the kids to open their eyes to careers and possibilities that for a kid living in a rural area or on a reservation may never have come up before.”

The Ketchum squadron also opens another chapter in the proud Navajo heritage of military service to the U.S., embodied in not only the Code Talkers but also generations of the Navajo Nation. During his time in Shonto, Fout saw a strong veteran presence.

“There’s really a great deal of pride in the Navajo Nation, within the people for that concept of service to country. They take a lot of pride in that history of the Code Talkers. The kids see that, not so much as an opportunity, but something [they’re] supposed to do,” Fout says. “[The attitude is] ‘It’s what my father did. This is what my grandfather did. This is what we do.’ ”

One of the Shonto members, Cadet Airman Tymicus Yazzie, embodies the spirit that lives in the hearts of the Navajo.

“I want to serve like those before me,” he told Cronkite News last year

cadet opens greater opportunities within the military.

“It’s a great opportunity in expanding their education in STEM, but it also has a great character development program within it,” Fout said. “And, with CAP being an auxiliary of the Air Force, it’s viewed similarly to the JROTC. So when a cadet goes through CAP and earns those ranks, that can transfer over to greater opportunities when they get into military service.”

The impact of the Bahé Ketchum squadron has reached quickly across the Navajo Nation.

“I know that it is recognized as



in a story broadcast by Arizona PBS. “One day, it will be my turn.”

Tymicus’ mother, Ferleighshea Yazzie, understands the tribe’s treasured legacy of duty, honor and country.

“The Code Talkers are individuals of great honor for our tribe,” she told Cronkite News. “To have my son be part of that legacy — wow, it makes my heart want to burst with happiness.”

Since Civil Air Patrol is the U.S. Air Force auxiliary, involvement as a

Members of Navajo Codetalker Bahé Ketchum Composite Squadron 211 walk toward their assigned aircraft at Page Municipal Airport. Members of the squadron took their first orientation flight over Lake Powell country, which included parts of the Grand Canyon. Photo by Krista

Allen, Navajo Times

Members of the squadron are briefed by Capt. Russ Miller before they head out on orientation flights. Photo by Krista Allen,

Navajo Times

something positive for the youth of the Navajo Nation. It's definitely appreciated. Since the inception of the squadron we've had requests by the Navajo Nation and different organizations to do color guards and things like that. It's also a great opportunity for the kids to stand up and shine and show how they are having a positive impact within the Navajo Nation," Fout said.

He added, "I know within the school itself and for the community around the school, it's definitely had a positive impact in that there's something else that maybe a kid who doesn't excel at athletics or (isn't) academically gifted has perhaps found a niche in this. It's another opportunity for kids. And it's not just on reservations. Kids anywhere that aren't blessed with privilege could benefit from a program like this."

Even now, nearly 3,000 miles from Shonto, Fout, as a member of the U.S. Army Reserve and a veteran of the war in Afghanistan, feels the impact of the



Bahé Ketchum squadron, and not just on the flight line.

"Even when they post colors, for a person like me, or the veterans that are there, you can't explain that. It's pretty special."

When the Bahé Ketchum squadron was born, Fout and his wife, Gerlie Alicando Fout, were the only non-Native Americans involved. Now the unit is completely Navajo-run.

The squadron wasn't the result of one person's efforts, Fout said.

"I was just that one person in the right place at the right time. We gave people the green light, and they ran with it. The support from the parents, the support from the superintendent

and the school board, and the way the community opened their arms and said, 'Yes, we love this,' has been fantastic. If it goes on for however long it goes on, it will be because of them."

He added, "They're going to do great things with it, because they believe in it."

In its short history, the squadron has opened the world to the Navajo and the Navajo to the world, building bridges of understanding. For Fout, that's something to cherish.

"I would want people to fall in love with kids doing something they didn't know they could do and having dreams. This kind of opportunity really does that for them." ▲

CONTOUR
FLIGHT SUPPORT

(615) 350-5000 www.contouraviation.com

110 Tune Airport Dr. • Nashville, TN 37209

GERONIMO ENERGY

Farmer-friendly.
Community driven.

info@geronimoenergy.com | 952-988-9000 | www.geronimoenergy.com



Georgia, South Carolina Wings Team Up for Super Bowl Security Exercise

By 1st Lt. Rachael J. Mercer

While much of America was focused on the Los Angeles Rams and the New England Patriots in Super Bowl LIII, Civil Air Patrol and its partner agencies were concentrating on the safety of the skies and the culmination of months of planning and training.

Georgia Wing Headquarters sits only a few miles from Atlanta's Mercedes-Benz Stadium, site of the big game. Security planning and exercises for the event began in early 2018. "Five Super Bowl LIII exercises were planned and four were executed in the Atlanta area over the past eight months," said Maj. Brad Haynes, Georgia Wing incident commander for the Super Bowl mission.

CAP is involved in joint exercises that help strengthen the North American Aerospace Defense Command's ability to respond to aircraft that may enter a Federal Aviation Administration no-fly zone.

Maj. Sam Fernandes, a Georgia Wing mission pilot, flew in three of the four Super Bowl security preparation missions. "The training meant early mornings, but it is an honor to help out, knowing how important air safety is to the city of Atlanta," Fernandes said. "It is really exciting when you see those F-16s beside your plane."



Maj. Bayne Selby (left) and Lt. Col. Brian Rawl prepare a South Carolina Wing Cessna 182 for their Super Bowl during an air defense practice session. Rawl is commander of the wing's Legislative Squadron; Selby is public affairs officer for the Coastal Charleston Composite Squadron. Photo by 1st Lt. Rachael J. Mercer, South Carolina Wing

The FAA implemented a Temporary Flight Restriction (TFR) around Mercedes-Benz Stadium for the Super Bowl. CAP's role in the training exercises is to provide a simulated errant plane or track of interest. Participating CAP aircrews follow a carefully scripted operations plan to simulate their role as an aircraft entering restricted airspace — whether intentionally or unintentionally.

As the Georgia Wing trained throughout 2018 for the 2019 Super Bowl, each exercise involved additional partner agencies. CAP wings throughout the U.S. practice missions every

month with their state agencies, but sometimes the need to involve more and more partner agencies becomes evident in the training process.

For Super Bowl LIII, the Georgia Wing trained with the "entire system working together," Haynes said. The South Carolina Wing was involved as well. The Wednesday before Super Bowl LIII, exercise participants included the South Carolina Air National Guard's 169th Fighter Wing, the Alabama Air National Guard's 117th Air Refueling Wing, U.S. Customs and Border Protection's Air & Marine Operations, Federal Aviation



As airmen of the U.S. Air Force, South Carolina Air National Guard, Tennessee Air National Guard and other NORAD agency representatives stand by, CAP Maj. Ben Cole of the South Carolina Wing addresses members of the media from a hangar at McEntire Joint National Guard Base. The press conference was held in conjunction with aircraft intercept exercises, in which a CAP Cessna served as a “track of interest” for Air National Guard fighters. Photo by 1st Lt. Rachael J. Mercer, South Carolina Wing

cadets distributed information packets at airports throughout the general area, ranging from one of the world’s largest — Hartsfield-Jackson Atlanta International — to small community airstrips.

Each packet contained an instruction letter from the Air Force, a Super Bowl air restriction poster for airport fixed-base operator use, and a map of affected airports. The packets also contained NORAD/FAA Intercept Procedures for any plane entering restricted airspace.

“We delivered the packets to 62 airports, including not only those in the Temporary Flight Restrictions itself but also those surrounding the TFR,” said 1st Lt. Steve Strong, Georgia Wing assistant director of emergency services, who coordinated the distribution mission.

Since the terrorist attacks of Sept. 11, 2001, the FAA routinely implements no-fly zones around major events to ensure no airplanes enter within a specified radius except those on an FAA-approved flight plan. During Super Bowl LIII, NORAD enforced the restrictions using Department of Defense and Department of Homeland Security aircraft.

Defense of the nation is NORAD’s top priority. For 60 years, NORAD has identified and intercepted potential air threats to North America in the execution of its aerospace warning, aerospace control and maritime warning missions. Civil Air Patrol has played an active role in the Super Bowl air security training exercises since 2002. ▲



Georgia Wing cadets were an integral part of CAP’s Super Bowl LIII mission, helping to collate packages of critical security information for 62 Georgia airports. It took three days to deliver all the packages.

Administration representatives, Atlanta Terminal Radar Approach Control, the Eastern Defense Sector and NORAD.

Participants’ skills during the exercises were on full display that day to a media contingent that included state and national correspondents. A national CBS report by correspondent David Martin mentioned the impor-

tant role Civil Air Patrol plays in helping ensure the security and defense of America’s skies.

In addition to the air exercises involving the Georgia and South Carolina wings and their partners, cadets from the Georgia Wing played an integral role in educating pilots and aircrews about the flight restrictions. Working with senior members, the

With the Flow

CAP Cadet Creates Nonprofit to Provide Clean Water

By Alexis Faire

Civil Air Patrol Cadet 1st Lt. Haseeb Khan is working to provide clean drinking water to underprivileged communities overseas through his nonprofit organization, AquaEffort.

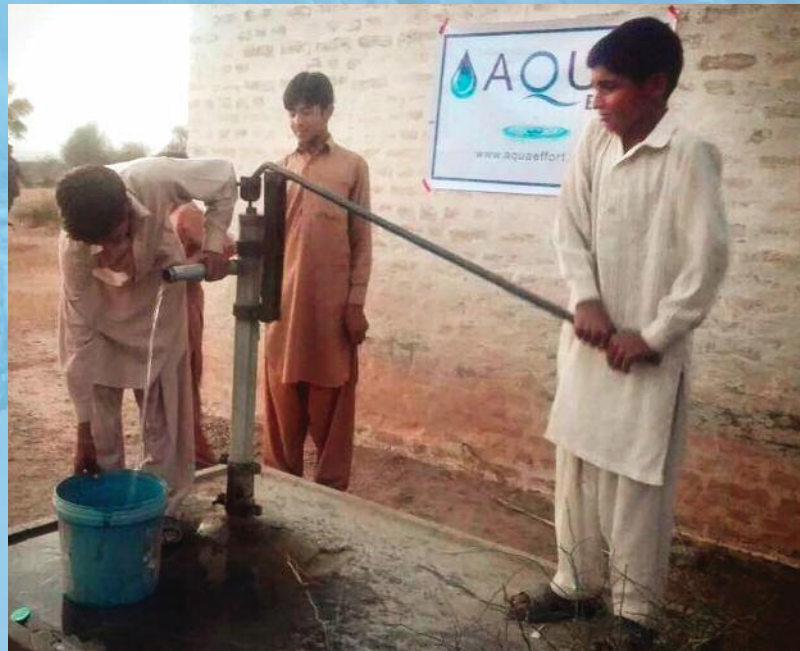
“When we have clean water here in America, we don’t really pay much attention to the value of it,” said Khan, a member of the National Capital Wing’s Challenger 1 Cadet Squadron. “So I was thinking, ‘Maybe it’s important that if we could get as many people as we could, [we could] start awareness on what water means to many people.’”

Initially an idea for a school project, Khan said he wanted AquaEffort to be something bigger.

“Our main project prompt was to present something that we were passionate about,” he said. “The thing that I’m really passionate about is community service. That was another reason why I joined CAP.”

According to the Centers for Disease Control and Prevention, an estimated 780 million people worldwide have no access to clean drinking water. With the support of his parents, teachers and peers, Khan was able to start his organization to lower that number.

His father gave him \$1,000 to start his organization. Without that money,



Children from the Pakistani village in which AquaEffort completed its first project pump fresh, clean drinking water from the well.



Left, this photo offers a side-by-side comparison of two samples of water, one before the project and one after. Right, the first and most important AquaEffort project, completed in August 2016 in Pakistan, is meant to serve a village of more than 200 people who hadn’t experienced the luxury of clean water.

Cadet 1st Lt. Haseeb Khan pays his regular visit to the Arlington National Cemetery. Khan has made a personal mission of spending every holiday, regardless of the weather, with soldiers who could not be with their families to celebrate. He also never forgets to visit the Civil Air Patrol Memorial at the national cemetery.



U.S. Army Sgt. Gulzar Hussain, Khan's grandfather and work ethic role model, places Khan's officer's cap on his head during his Gen. Billy Mitchell Award promotion.

AquaEffort wouldn't be the official, IRS-recognized organization it is today, Khan said.

"Without that \$1,000, I wouldn't have been able to figure out what my mission was as a company, what my goals were and what my expenses were going to be," he said.

Since its inception in 2016, AquaEffort has completed two projects in South Asia and Puerto Rico and hopes to expand elsewhere around the world.

Khan said he owes most of his



1st Lt. Justin Strait (left), commander of the National Capital Wing's Challenger 1 Cadet Squadron, poses for a photo with Khan after a change of command ceremony promoting him to cadet commander.

success to his participation in Civil Air Patrol. He joined in February 2016 after learning about CAP from a classmate his freshman year of high school. He was interested in the activities and opportunities CAP had to offer. His passion for CAP grew, and his involvement helped him grow as a person.

"[CAP has] given me an opportunity

to test my ability," he said. "Without CAP, I wouldn't have been able to realize how good of a leader I thought I was. It gives me the opportunity to see my own potential. It gave me the opportunity to professionally develop myself."

The leadership and hard work he exhibited as cadet commander for his squadron and as a cadet public affairs for his wing didn't go unnoticed. Khan was recognized with the 2017 Junior Cadet of the Year award and a national CAP public affairs award.

Lt. Col. Paul Cianciolo is the national marketing and social media manager for CAP's Marketing and Strategic Communications team as well as National Capital Wing vice commander. As a wing cadet public affairs officer, Khan contributes ideas to better CAP and its cadet programs, Cianciolo said.

"He recently came up with an idea to do a video for youth orientation flights," he said. "He also came up with the idea to take our annual year-in-review video and base it off of the cadet oath."

Capt. Bebe Finkenstaedt was the Challenger 1 squadron commander

when Khan joined CAP. Her son is one of Khan's classmates and CAP peers. From the beginning, she said, she believed Khan had fantastic leadership skills.

"Haseeb has been a go-getter from the start," she said. "I am amazed by his initiative and follow-through. He gets things done and has brought great value to our squadron and wing."

Finkenstaedt recalled that Khan shared his school project proposal for AquaEffort with her. His proposal included such ideas as a mission statement and plans for donations and how the organization would spend its money to provide materials for those in need.

"He gave me a professional-looking printout of his proposal, and a bottle of water he had made a custom label for," she said. "He was so excited about putting his plan in motion."

Three years after the creation of AquaEffort, Khan has additional goals for the company. Right now, his goal is to provide at least one well every two years. After six years he hopes to increase that to at least one well annually.

"The overall goal is to rebuild water supplies, as many as we can," he said. "The most important one [goal] is water hygiene education."

While his goal is to provide a water source to as many people as he can, Khan also believes it's important to educate people on how to preserve water.

"Us teaching these people, giving them the free education on how to keep their water clean, how to preserve it, can help them for life," Khan said. "I think that's one thing my company does that's different from others. That's my main thing that I'm glad I'm doing — the water education."

AquaEffort has 24 volunteers who participate in such activities as fundraising, social media, promotion and awareness. The company is working to expand its social media presence and to motivate others to contribute.

One project costs about \$5,000 to complete, which includes the costs of employee travel. About half that total is the cost to place a well in any given country.

Those interested in donating can visit the AquaEffort website, www.aquaeffort.com, and use the PayPal button there. Donations are tax-deductible through the tax ID number located on the website.

With AquaEffort's success in mind, Khan wants to encourage his fellow CAP members to try to achieve any goal they desire.

"If you dedicate yourself to a goal and keep yourself disciplined toward that goal, then you can do it," he said. "That's how I did it." ▲



Join
Us...

August 8-10, 2019

National Conference

Baltimore Marriott Waterfront
Baltimore, Maryland

www.gocivilairpatrol.com/conference

An aerial photograph showing a makeshift camp in a dense forest. Several tents and tarps are visible, including a large white tent with a green tarp, a brown tent, and a blue tarp. The camp is situated on a dirt clearing surrounded by tall evergreen trees.

Oregon Wing Partners with Veteran Outreach Program

By Jennifer Gerhardt

A closer aerial view of the makeshift camp, showing a large blue tarp covering a structure, a white tent with a blue tarp, and a blue and white tent. The camp is surrounded by dense evergreen trees.



During its two-hour flight in support of Central Oregon Veterans Outreach, a CAP aircrew found eight apparent homeless camps like those pictured here.

Maj. Mike Wissing (right) and 1st Lt. Ron Lee take to the skies above Central Oregon with Max Goldwasser of KTVZ NewsChannel 21 (in the back seat). Goldwasser rode along with the CAP aircrew as they searched for homeless veterans camps.

They are visible, but anonymous. They lie in dingy sleeping bags, bury themselves under blankets, ponchos or cardboard boxes, often cold and hungry. They were once defenders of freedom, proud and strong, before being derailed by deployment injuries, mental illness or other issues. Now they are homeless.

This is the plight of almost 40,000 homeless veterans, according to the U.S. Department of Housing and Urban Development.

There are organizations that help homeless veterans, and the Oregon Wing's High Desert Composite Squadron is one. The unit recently partnered with Central Oregon Veterans Outreach to find and help homeless veterans in their local area.

"CAP has such a capacity to do great things," said Maj. Mike Wissing, who is the squadron training officer, mission pilot, check pilot, aerospace education officer and deputy commander for cadets. "This is a small piece of what we can do.

"To be able to give back, and do something meaningful, is really important," he told KTVZ-TV, the NBC affiliate in Bend, Oregon.

The squadron's mission during the 2018 holiday season was to fly over a wide area south of Bend Municipal Airport in search of homeless encampments and let COVO know about them. The pilot and observer searched for encampments, took photos, marked latitude and longitude and manually logged the locations.

Once the locations were identified,

COVO planned to travel to those spots and try to help the veterans in need.

It was no easy task. One full grid took about six hours to fly. In addition to length of time, it was also challenging because the CAP members were flying around North Bend's Southwest Oregon Regional Airport, which is the third-busiest airport in the state but has no air traffic control tower.

Wissing and 1st Lt. Ron Lee, though, had help planning the mission. They asked cadets to plan and chart a detailed search grid — an essential task so Wissing and Lee wouldn't fly over the same spots twice.

Cadet 1st Lt. Samuel Conklin, cadet commander for the High Desert squadron, wanted to help with the maps. He already had previous experience charting maps through CAP



◀ First Lt. Ron Lee served as an observer for the flight and took aerial photos of the homeless camps.

training exercises and working on his private pilot's certificate.

"We have always been eager to assist the veterans of Central Oregon," Conklin said. "The COVO mission has differed from regular squadron and cadet activities because we have mostly worked with veterans with homes.

"The rare opportunity COVO gave our squadron with this mission was a chance to help the homeless veterans

who served our country, which is equally as important."

Lee, retired after 25 years of active duty, agreed. "This mission comes from a humanitarian aspect," he said. "Having been in the Air Force, this felt personal, too. I wanted to be a part of this mission."

Wissing and Lee found eight apparent homeless camps after flying over the area for just over two hours.

"If COVO goes out there and actually makes contact with those people and says, 'Yeah, we found those guys and we gave them this,' then it's going to really hit home, the fact that we were able to do something," Lee told KTVZ-TV.

Using the CAP coordinates, COVO officials hope to build relationships with the homeless veterans and bring them supplies they need to survive.

"You know, a lot of times, these vets are the toughest ones to crack, because they carry a lot of pride with them," said David Nieradka, COVO's outreach program manager. "It takes a lot for those guys to ask for help." ▲

(206) 780-3099



**500 Hour Inspection,
Propstrike, Overspeed,
Repair, Overhaul, and Sales
Serving Over 1,000 Magnetos
Per Year Nationwide**

8171 Mullan Road • Missoula, Montana 59808
aircraftmagnetoservice.net



Fly On In



to Lumberton Regional Airport

- Overnight Hangar Space Available
- Volume Discounts
- Restaurant & Hotel Discounts - Call for info!
- Rental Car - Call for info!
- 24/7 Crew Car
- 24/7 Avgas Self-Service
- Airboss Fuel
- GPU & Mechanic on the Field
- Aerobatics Practice Area on the Field
- 8:00 am - 5:00 pm weekdays
- 10:00 am - 5:00 pm weekends

Lumberton, North Carolina
910-739-6480 • 910-608-1219
tgammon@ci.lumberton.nc.us




2018 COMMANDER'S CIRCLE

We welcome the following donors to the Commander's Circle. Recognition in the 2018 Commander's Circle includes donors who have given a cumulative donation of \$1,000 and above from October 1, 2017-September 30, 2018.

We recognize and thank the following donors for their generosity to Civil Air Patrol.

GIFTS BETWEEN \$500,000 OR MORE

GIFTS BETWEEN \$25,000 - \$49,999

GIFTS BETWEEN \$10,000 - \$24,999

Anonymous
Griffiss Institute
Textron Aviation
Air Force Association
Anonymous
America's Aircraft Engines
Maj. David N. Ayre
Cognizant U.S. Corp.
Continental Motors Group
Ms. Anne Darr
Detroit Wayne Mental Health Authority
EAA Chapter #1073
Mr. and Mrs. Mathew and Mary Eckart
Facebook
Mr. John V. Felter
Lt. Col. Richard W. Flowers
2nd Lt. Gary Hsu
Col. and Maj. John and Teri Knowles
Mr. Robert Lambert
USAA
Vanguard Industries
Walmart Foundation
2nd Lt. Thomas M. Weir
William Penn Foundation
Maj. Rob Yusko

GIFTS BETWEEN \$5,000 - \$9,999

Anonymous
AC Supply
Aeroptic
AFECEA
Arkansas Space Grant Consortium
Baltimore Gas & Electric
Capt Linda Berez
BP Air Inc.
Cobham Aerospace Connectivity
Colorado CAP Foundation
County of Vilas
Friends of Carroll Composite Squadron
Friends of Detroit City Airport CDC
Hui O Na Wahine Scholarship & Welfare Fund
Jason Truck & Auto Repair
Nation's Capital Chapter AFA
Norwich University

NVIS
Capt. Tim Perry
Pi Foundation, Inc.
ReadyOp
Mr. Scott Rink
1st Lt. Gary M. Rogers
1st Lt. Aric Rosenbach
Col. Orlan Scott
Soloy Aviation Solutions
United Way of Bartow County

GIFTS BETWEEN \$2,500 - \$4,999

3-GIS LLC
Acworth Allatoona Charities Inc.
Amazon Smile Foundation
Lt. Col. Kenneth I. Aronson
BWS Corporation
C & B Recycling
Cable Air Show
Centerplate
Chatham Jaycees
Cirrus Design Group
City of Blaine
County Commissioners of Washington County
Curtis Lumber
Davis Direct
Ms. Harriet Dean
EAA Chapter #565
Fargo Air Show
Fidelity
Fillmore Western Railway 2014
2nd Lt. Jose A. Garcia
Greenville County Office of the Treasurer - Jill Rees Kintigh
Harford County Farm Fair
Hornady Manufacturing Co.
Manolas Family Trust
Maritime Republic of Eastport
Matthew Dricevich Charitable Remainder Trust
McCracken County Fiscal Court
SM Joe Michelotti
Modern Woodmen
Middle Tennessee State University
Muskogee Federal Credit Union
Omaha Community Foundation: Sara A. Boyd
Order of Daedalians
Maj. Mark W. Powell
Ms. Amy Reed
ServisFirst Bank
State Auto
Stewart's Foundation
Superior Air Rescue, Inc.
The Barnes Law Group LLC

The Spaatz Association, Inc.
United Way of Florence
United Way of Southeastern Idaho
Virgin Islands Lottery
1st Lt. Kevin J. Wallace
Wells Printing

GIFTS BETWEEN \$1,000 - \$2,499

7-Eleven
Aerial Solutions, LLC
AirSure Ltd.
Alabama Power Tuscaloosa
Alcatel Lucent Corp.
American Legion Cowansville
American Legion Pinckney Memorial Post 419
American Transmission Company, LLC
1st Lt. Daniel Anderson
Capt. Donald Andrews
Andrews Excavating & Burials, LLC
Mr. Scott A. Andrusis
Capt. Larry Arnold
1st Lt. William Atwell
Audia Group, LLC
Aviation Association of Santa Fe
Capt. Steven Balsom
Bank of Herrin
Lt. Col. Steven W. Bass
Lt. Col. Kathleen E. Beauford
Daedalians
Lt. Col. Thomas R. Berg
Ms. Rosemary Beukens
Big Bear Lake Antique Car Club
Maj. Ralph Black
Blue Earth County
BOA Nonprofit Grant Funding Foundation
Boone County Fiscal Court
Boshart Aviation
Boutiki
Brunswick Electric Membership Corporation
Buncombe County
2nd Lt. Alex J. Burwasser
Mr. Steve Butcher
1st Lt. Vern W. Cavin Jr.
Central Water Conservancy District
SM Janet Chanski
Lt. Col. Anthony J. Cichocki Jr.
Lt. Col. Dennis Cima
Citizens Energy
City of Tullahoma
Clark Construction Group
CoBank
Community Foundation of Washington County
2nd Lt. Laura A. Congrove
Consistent Computer Bargains
Lt. Col. Kevin Cooley
Copper Valley Electric
County of Carteret
Maj. Richard E. Cox Jr.
Capt. Heidi Cunningham
Davenport Shooting Assoc
Dayton Utility Grant Board
Mr. Jack Dempsey
Denison Publishing
Lt. Col. Mary A. DiMarsico
Maj. Jon Domke
Doolittle Institute Inc.
Downtown Oronoco Gold Rush Days Inc.
Lt. Col. Jean Dubois
EAA Chapter #486
Easton Rotary Club
Eau Claire Community Foundation
SM Brett Elsner
Emerald Mountain, Inc.
Energy Rebate Inc.
1st Lt. Terry W. Ewing
Ms. Mary Lepman and the Woolfenden Family
Fast Lysons Club
Lt. Gen. Judith A. Fedder, USAF, Retired
Florida International Airshow, Inc.
Friends of Chennault Aviation & Military Museum: VFW Post 3267
Friends of Pony Express Cadets in care of: Susan L. Carpenter
Mr. James Gardner
Lt. Col. Edward W. Garland
Ms. Kathy L. Garland
Gartner
Global Impact
Mr. and Mrs. Paul D. Gloyd
Golden's Landscaping
Mr. and Mrs. Patricia and Robert Gonzales
Ms. Ligia Gonzalez
Gorman's Manufacturing Instr & Cons LLC
Col. Kenneth Goss, USAF, Retired
Great River Energy
Greenbriar Oceanaire Men's Club
1st Lt. James W. Gregg
H. Fort Flowers Foundation
Mrs. Wendy Hamilton
Mr. George Harrison
Hawaii Cement
Cadet Tech. Sgt. Brett Patrick Herman
Hicham AFB Officers Spouses Club
Capt. Phillip C. Hooper
Mr. Samuel Horn
Maj. James R. Van Horn
Maj. Julian Don Howe
Idaho National Guard Family Services
Lt. Col. LouAnn Maffei-Iwuc
Mr. and Mrs. Christopher and Beverly Jensen
Capt. Dean Jones
1st Lt. Danny Jones
Lt. Col. David N. Kaplan
Maj. April Krason
Mr. Kenneth Kelley
Col. Thomas R. Kettell
Keva Charitable Fund
Mr. and Mrs. Susan and Mark Kiddo
Maj. Robin Kim
Ms. Winona S. Kimrey
Kohl's Department Stores, Inc.

Mr. Manchandran R. Kurup
Land O'Lakes, Inc.
Lt. Col. Keith F. Lauder
Mrs. Edwin Lewis
Lynch Ford Chevy
Col. J. Bradford Lynn
Mary von Mach Scholarship Fund
SM Keith D. Matthews
Mr. David Maxwell
Mr. and Mrs. Pat and Kathy McClain
Middle TN ISSA
Mr. James Miller
Mr. Erick Minja
Monmouth Area Flying Club
Ms. Kelly Monson
Morgan Stanley
Mt. McKinley Bank
Mr. Donald Murray
Nano Film
National Balloon Rally Charities, Inc.
National Christian Foundation
Navient Corporation
NRA foundation
Nu-Era Services Inc.
Officer's Spouses Club
1st Lt. Bernard R. St. Onge
Order of Daedalians, Granite State
Flight 53
Oregon Trail Chapter KWVA
Mr. George Panaitescu
Maj. Gen. Teresa Marne' Peterson,
USAF, Retired
Lt. Col. David P. Phippen
Planes of Fame Air Museum
Mr. and Mrs. Denise and Lawrence
Ploetz
Procida Landscapes
PWC LLP
Qualis Corp
Red Tailed Hawks Youth Group
Ms. Gretchen Reed
Ri & BS Bow
Robert Paul Schmitt and Estate
Robinson Nevada Mining Co
Mr. and Mrs. David and Danielle
Rocheferd
Mr. Stephen Rogers
Capt. Christopher J. Romkema
Rotary of Grand Junction
Mr. Robert Ryan
SAC Federal Credit Union
Mr. and Mrs. John A. Salvador
Sam's Club #4789 Sharpsburg
Mr. and Mrs. Mark and Debra
Schmidt
Schneider National Foundation, Inc.
Col. John Schupp

Senoia Downtown Development
Authority
Sertifi
Sertoma Club of Georgetown
Lt. Col. James Shepard
Mr. Sam Shmaisani
Sierra Military Hospitality Services
Lt. Col. Richard Simerson
Sioux Falls Scheels
Mr. John J. Smith Jr.
Maj. Gen. Mark E. Smith
Mr. Robert Smith
Mr. and Mrs. Joseph M. St. Clair
St. John Foundation
St. Mary's Moose
St. Matthias Thrift Shop
Starbucks
Steel-Waseca Cooperative Electric
Target Corp.
Team Evergreen
Mr. Phillip Terry
The Barden Foundation Inc.
The T.J. Lobraico Foundation, Inc.
The WAWA Foundation
Mr. Brock Thompson
Tour De Palm Springs
Travelers Support Center
Treasurer of Nobles County
Treasurer of Sherburne County
Triman Industries
Truckee Tahoe Airport District
UHY Cares Michigan
United Way of Goodhue
U.S. Coast Guard Auxiliary Unit
Flotilla
Valdez United Way
Valley Wide Cooperative
Vasatka Goers VFW Post 6690
VFW Basinger/Sone
VFW Post 23
VFW Post 4793
VFW Post 7835
1st Lt. John C. Walton
Western DuPage Chamber of
Commerce
Weyerhaeuser
White Circle Club
Lt. Col. Chet Wilberg
Wisconsin Public Service
Foundation
Worthington Elks Lodge #2287
Xcel Energy Foundation
York Flight Training, LLC
Mr. Erike Young
Zaia & Zaia LLC
Maj. Jerry E. Zurovski

LEGACY GIFTS

The following estate gifts were received by Civil Air Patrol from October 1, 2017-September 30, 2018. We remember these individuals for their generosity and for the impact they continue to make in the future by including Civil Air Patrol in their estate planning.

Estate of Marc Q. Huey
Estate of Charles Rose

If you are interested in becoming an inaugural member of a newly created Civil Air Patrol Legacy Society by designating Civil Air Patrol in your estate plans or will, please contact Kristina Jones, CFRE, Chief of Philanthropy, at legacy@gocivilairpatrol.org or 833-IAM-4CAP (833-426-4227).

Want to learn more about estate planning? Visit www.GoCivilAirPatrol.PlannedGiving.org

GRANTS AND MATCHING GIFTS

We are appreciative of the following companies for supporting donations and volunteer service by their employees in 2018. The following list reflects matching gifts made from October 1, 2017-September 30, 2018.

Participating Employers

Abbott Laboratories – EGC	J.C. Penney
Adobe Corp	JP Morgan Chase
Alaska Airlines	Kimberly-Clark
America's Charities	Lenovo
Ameriprise Financial, Inc.	Lilly Foundation
Apple	Medtronics
Applied Materials	Microsoft
AT&T	Nextra Energy
BAE Systems	NRG Energy, Inc.
Bank of America	Nvidia
Battelle Always Giving	Oracle Corporation
Boeing	PayPal, Inc
Cargill	Pepsico
Chevron	Pfizer Foundation
Cisco	PGE
CNH Industrial America LLC	SAP Software Solutions
Costco	Sempra Energy
Deere & Co.	State Farm Companies Foundation
Dell Inc.	Symantec
Duke Energy	Teradata
ETS Cares	Thrivent
Exelon	T-Mobile
ExxonMobil	Travelers
Google Inc.	UBS
Hartford Fire Insurance Company	United Airlines
Hewlett Packard Enterprise	United Health Care
Honeywell International Charity Matching	United Health Group
IBM	UPS
Intel Involved Volunteer Matching Grant	USAA
International Monetary Fund	Veritas
	Viacom, Inc.
	VMware Foundation

Should you have changes or corrections, please contact Civil Air Patrol Development Department by email at thankyou@gocivilairpatrol.org or toll-free call to 833-IAM-4CAP (833-426-4227).

If you would like to be included in the 2019 Commander's Circle, please mail your donation to CAP Development, 105 S. Hansell St, Bldg. 714, Maxwell AFB, AL 36112 or make a donation via www.GoCivilAirPatrol.com/giving.

More than 19,000 companies across the United States will match contributions and/or volunteer hours for their employees and retirees. To see if your employer participates, please visit www.gocivilairpatrol.com/giving/corporate-matching.



EXPLORE CAREER OPPORTUNITIES WITH THE
LARIMER COUNTY SHERIFF'S OFFICE

SHERIFF JUSTIN SMITH AND STAFF
THANK THE CIVIL AIR PATROL
FOR YOUR SERVICE TO THE
CITIZENS OF LARIMER COUNTY



Scan here - larimer.org/sheriff/recruiting

FLINT
A E R O N A U T I C

*FAA-PMA approved auxiliary fuel tanks
for Cessna airplanes since 1967.*

***We salute and support the
Civil Air Patrol!***

(619)
448-1551

Gillespie Field
(SEE)

1942 Joe Crosson
Drive, El Cajon
www.flintaero.com



SIU Southern Illinois University

CARBONDALE



ASSOCIATE OF APPLIED SCIENCE DEGREE:

Aviation Flight

CERTIFICATE:

FAA Approved Airframe and Powerplant

MASTERS IN PUBLIC ADMINISTRATION:

Aviation Administration

BACHELOR DEGREES:

Aviation Management

- Professional Pilot Specialization
- Minors in Air Traffic Control
Aircraft Product Support
Airport Management and Planning

Student Organizations

Flying Salukis

9 Time National Champions

Aviation
Ambassadors



Detail Dawgs

Maintenance Competition Team

Rotor and Wing
Ambassadors



Aviation Technologies

- Aircraft Maintenance Specialization
- Aviation Maintenance Management Specialization
- Aviation Electronics Specialization
- Helicopter Specialization

We offer two degree-completion programs:

Aviation Management at six off-campus sites; Online Aviation Maintenance Management

For more information regarding our degrees visit:
aviation.siu.edu or call us at 618-453-8898

