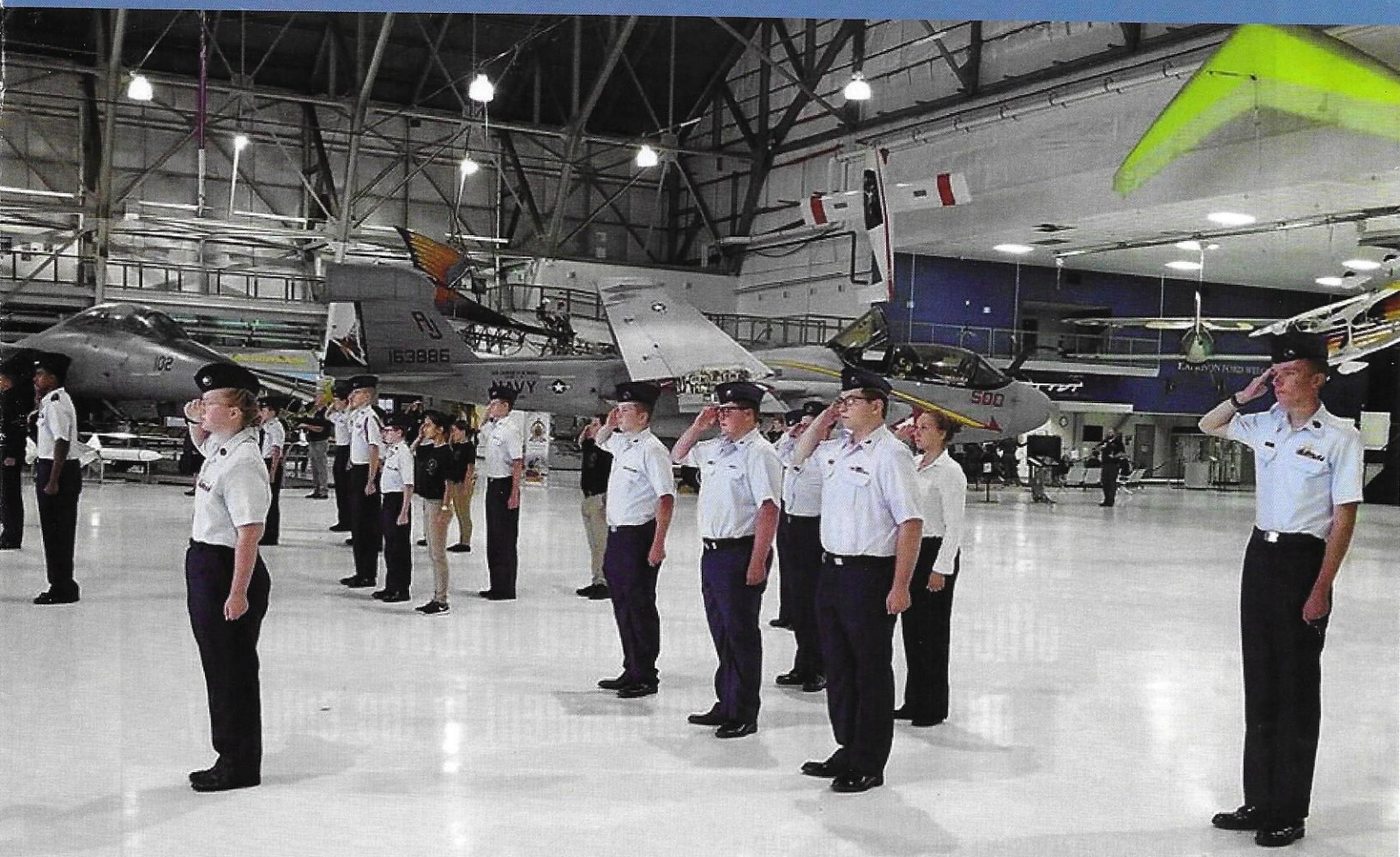
Spring 2019

Peaks and Planes

Official Magazine of the Colorado Wing, Civil Air Patrol



In This Issue:

- Jack Swigert Aerospace Academy Program
- Wreaths Across America
- Military and Veteran's Appreciation Day

And Much More!

Civil Air Patrol is the civilian auxiliary of the United States Air Force. *Peaks and Planes* is the official publication of the Colorado Wing of the Civil Air Patrol. It is published three times a year by the Colorado Wing Public Affairs Staff. *Peaks and Planes* is published by a private firm which is not associated with the Department of the Air Force or the Civil Air Patrol Corporation. The appearance of advertisements for products and services, as well as supplements and inserts found in this magazine, does not constitute endorsement by the United States Air Force or the Civil Air Patrol Corporation.

Colorado Wing Commander
Col. Celeste Gamache, CAP

Colorado Wing PAO
2nd Lt. Daniel Turner, CAP

Article submissions are always welcome. Please send them in Microsoft Word format to 2nd Lt. Daniel Turner, *Peaks and Planes* at dturner@cap.gov. Attach photos (in jpeg format) to your email and make certain to include full caption information for each photo at the end of your article.

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COVER: Eagle County Composite Squadron cadets in formation with a Grumman A-6 Intruder in the background. INSET: Mile High Squadron Honors the Fallen at Wreaths Across America.

Commander's Comments

Col. Celeste Gamache, CAP
Commander, Colorado Wing

CAP, as the auxiliary of the US Air Force, is a rules driven organization. CAP's regulations apply to all CAP members and compliance is mandatory.

Unfortunately, some members choose to believe that they may selectively follow our regulatory requirements as they see fit. *"I'm just a volunteer"* is sometimes heard in response about why a specific task or assignment has not been completed or a regulatory requirement deadline is not met. They feel that this attitude of *"just a volunteer"* somehow relieves them of the responsibility to complete requirements. This attitude is not acceptable in CAP.

The following is a portion of the CAP Oath of Membership. Members must agree to these provisions during initial membership application and during each subsequent membership renewal:

> *I voluntarily subscribe to the objectives and purposes of the Civil Air Patrol and agree to be guided by Civil Air Patrol Core Values, Ethics Policies, Constitution & Bylaws, Regulations and all applicable Federal, State, and Local Laws.*
>
> *I fully understand that this Oath of Membership is an integral part of this application for senior membership in the Civil Air Patrol and that my signature on the form constitutes evidence of that understanding and agreement to comply with all contents of this Oath of Membership.*

We are volunteers when we decide to join CAP. Once we are members, we are required to comply with all of CAP's rules. If we accept a duty position in the squadron or wing or

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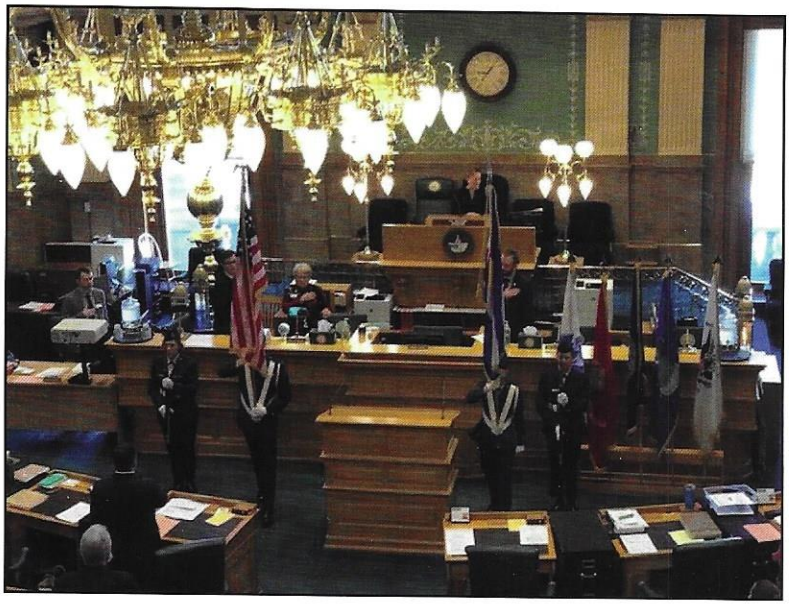
CIVIL AIR PATROL SERVICE: Military and Veterans Appreciation Day

By Col. Gary Tobey, CAP
Wing Government Relations Advisor

Each year, the Senators and Representatives in the Colorado Legislature conduct a special joint session to recognize the military and veterans. On February 1, 2019, at the Colorado State Capitol in Denver, Civil Air Patrol cadets played key roles in honoring the service of military personnel and veterans, including Prisoners of War and Missing in Action. CAP Senior members also manned a table to inform the Senators and Representatives about CAP.



This year, one of the chief sponsors of the primary Joint Resolution was Representative/Lt. Col. Dafna Michaelson Jenet, CAP, the new Commander of the Colorado Wing Legislative Squadron.

At the direction of Colorado Wing Commander, Col. Celeste Gamache, with direct supervision by Capt. Helen Gray, the following cadets from Mustang Cadet Squadron were fine CAP representatives and provided outstanding performance. They were professional and sharp on the floor of the Colorado House of Representatives:

Civil Air Patrol Cadet Color Guard:

Cadet Chief Master Sergeant Aaron Avery,

Cadet Staff Sergeant Sydney Loos,

Cadet Staff Sergeant Aida Telford, and

Cadet Senior Airman Mimi Telford

Leader of Pledge of Allegiance:

Cadet Second Lieutenant Tristan Poseley

Save March 14, 2019, for Civil Air Patrol Day at the Capitol. The members of the Colorado Wing will stand proud as members enjoy a welcome breakfast and appeared in both the House and the Senate. All will be especially honored in a special ceremony with Colorado Governor Jared Polis, The Adjutant General, Major General Michael Loh, and Wing Commander Colonel Celeste Gamache, among others.

Wreaths Across America
Fairmount Cemetery 15 December 2018

By Maj. Norm Teltow, CAP
Mile High Cadet Squadron 143

Each Year Mile High Cadet Squadron 143 works to raise funds to lay wreaths of remembrance at Fairmount Cemetery. The squadron has partnered with members of Buckley Air Force Base, local banks, foundations, and businesses. The Mile-High Squadron honored fallen military service members from the Korean war, WW1, WW2, and Vietnam war.

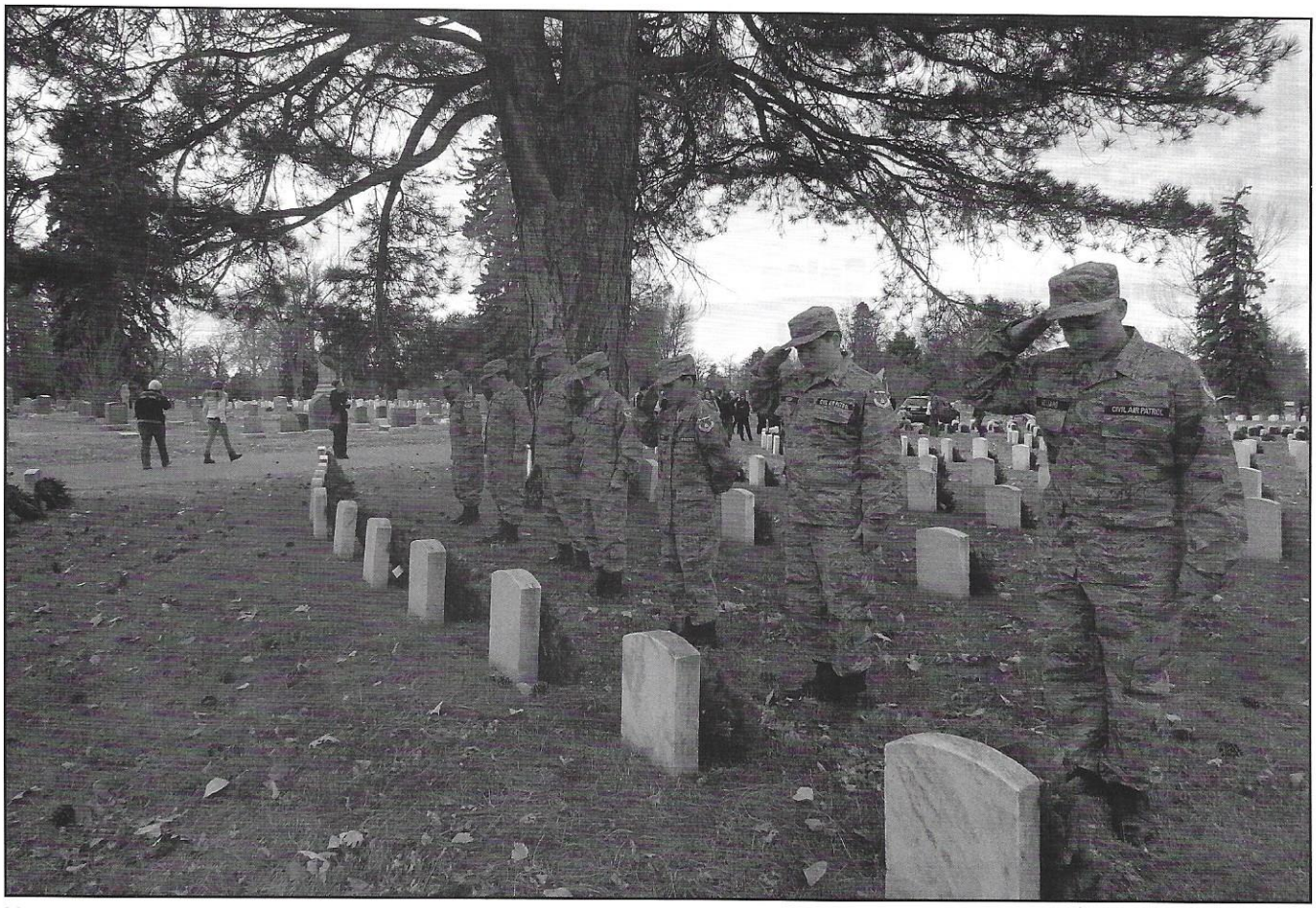
Mile High Squadron executed the Wreaths Across America Event partnering with Michael Long, Director, Fairmount Cemetery, and Commander Norm Teltow, CAP Event Organizer and Director. Cadets from Valkyrie Cadet Squadron and

Commander Maj. David Pershing were in attendance and participated in laying wreaths with Mile High Cadets.

2nd Lt. Steve Schermerhorn conducted the formal event at the Community Center and Maj. Teltow conducted the wreath event at the US Military and Nisei Monument. Wreaths were laid around the US Military Monument by active members of the US Army, Marine Corp, Navy, Air Force, Coast Guard, and the Merchant Marines.

Buckley Air Force Base & Wing Commander, Col. Troy Endicott, and MHCS Maj. Norm Teltow formally laid a wreath at the NISEI Memorial.

Col. Endicott, Brig. General Designate, and Cadets with the assistance of family and special attendees, laid wreaths at the graves of 5 Congressional Medal of Honor recipients. Cadets and about 250 attendees laid 400 wreaths in a very honorable military manor at each head stone representing those interred at Fairmount.



Honoring the Fallen from right to left is Cadet Airman Williams, Cadet Airman Johnson, Cadet Airman Perez, Cadet Airman Bueno, Cadet Airman S. Bueno, Cadet Airman Fast.

This also included WW1 pilot, 2nd Lt Francis Lowry, shot down over enemy lines near Crepion France by German antiaircraft fire. His remains were transferred to Fairmount in 1921 and laid to rest adjacent to the land that was to become Lowry Field (Lowry Air Force Base). There are over 4600 military graves at Fairmount including those not in the military section.

Next year our squadron will begin in July developing plans for the 2019 WAA Event to address graves we were unable to cover this year. Each year we grow with the wreaths event, working together with additional participants to cover the cost of wreaths as well as laying of wreaths. Hopefully in 2019 other squadrons will help with wreath sales and donations for Fairmount. It is an outstanding community event program, with cadets and officers promoting donations at Sam's Club, one of our national sponsors and King Soopers. Cadets and Senior members spoke to everyone that entered the main doors at each of the food stores. Local members of the communities wanted to know more about CAP and the WAA event. Two new companies have made a commitment to become sponsors for 2019.The reception of the general public was outstanding. Many went on line making donations missing our WAA assigned number but named the cemetery. We received the credit for the donations but two late to receive the wreaths.

On behalf of Mile High Cadet Squadron, I would like to extend my appreciation to everyone that attended the

Wreaths Across America Event at Fairmount. You are the ones that made the event possible and successful.

If you have questions and want to get involved, please contact Maj. Norm Teltow, CAP Mile High Cadet Squadron, 303 437 6219 capnorm143@aol.com

HONOR

January SAREX

By Capt. Mark Weiss, CAP
Thunder Mountain Composite Squadron

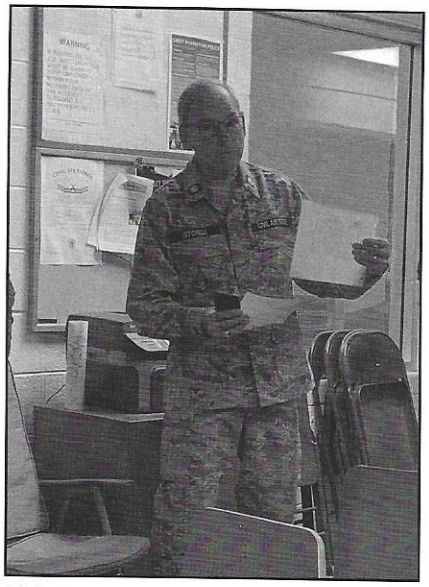
During the weekend of January 11th – January 13th, Colorado wing participated in a multi-state, multi-agency, Search and Rescue Exercise (SAREX). Under the command of Incident Commander Maj. Ed Behen, more than 60 cadets, ground team members, communication team staff, and air crew members participated.

Mission base was established at Grand Junction Regional Airport, at the Thunder Mountain Composite Squadron. A full communications room was established using the Colorado state-wide repeater system, as well as HF communications. CAP agency partner, Mesa County Search and Rescue Control (SARC), was present in the comm. room as well. SARC also provided field teams that coordinated directly with CAP air crews.

While the SAREX was hampered by weather, which caused some delays and cancellations, it also was helpful. According to Capt. Michael Schulte, a sortie mission pilot of CAP 552, he felt that the weather provided real world training in conditions that we might see during actual missions.

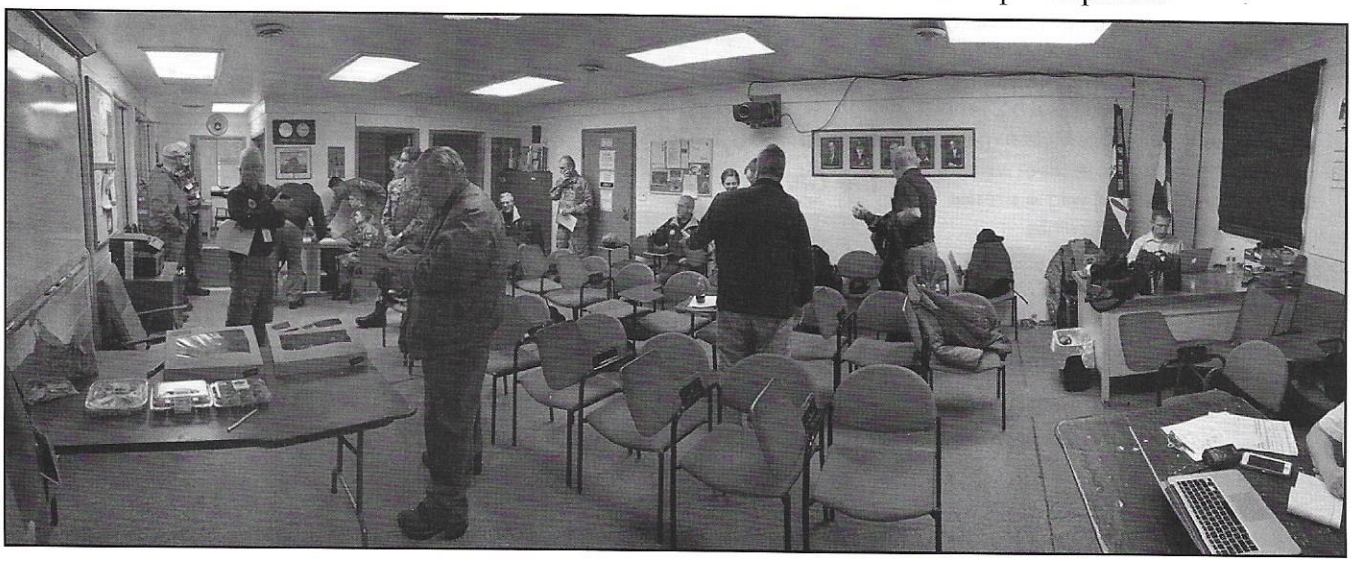
In addition to practice beacons and photo missions of flooding/ice dam evaluations, there was another excellent training opportunity. Maj. Behen mentioned that one of the missions involved finding an actual aircraft wreckage site. "Trying to find a white aircraft in white snow, is a fantastic training opportunity", said Maj. Behen.

As part of this SAREX, a CAP aircraft from Cortez was assigned to the Arizona wing to assist in their SAREX sorties. Colorado wing was able to launch a total of six successful sorties on Saturday and Sunday.



Maj. John Mitchell

Like all training missions, this SAREX provided a great training opportunity for many aspects of Emergency Services (ES), including communications, ground team, aviation team, and full mission base staff positions. Thank you again to Mesa County Search and Rescue Control (SARC) for their participation.



Chaplains Corp of the Civil Air Patrol

By Chaplain Phil Vogels, CAP
Colorado Wing Chaplain

As a Chaplain in the Civil Air Patrol, I often get questions about what it is that the Chaplain Corps does in the context of the Civil Air Patrol and I wanted to take a few minutes of your time to help us all understand what it is we do. Most of you will recognize the terms Character Development Instructor (CDI) and Chaplain, but do you know what each of these is primarily responsible for?

> *Character Development is a required part of the CAP Cadet Program, and cadets must participate in Character Development sessions in order to promote. Character Development Instructors are a part of the CAP Chaplain Corps and provide this important training to the cadets within their local unit.* -(https://capchaplain.com/join/).

To put it simply, the CDI's job is to help cadets and senior members alike understand our Core Values of Integrity, Volunteer Service, Excellence, and Respect, in a clear and relatable way. It is through these Core Values that we serve not only one another but our communities as well.

Each month a Character Development lesson should be offered at each Squadron and I highly encourage senior members to be a part of these discussions as you might get questions from the cadets about these lessons. It is also a good idea to keep reminding ourselves of what having good character is.

The Chaplains Corps has rolled out a comprehensive 2 year plan of Character Development lessons containing stories, video, and questions to help us understand what it really means to live by our Core Values. These lessons will be the same for each squadron each month across the United States, meaning that we will all be learning the same lessons at roughly the same time. This is a new program and we will have a few bugs to work out so your input on how these lessons are going in your squadrons would be a very valuable tool going forward.

The CAP Chaplain's role is to be an advisor to commanders on issues of morality and ethics, they provide for religious observances, is there for pastoral care, they help with emergency ministry and they help facilitate character development for cadets. A chaplain may adhere to a specific faith but they are also responsible for helping others with the free exercise of religion, so a CAP chaplain is there to offer spiritual guidance to all faith groups.

If you have an issue or a personal problem, your chaplain is the person to go to if you are looking for help. They typically have the training and resources to help where others may not be able to. A chaplain has a listening ear and they will walk with you through pretty much anything. One interesting note that you may not know is that a CAP chaplain should be addressed as 'Chaplain' and not by their rank.

I wanted to personally thank all of the Character Development Instructors and Chaplains in the Colorado Wing for all of your hard work. The Chaplains Corps is here to serve and I am constantly hearing about the good that you are all doing so please keep up the excellent work.

The Chaplains Corps of the Civil Air Patrol is here for all of you so please let us know what we can do for you. Thank you all for letting us serve you.

WATCH YOUR SIX

Accountability and What It Should Mean to You

By Capt. Tammy Peeples, CAP
Assistant Director of Safety, COWG

In October of last year, a man went up for a jump with a skydiving Center in Longmont. He went up with them at 1:15pm. It wasn't the skydiving center who reported him missing. It was his girlfriend who was supposed to meet him for dinner, when he didn't arrive she called Longmont Police and reported him missing. He was found in a field the next morning. The FAA ruled his death an accident.

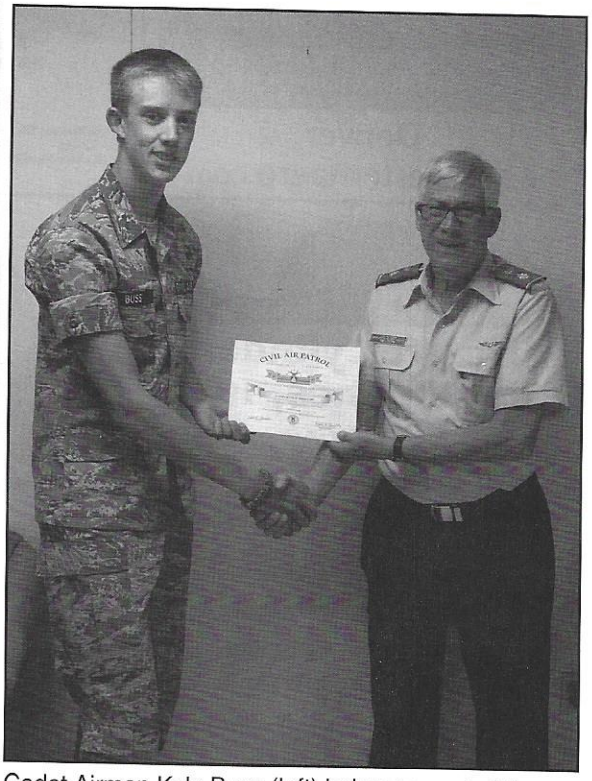
The accident itself is not what I want to focus on. It is the fact that he was not reported missing until his girlfriend reported it eight hours later. Accountability is my focus here. How can a group of people go up in a plane, and come down with one less and nobody notice it? If ten people go up in a jump plane, then ten people should be on the ground afterwards. Sounds simple doesn't it?

Well a lot of things can occur to cause such an error of this magnitude and I am not judging anyone for what happened to this gentleman since all the facts are not made public. Rather, I am using this as an example to bring awareness to those of us in the Wing who have the responsibility to keep account of where our members are. Are you responsible for cadets? What about being the director of an activity? Do you practice random fire drills at your meetings, if so, what do you do to account for everyone?

At our CO Wing Encampments every year we are required to do a random fire drill. We hold them at different times and days each year, so the cadets don't know when it is coming. At the end of each drill we hold an after-action meeting right then and there. We identify any issues and talk with all the staff and cadets at the encampment about what we discovered and how we plan on mitigating it the next time. This does three things: 1) Helps us make the encampment safer each year 2) educates the cadets on the importance of accountability and constant vigilance in their own duties and 3) reminds all our members of our duty to keep a watchful eye; Semper Vigilant. I encourage everyone to take the time to reflect on how you can take measure to help improve accountability at your squadron and at activities you attend.

Fremont Starfire Cadet Receives Life Saving Award

By 2nd Lt. Sherry Turner, CAP
Fremont Starfire Squadron



Cadet Airman Kyle Buss (left) being presented the Life Saving Award by Fremont Starfire commander Lt. Col. Bryce Nelson (right).

Cadet Airman Kyle Buss of Fremont Starfire Squadron was on the way to a squadron meeting recently when he was presented an awesome chance at rendering aid to a gentleman traveling in front of him on Hwy. 50 in Fremont County whose vehicle left the road and traveled down an embankment to the Arkansas River. Kyle Buss stopped to render aid and call for help. Buss was recently awarded a life-saving award in recognition of rendering aid to the driver.

Alaska Communications Up and Running Thanks to CAP Volunteers from Idaho and Texas

Maj. Bryan Emerson

In 2015, no Alaska squadron had any volunteers participating in CAP's national communications network. In 2018, 8 squadrons had active representation. What happened? The answer is individual initiative and the generous aid of three leaders in CAP communication, all of whom live thousands of miles from Alaska:

* Maj. Kristin Freeman is the national Voice Operations Manager, Rocky Mountain Region DCS-Communications, and has been an instructor at NESA, the National Emergency Services Academy.
* Maj. Eric Freeman is the Idaho Director of Communications and on the National Headquarters staff for Communications Engineering.
* Lt. Col, Henry Howe, Texas Wing Director of Communications, coordinates the one week LESA (Lone Star Emergency Services Academy) Communications School for CAP seniors and cadets each year in East Texas. Maj. Bryan Emerson, current Alaska Director of Communications, was a graduate of the 2011 School.

When Maj. Emerson learned that all have adult children living in Alaska, he asked them if, on a future visit, they could lend some of their time and considerable talents to resuscitating the state's moribund communications program. They quickly agreed.

Alaska's communications program is important not only to Alaska, but to the rest of the U.S. as well because, perhaps counter-intuitively, of its distance to the Lower 48. High Frequency (HF) radio waves travel three ways: One is by line of sight, which is limited by the curvature of the earth. The second is by ground wave which is limited by the contours of the earth, and the third is by bouncing transmissions off the ionosphere, which facilitates long distance, even intercontinental communication. Because of the angles involved, Alaska can hear and receive messages from CAP stations throughout the country when even adjacent operators cannot, without near vertical incidence skywave antennae (NVIS), which are rarely used in CAP.

In 2017 and 2018, the Freemans and Howe visited, by CAP plane and car, all of the Alaska squadrons that expressed interest in enhancing their communications programs. They assessed inventory lists, installed and repaired old radios and antennae, and trained three dozen CAP volunteers in the communications protocols and equipment. In addition, they drafted a detailed memo for CAP National Headquarters, outlining recommendations for new equipment purchases, including a powerful Log Periodic antenna, which Hawaii also has, for ensuring crisp and clear radio transmissions to and from the other 48 states.

Today, CAP volunteers at eight squadrons participate in CAP's daily communications network, prepared to transmit information in any emergencies.

"Everyone in CAP communications is excited that Alaska is up and running again. I was so relieved to hear Kodiak loud and clear the day of the state's 7.1 earthquake," says Maj. K. Freeman, who flew out to that island to help them get online. "And the powerful Log Periodic antenna in Alaska is a great asset to CAP squadrons throughout the country almost every weekday, because it relays messages that some of us cannot hear; it is "in the skip" for nearer stations. Perhaps most important, Alaska's distance means that it is likely to be unaffected by major disasters, like a New Madrid earthquake or power grid disruption, which could cripple large swaths of the Lower 48. In my view, any Alaska squadron with a CAP HF radio and a willing volunteer, is a valued resource for every other CAP installation."

For their time, talent, and generosity, Alaska sends out a hearty THANK YOU to the Majors Freeman and Col. Howe.

U.S. Astronaut and Russian cosmonaut safely on earth after emergency during Soyuz rocket launch

By Cadet 1st Sgt. Peck, CAP
Eagle County Composite Squadron

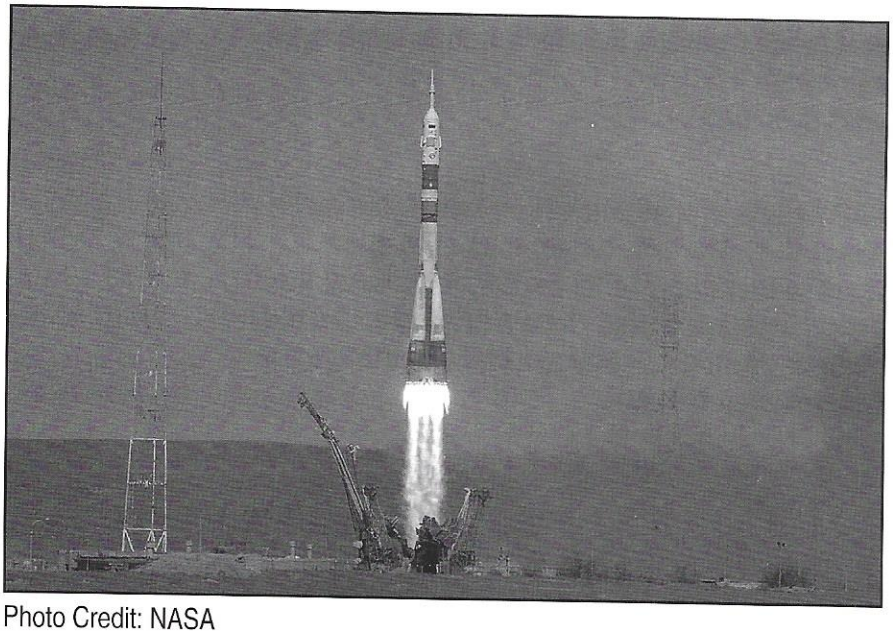


Photo Credit: NASA

U.S. Air Force Colonel Nick Hague and Russian cosmonaut Alexey Ovchinin are safely on the ground after an in-flight emergency during the launch of their Soyuz rocket to the International Space Station. During booster separation approximately 2 minutes after Soyuz MS-10 lifted off from Baikonur Cosmodrome in Kazakhstan at 04:40 Eastern Daylight time on 11 October 2018, one of the Soyuz's side boosters collided with the rocket's core stage. Following the anomaly, the crew used the Soyuz's launch abort system to separate their Soyuz capsule from the stricken launch vehicle, enduring a G force load of 6.7 Gs during a ballistic reentry before landing near the Kazakh town of Dzhezkazgan. NASA and the Russian space agency Roscosmos have both promised to investigate the incident thoroughly to determine the cause. For the moment, however, the international community of space exploration is relieved to hear that Hague and Ovchinin are safely on terra firma. The effect that the incident will have on the 3 crew members onboard the ISS is currently uncertain, but NASA and Roscosmos are aiming to launch another Soyuz "before Christmas."

YOUTH AVIATION INITIATIVE:

Funding America's Future in Aviation

By Russell Slater

Beginning next year, Civil Air Patrol will use federal funds from the U.S. Air Force to implement a program designed to help solve a national pilot shortage.

CAP cadets around the nation are enthusiastic about the initiative. Its purpose is 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.

Cadet 1st Lt. Aaron Loya, cadet commander of the Georgia Wing's Bartow-Etowah Composite Squadron, prepares to solo in a glider. Photo courtesy of Cadet 1st Lt. Aaron Loya, Georgia Wing

"It felt like I had the entire world at my fingertips. It is unlike any other feeling in the entire world."
— Cadet Capt. Kevin Martinez, Bay Shore Composite Squadron, New Jersey Wing

The Initiative

"Civil Air Patrol is working with its partners on many fronts to encourage America's youth to pursue aviation careers," said John Desmarais, director of operations at CAP National Headquarters. "CAP has a long aviation history, and as needs for more aviation-oriented youth are realized, we are expanding existing programs as well as fielding new ones to address the challenges.

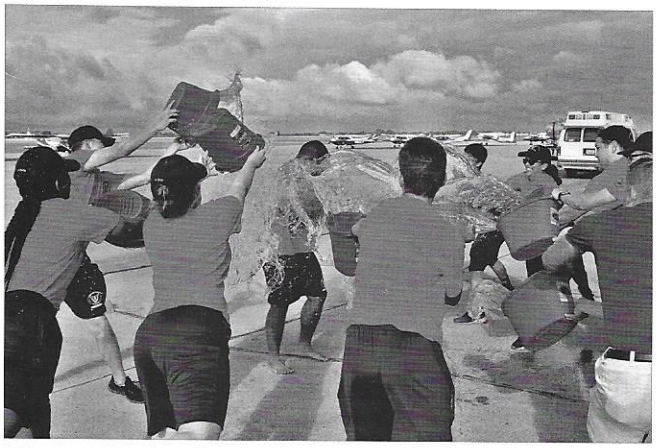
"As we move into fiscal year 2019, CAP will be working hard to implement a significant initiative funded by the Air Force to attack the problems on several fronts," Desmarais said.

Those measures include:

- $1 million for formal flight instruction of CAP cadets, which is expected to lead to about 240 cadets soloing and another 60 earning their Federal Aviation Administration private pilot certificate;
- $400,000 for CAP to provide cadet orientation flights for Air Force ROTC and Air Force Junior ROTC cadets;
- $500,000 for STEM (science, technology, engineering and math) program support that CAP will use to field more kits for squadrons to employ as part of internal aerospace education programs and for teacher members to use in their classrooms. The STEM money will also support maintaining and updating kits to sustain the program; and
- $500,000 to support career exploration activities for CAP cadets. CAP offers more than 50 National Cadet Special Activities that enable participants to explore careers

in the Air Force as well as the aviation industry by becoming a pilot, building and designing airplanes, managing airlines and serving in space command or pararescue.

"We're also working hard to expand relationships with industry partners like Delta and American airlines," Desmarais added. "This is a developing industry-wide issue, and by working together we can not only encourage cadets to consider pursuing military careers, but also either directly or as a step after the military go into commercial aviation. This also incorporates opportunities with accredited university aviation programs as well, encouraging CAP cadets to explore all opportunities."



Blue water buckets in hand, participants in Week 1 of the Johnson Flight Academy douse a cadet who just finished his solo flight. The ritual is common at the academy, where hundreds of cadets have learned to fly over the past 60-plus years.

New Jersey Wing Cadet Capt. Kevin Martinez takes flight during the National Flight Academy in Shawnee, Oklahoma. Photo courtesy of Cadet Capt. Kevin Martinez, New Jersey Wing

Expanding Opportunities

Wendy Hamilton, manager of cadet career exploration programs at CAP National Headquarters, predicts the initiative will help enhance the organization's contribution to the aviation industry.

"We're starting to work with the industry to connect cadets directly to opportunities for pursuing careers in aviation-related fields," Hamilton said. "The program will expand opportunities for our cadets, such as helping them get their private pilot's certificate and having the funds to get to that milestone."

CAP cadets impress aviation-related businesses with their focus and experience.

"Cadets are vetted, and are getting out there and doing the work," Hamilton said. "This program will help them take the next big step. Youth development programs, not just flying on the weekends, but leadership development, character development, good moral groundings, physical fitness training, all of it plays hand-in-hand. Cadets know how to work as a team."

Cadets with Potential

Cadet Chief Master Sgt. Emma Diane Herrington of the Texas Wing is looking forward to the initiative. "I believe that this program can help answer the needs of the national pilot shortage, and I can't wait to do what I can to help," she said. Herrington has 40 hours of flight time and is in the final stages of obtaining her private pilot certificate.

Cadet Capt. Kevin Martinez of the New Jersey Wing heard about the initiative through his flight instructors and CAP

Cadet Chief Master Sgt. Emma Diane Herrington of the Texas Wing flies at the Shirley Martin Powered Flight Academy in Nacogdoches, Texas.

senior members.

"I think it is something I would be deeply interested in, as it helps people like me achieve lifelong goals and aspirations that many think are unreachable," Martinez said. "Some people may not realize the incredible cost of maintaining flight training, and this program would help me and others like me out immensely in that aspect. I think this is just the program our nation's youth needs to unlock their true potential."

Martinez's flight experience dates back to 2014, when he received his first cadet orientation flight at 12. Fascinated with aviation from an early age, Martinez credits his membership in CAP for opening the door to a new world of opportunities. He has received four powered orientation flights as well as two glider orientation flights.

During the summer Martinez logged 11.7 hours of flight time in nine days at the Southwest Region Powered Flight Academy in Shawnee, Oklahoma. "By the end of the week I soloed for the first time! Although it was just a pattern around the one-runway airport, it felt like I had the entire world at my fingertips. It is unlike any other feeling in the entire world."

Cadet 1st Lt. Aaron Loya, cadet commander of the Georgia Wing's Bartow-Etowah Composite Squadron, attended the Texas Wing Glider Flight Academy in 2016 and the Southeast Region Glider Academy this summer, where he flew solo for the first time. He recently began working toward obtaining a powered flight certificate, logging about five hours so far.

Civil Air Patrol Cessna 172s line the tarmac during Week 2 at Coles County Memorial Airport in Mattoon, Illinois. The airport is the site of CAP's oldest National Flight Academy — the Johnson Flight Academy. Photo by Maj. Greg Hoffeditz, Illinois Wing

Maj. Evan Youngblood, commander of the Illinois Wing's Shawnee Composite Squadron, provides ground instruction at the Johnson Flight Academy. This was Youngblood's first year at JFA, where he served as a certified flight instructor. Photo by Maj. Greg Hoffeditz, Illinois Wing

Powered flight students at the Johnson Flight Academy maneuver a CAP Cessna 172 into its parking spot. Note the yellow T-shaped lines painted on the flight line as cadets attempt to line up the plane so they can tie it down. Photo by Maj. Greg Hoffeditz, Illinois Wing

These cadets and many others stand ready to reap the benefits that will result from the Youth Aviation Initiative. As multiple doors open for opportunities to better their education and future careers, they will continue to work on personal self-improvement while contributing to CAP's mission of service to communities and the nation. ★

Photos courtesy of CAP National Headquarters

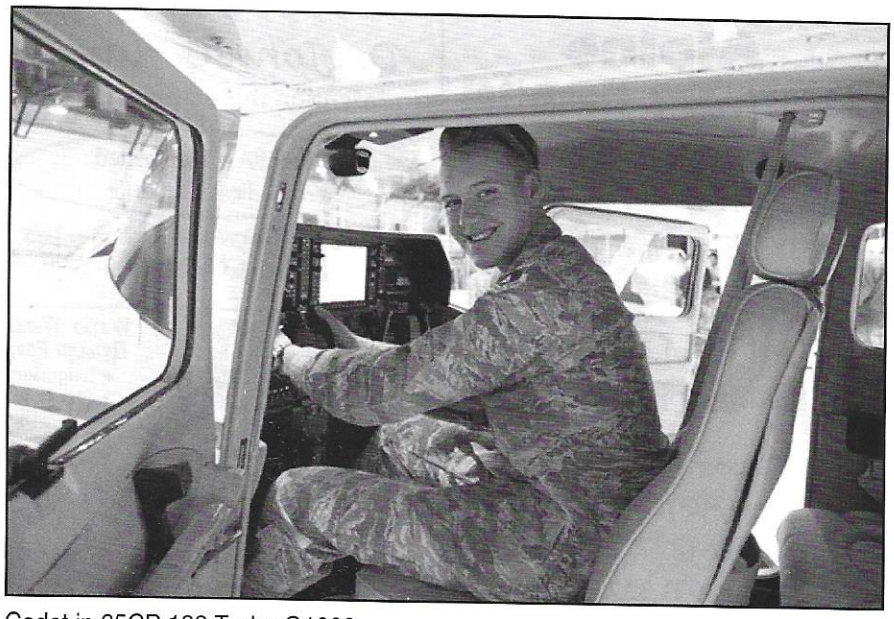
Reprinted from CAP Volunteer *Magazine, Fall 2018*

Hanging Out With Airplanes

By Capt. Jen Knellinger, CAP
Squadron Commander, Pikes Peak Senior Squadron

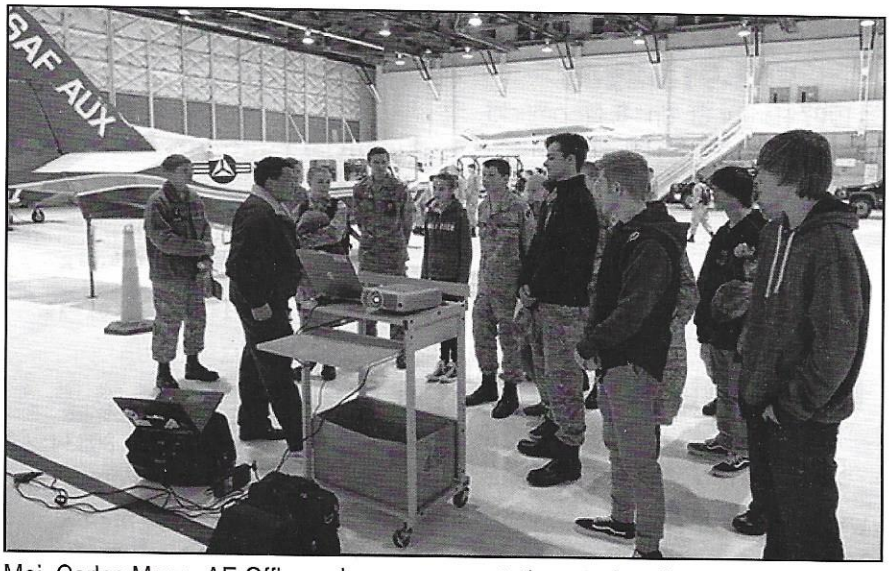
In an effort to introduce new cadets to aircraft and relieve the anxiety of a fast paced Orientation Ride scenario, PPSS developed a model initial program with the input of our pilots and one of our cadet squadrons.

Last year when teaching a CLC class, Anja Meyers, of the Colorado Springs Cadet, asked about opportunities to collaborate on more hands on aviation activities with Pikes Peak Senior Squadron. In addition, we also discussed a rather recent phenomena regarding cadets joining an aviation organization but with no interest in flight.



Cadet in 65CP 182 Turbo G1000.

After discussing internally we thought it might be helpful to introduce cadets to airplanes (other than United, American, etc…) by an open house of sorts but with no planes leaving the ground. Developing a comfort and general knowledge about the very aircraft they would fly in when ready, we believed might both relieve fear and inspire excitement.



Maj. Carlos Mena, AE Officer, shares a presentation on aircraft.

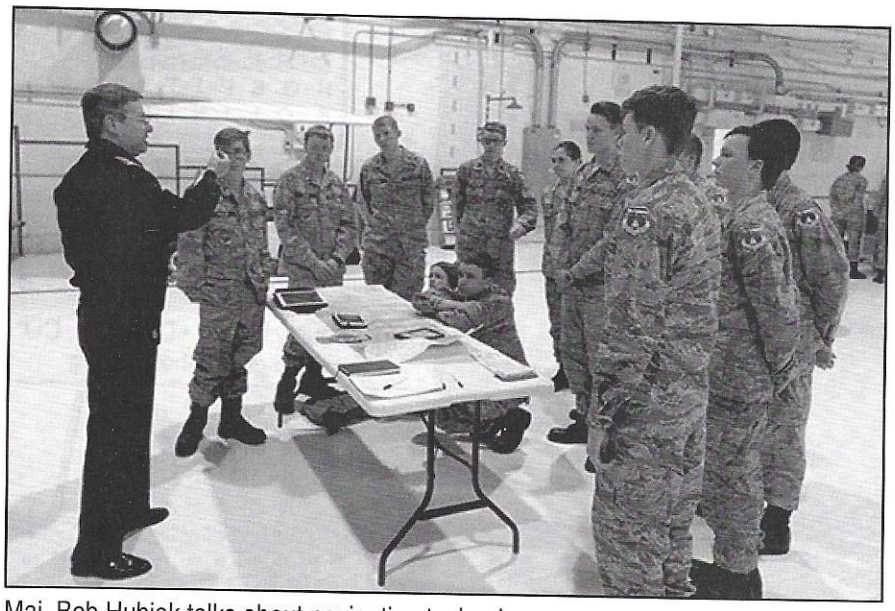
The hour and a half program starts out with a welcome and introduction to the instructors and presenters. Then the group of about 50 is divided into four groups, each going to a different station. One station presented aircraft mechanics and was taught by our AE Officer with a short PowerPoint presentation. The second station was one of the two CAP aircraft; the third the other CAP aircraft. Those two stations were taught by pilots that routinely fly the particular aircraft.

Continued on page 27 . . .

AIRPLANES Cont. from page 25

They know the planes well and could discuss them in depth.

The fourth station was an exhibit of personal aviation technology; think Ipads... commonly used by pilot and aircrews to both navigate, track, check weather, terrain... and more. With this generation of cadets, the use of technology is not foreign or complicated, they embrace it. Taught by a pilot, the cadets realize that tools they know and use with ease are used by aircrew to fly the plane and complete the missions.



Maj. Bob Hubiak talks about navigation technology.

At the close of the event, cadets were able to express their interest in signing up for an ORide if interested, ask questions, get photos in the planes, etc. A CAP Airplanes 100 event done with low stress and a lot of fun, Pikes Peak Senior Squadron will be offering similar events to all of the cadet squadrons in the Colorado Springs area.

COMMANDER'S COMMENTS Cont. from page 1

fly our aircraft, things also change. The "volunteer" has now agreed to perform the duties and accept the responsibilities of the job or duty position and abide by our regulations. This includes commanders, staff members, aircrews, and all those holding duty positions in our units.

Commanders at all levels must ensure that prospective new members understand CAP's expectations of members. The unit membership board should ensure a new member is a good "fit" for CAP.

"I'm just a volunteer" is never an acceptable reason or excuse for a member's failure to follow the rules or perform the requirements of a task or duty position. In talking with members who are volunteers in other organizations, like firefighters, if their members do not follow the rules or complete required training, they are removed from the organization. Their lives, and the lives of others, depend on it.

While many of our requirements are not life or death, some are. We took an oath to follow all the rules, not just the ones we deem worthy to follow. We need to encourage those that speak out against the rules to embrace the rules and follow them.

If you feel a rule is overly burdensome or could be better, send your suggestion up the chain of command. While I can't guarantee the rule will be changed exactly as you want it, it may spark further discussion and lead to a better rule. In addition, you may get information so you understand why we have the rules we do.

We all know that life gets in the way of CAP at times. That's not what we're talking about here. During these times, let your commander know so that anything that needs to be taken care of is handled. However, if you're just saying you're not going to follow a rule because you don't like it, step back and remember, once you volunteered to be a part of CAP, to obligated yourself to follow all of its rules.

Aircraft Spotlight: McDonnell Douglas F-15 Eagle

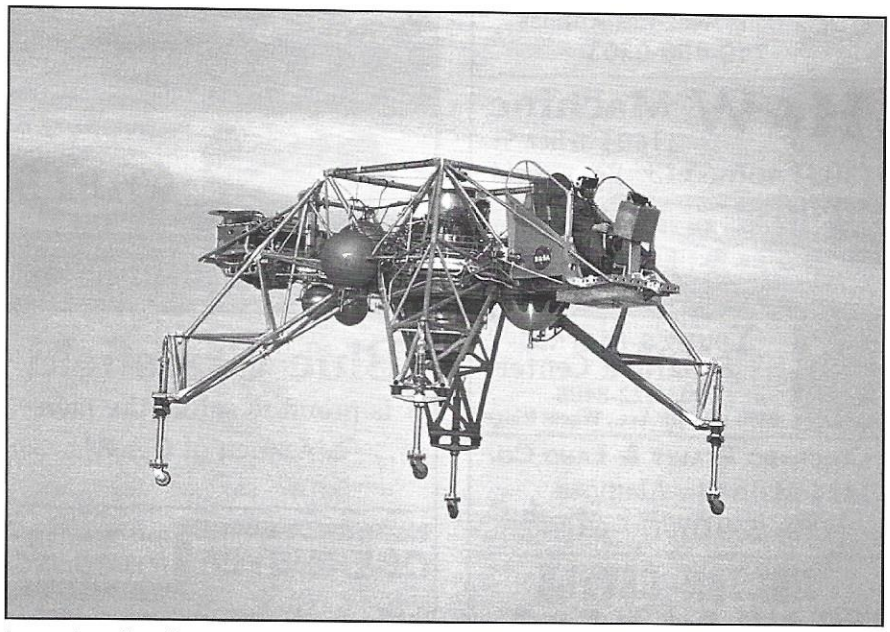
By Cadet 1st Sgt. Peck and Cadet Chief Master Sgt. Kalista Farmer, CAP
Eagle County Composite Squadron

F-15 Eagle. Credit: United States Air Force

The F-15 Eagle is a twin engine air superiority fighter used by the United States Air Force, Israeli Air Defense Force, Japan Air Self-defense Force, and Royal Saudi Air Force. Initially designed by McDonnell Douglas in response to the U.S. Department of Defense's demand for an American fighter that could provide a worthy adversary to the formidable Soviet MIG-25, the F-15A made its first flight on 27 July 1972. In conflicts such as the Persian Gulf War, the F-15 gained a reputation as a highly lethal fighter, achieving over 100 victories over its combat career with not a single F-15 confirmed to have been shot down by an enemy aircraft. The F-15 was also used in a USAF program to test the ASM-135 anti satellite missile; this experiment culminated in F-15 pilot Major Wilbert "Doug" Pearson destroying a decommissioned solar observatory satellite on 13 September 1985. The F-15 is powered by two Pratt & Whitney F100 afterburning turbofan engines, producing up to 23,770 pounds of thrust each, allowing the F-15 to accelerate to 2.5 times the speed of sound (1,650 mph, 2,665 kph). The United States Air Force continues to operate the F-15C and F-15D in the air superiority fighter role, as well as the two-seat F-15E Strike Eagle for more ground attack related missions. The F-15C/D models are expected to be fully replaced in their air-to-air role by the Lockheed Martin F-22 Raptor and other fighters sometime in the mid 2020s', with the F-15E continuing to operate for a longer timeframe.

Aerospace Oddities: Lunar Landing Research/Training Vehicle

By Cadet 1st Sgt. Peck and Cadet Chief Master Sgt. Kalista Farmer, CAP
Eagle County Composite Squadron



Lunar Landing Research Vehicle. Credit: NASA

In order to accomplish their assigned mission of Landing an astronaut on the moon, NASA needed a safe way to simulate the flight characteristics of a lunar lander in the atmosphere. The actual lunar excursion module (LEM) was too fragile to fly on Earth, so NASA instead needed an aircraft that handled similarly to the LEM for research and training purposes. Bell AeroSystems answered the call by designing and manufacturing the Lunar Landing Research Vehicle (LLRV). The "Flying Bedstead," as it was nicknamed, consisted of a simple aluminum alloy frame with a General Electric CF700-2V turbofan jet engine in the middle that the pilot could swivel using the flight controls. The engine swivel controls were supplemented by a set of 4 hydrogen peroxide fueled maneuvering thrusters mounted on the frame. The LLRV made its first flight on 30 October 1964, piloted by NASA test pilot Joe Walker. It continued to be used for test and training flights until, on 6 May 1968, future Apollo 11 commander Neil Armstrong was piloting LLRV #1 at Ellington Air Force Base near Houston, TX, when his maneuvering thrusters ran out of fuel in a high-wind environment, forcing him to eject a mere 200 feet off the ground. Armstrong's Crash halted LLRV flights, as Bell was already developing an upgraded version of the aircraft, the Lunar Landing Training Vehicle. This new version would continue to be used for training flights until the end of the Apollo program.

Fremont Starfire Squadron Bivouac Training

By 2nd Lt. Sherry Turner, CAP
Fremont Starfire Squadron

Fremont Starfire Squadron recently held another bivouac at Royal Gorge Campground. Lt. Col. Bryce Nelson along with 2nd Lt. Daniel Turner and 2nd Lt. Sherry Turner presented classes in first aid and trained the cadets in litter carrying. The cadets learned how to render aid to someone injured with different types of injuries, how to move them onto a litter and then strap them in safely before transporting. Cadets were trained in UDF, making fires with different types of starter, making an emergency shelter, outdoor cooking, and other survival skills.

From left to right: Cadet Sweigart, Cadet Airman Richardson (on litter), Cadet Technical Sgt. Foster, and Cadet Gerber.

Jack Swigert Aerospace Academy Program

By Capt. Jen Knellinger, CAP
Squadron Commander, Pikes Peak Senior Squadron
Photos by Christopher Lucca

In 2016, I received a phone call from a middle school science teacher regarding assistance with aviation education. As a PAO and Deputy Commander, I thought this slightly out of my realm but took the opportunity to share CAP with the community.

Jack Swigert Aerospace Academy is a District 11 school opened in 2009 in collaboration with the Space Foundation. It was named after Colorado native and astronaut, John L. "Jack" Swigert who served on Nasa's Apollo 7 and Apollo 13 missions. With incredible community and industry support, the school's focus is on improving students' proficiency in science, technology, engineering, arts and math (STEAM).

One of the buildings on the school campus houses the Space Foundation's Discovery Institute where 4 working flight simulators, a wind tunnel, and other ancillary equipment serve to teach selected and interested students about aviation and aerospace. The dilemma, I discovered upon my visit with science teacher Leif Anderson, was their general science

Earl Goecker and JSAA students examine an experimental's engine.

JSAA Students and PPSS members take a final pic with the planes.

teachers lacked the experience and background to teach more targeted lessons on flight training, aircraft, navigation, airports and communication. Hence, the request for Civil Air Patrol assistance.

Leif Anderson's class at JSAA. Thanks for a great year!

After almost a year of phone calls, approvals, curriculum discussions, and agreement on what Pikes Peak Senior Squadron could realistically offer the school in time, skill sets and experience, our Aerospace officer, Maj. Carlos Mena picked up the mantle. Carlos led and continues to lead a team of pilots and AE instructors to teach 4 -6 classes per week for 2 weeks in both the Fall and Spring at the school. The students are a select group of 7th and 8th graders chosen to work in teams or pairs in a simulator cockpit running various scenarios and speaking to "tower" with the tools provided.

The PPSS pilots have brought in all types of tools and hands-on technology to share the less theoretical and more operational aspects of flight training, planning and communications with the students. The program has been a great collaboration and even more fun for our participating members. Last Spring Pikes Peak Senior Squadron worked for months with local FAA staff to provide an opportunity to share the local FAA's ATC with the D11 students. It was a huge success. For the FAA staff who toured, talked and shared their roles, the students – many of whom have never been to or seen an airport and PPSS seniors Carlos Mena, Stephen Fontenot and Jen Knellinger had a fantastic time seeing the inner workings and coordination of the FAA team at work.

This past December, the two weeks of teaching culminated in yet another big event – The Airplane Day at the Jet Center. In addition to the two aircraft which PPSS uses, a GA8 Gypsum and a 182T Turbo, G1000, Carlos and our maintenance team of Jon Bucher and Earl Goecker arranged for three other aircraft to be open and shared with the students.

The students, teachers and CAP staff also had a unique opportunity to see a giant Russian cargo plane with a truck parked inside its hull. It was a huge hit. And for some students and many of us, a "wow" moment to see something that large.

In addition to viewing the planes with knowledgeable pilots and crew, the students were treated to a presentation of career opportunities for both men and women in aviation. Two pilots with long and very different career paths shared their flight training and career experiences. The best was yet to come-as the finale of the day was a big pizza lunch sponsored by PPSS before students and teachers headed back to school.

The partnership between PPSS and JSAA is an incredible model for a realistic and award winning AE External Program. It's a win/win for all and a great demonstration of CAP in the Community sharing their commitment to service, excellence and volunteerism. The thank you notes from the students with both their candor and excitement over having a special day to be in 5 different airplanes and stare into the hull of something so large were both gratifying and priceless. We are grateful to both the Jet Center's support and our JSAA partners for the opportunity.