



# South Dakota Wing Roundup



CIVIL AIR PATROL • SUMMER 2019 • UNITED STATES AIR FORCE AUXILIARY



**JOINT DAKOTA ENCAMPMENT**

VINCERE PROVOCATIO

2019



## 2019 JOINT DAKOTA ENCAMPMENT

SENIOR STAFF, CADET CADRE AND CADET PARTICIPANTS AT THE 2019 JOINT DAKOTA ENCAMPMENT HELD AT CAMP RAPID, SOUTH DAKOTA FROM 5 - 14 JULY 2019



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**SUPPORT OUR CADETS . . . . .**  
**. . . . . THEY ARE OUR FUTURE!!!**

# 2019 JOINT DAKOTA ENCAMPMENT



*By 2nd Lt. Malisa Niles, CAP  
Public Affairs Officer, 2019 Joint Dakota Encampment*

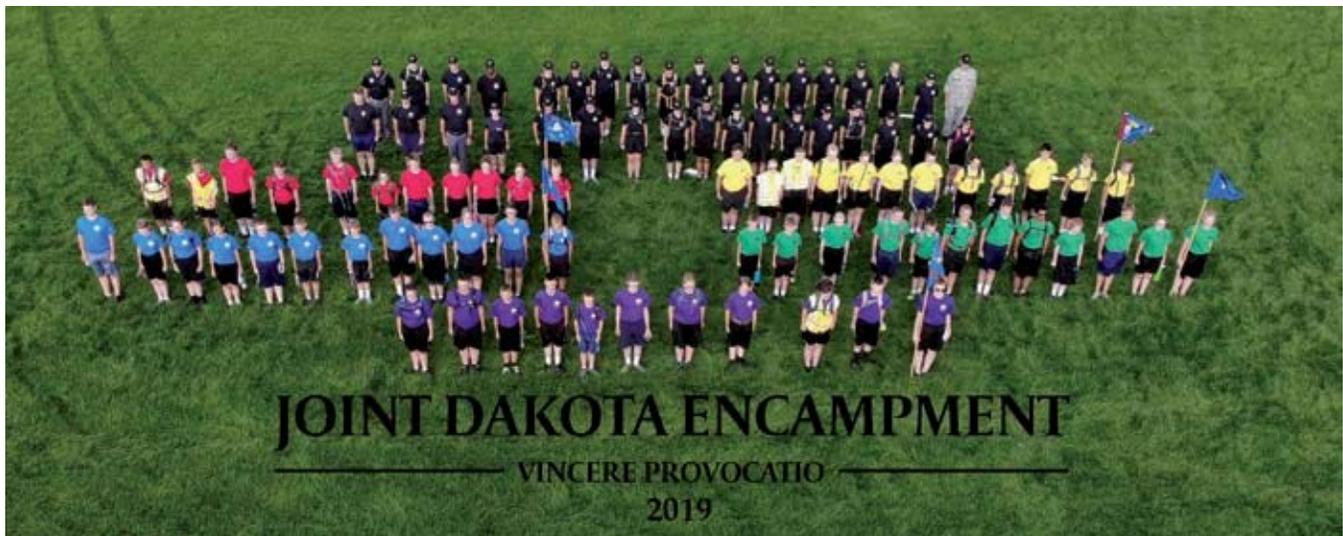
*Logo of the 2019  
Joint Dakota  
Encampment.  
The Latin motto  
translates as "To  
Overcome the  
Challenge".*

*[Editor's Note: In 2019, the Civil Air Patrol wings in North and South Dakota celebrated 27 years of holding an annual joint encampment each summer for their cadets. In even numbered years the encampment is at Camp Grafton, a North Dakota Army National Guard installation near Devil's Lake. In odd numbered years the encampment is at Camp Rapid, the South Dakota Army National Guard's facility near Rapid City. Although primarily for cadets from the Dakotas oftentimes cadets from CAP wings in nearby states also attend.]*

From 5 July to 14 July, the South Dakota Army National Guard's Camp Rapid near Rapid City was inundated by 64 cadets. First time encampment participants were registered in the Basic Leadership Course (BLC) while repeat participants were registered in the Advanced Leadership Course. There were 29 cadet cadre members and over 30 senior members at the 2019 Joint Dakota Encampment.

Eight Civil Air Patrol Wings sent participants; California, Minnesota, Missouri, Montana, Nebraska, North Dakota, South Dakota and Texas. The Encampment Commander was Lt. Col. Nick Gengler and the Cadet Commander was Cadet Capt. Jaden Peterson, both from South Dakota Wing.

Mornings started early with physical training followed by breakfast and close order drill. Afternoons during the week encompassed activities such as drug demand reduction, practical field exercises, uniform and barracks inspection, military customs and courtesies, public speaking, aerospace education, and various team leadership exercises. One of the most popular events for cadets and officers was the firearms training simulator. At day's ends the cadet flights competed in friendly games of Ultimate Frisbee.



*A drone's eye view of the encampment participants.*

One special activity was a tour of several Air Force organizations stationed at Ellsworth Air Force Base. The cadets were able to meet a B-1B bomber flight crew and climb up into a B-1B cockpit. They met with the base's Explosive Ordnance Disposal team and were able to dress up in their protective gear

and operate the bomb retrieval robots. The cadets sat in the base's flight line emergency services firetrucks and sprayed tremendous jets of water. During lunch, the visitors watched the Air Force Honor Guard practice their moves. The afternoon concluded with tour of the South Dakota Air and Space Museum. The Advanced Leadership Course cadets had the opportunity to fly the museum's flight simulator. All the cadets enjoyed the aerospace displays and the concession shop.

Another special activity was at West Camp Rapid where the cadets and their cadre spent several hours putting their leadership and critical thinking skills to test on the Leadership Reaction Course and the Challenge. Cadets and cadre were given tasks to complete with only the materials available. They build bridges, climbed walls and transported "casualties."



*A team of participants navigate a group obstacle/ leadership course.*



*Physical fitness played a large part in the 2019 JDE.*

The traditional Pass-in-Review Ceremony was held Saturday at Camp Rapid formally ending the 2019 JDE. An encampment banquet was held shortly thereafter at the Dakota Club on Ellsworth AFB during which a number of awards were presented. Bravo Flight was awarded the distinction of Honor Flight of the Encampment. BLC Cadet Airman of the Encampment was Cadet Airman 1st Class Joshua Skelton of



*Cadets negotiate part of an obstacle course.*



*Cadets operate a bomb clearing robot.*

the Sioux Falls Composite Squadron. BLC Cadet of Encampment was Cadet Tech. Sgt. Gabriel Healy of Mitchell Flight. Cadet Master Sgt. Devin Griffin of Rushmore Composite Squadron was the ALC Outstanding Cadet of Encampment. Outstanding Training Officer was awarded to North Dakota Wing's Maj. John Hoeck. 2nd Lt. Cody Helm, also of North Dakota Wing, was awarded the Outstanding Line Cadre and Cadet 1st Lt. David Willison of Sioux Falls Composite Squadron received Outstanding Support Cadre. The Carlson Jebediah Lassiter Award was given to Cadet Master Sgt. Keon de Hoed of Sioux Falls Composite Squadron. The Burton Gus Custer Award was presented to Cadet Senior Master Sgt. Matthew Tracy of Rushmore Composite Squadron. Cadet Chief Master Sgt. Hunter Rice of Crazy Horse Composite Squadron was awarded the Shawn SpenStar Award. The entire Advanced Leadership Flight was awarded the National Rifle Association Marksmanship badge. Members of the ALC also served as the JDE Color Guard and were responsible for the POW/MIA Honor Table.

The 2019 Joint Dakota Encampment was a



*Evenings featured competitive Frisbee matches between the flights.*



*Cadets handled deactivated ordnance during explosives ordnance disposal demonstration.*



*Cadets operate the water cannons of flightline fire fighting equipment.*

huge success due to the dedication of its members and supporters. Camp Rapid served as excellent hosts. Many thanks to the excellent culinary crew from the North Dakota Air National Guard out of Fargo ND to feed all of the 124+ encampment attendees three times a day. CAP Senior Members volunteered countless hours in support of the JDE's cadre and cadet participants. Everyone helped make a difference for each cadet attending. Each cadet arrived a little scared and feeling alone, but left strong and an integral part of the Civil Air Patrol. Please visit our Facebook page [www.facebook.com/CAPJDE/](http://www.facebook.com/CAPJDE/) to see more pictures and event coverage. 📷



*Always a favorite, cadets got to try out the small arms marksmanship simulator.*



*Uniform inspections and room inspections kept the cadets and their quarters looking sharp.*



*The cadet Color Guard leads the pass-in-review ceremony at the end of the encampment.*



*Ellsworth AFB made a B-1 bomber available for the cadets to inspect and sit in the cockpit and imagine.*



*Cadets march in a traditional pass-in-review ceremony formally ending the 2019 Joint Dakota Encampment.*

# REFLECTIONS ON THE 2019 JOINT DAKOTA ENCAMPMENT



*By 2nd Lt. Malisa Niles, CAP  
Public Affairs Officer, 2019 Joint Dakota Encampment*

Serving as the Public Affairs Officer (PAO) at my first Civil Air Patrol (CAP) Joint Dakota Encampment (JDE) was a truly eye-opening experience as to what we expect from our cadets. I remember last year my own cadet was nervous about attending the 2018 Joint Dakota Encampment and me reassuring her that it could not be that hard, and to think of it like a summer camp. She went and came back a stronger cadet that was excited about what CAP could do for her as well as what she could do for her community. I heard a story or two from her, read the article in the South Dakota Wing Round-Up magazine, and checked out the updates posted on the encampment's Facebook page. I thought I knew what encampment would be like. This year serving as the Public Affairs Officer, I learned my perception about encampment was wrong.

There is a reason we don't call it the Joint Dakota Summer Camp. Cadets do not spend the day at the swim beach, making crafts or riding horses. The encampment staff's job is not to coddle the cadets. I am sure all CAP members have their own encampment stories. CAP members, cadets to senior members, have many memories of encampment with the physical training, drill and never-ending inspections.

At the 2019 JDE, cadets woke up at 05:45 for reveille and physical training, including running a mile, before breakfast. The cadets' days were spent in the classroom learning about leadership, Civil Air Patrol history, military history, and about how to be a Wingman. There were countless hours of marching drill outside on the parking lot. Cadets practiced military customs and courtesy until the senior members avoided the hall when they were passing through to go out to the drilling area. Eighty-nine "Good Morning, Ma'am" in a row hurt the brain, but I acknowledged every single one.

As the Public Affairs Officer, I had the opportunity to experience every part of encampment; behind the scenes, Basic Leadership Course, Advanced Leadership Course, cadet staff and instructor cadres, and the Senior Members acting as mentors. If another PAO attended the event, I saw their pictures and heard their stories. It's an honor to work in the Public Affairs Office; you are able to experience the full encampment; every tear, every joy, every failure and every success. Every cadet participant, every cadet staff and cadre member and every senior member has a story from encampment and as we packed up Sunday morning I heard so many of them talking about how the 2019 JDE changed them through the important things they learned, the people they met and most importantly how they grew as a CAP member and as a human being.

The Joint Dakota Encampment is no summer camp. I need to apologize to my cadet about that. It takes today's youth and turns them into a Civil Air Patrol cadet; a cadet that knows the importance of practice, patience, and perseverance; a cadet who knows how to act with maturity and courtesy to those around them; a cadet who knows how to serve CAP and their community. Encampment is not easy, but the greatest of things never are.



*2nd Lt. Malisa Niles receives her Certificate of Completion from Encampment Commander Lt. Col. Nick Gengler.*



CIVIL AIR PATROL

# Aerospace Education

## Teach

... ordinary subjects in extraordinary ways by becoming a special member of **Civil Air Patrol, the Auxiliary of the U.S. Air Force**- an Aerospace Education Member (AEM)! With help from AEMs, CAP is helping to develop the aerospace/STEM workforce of the future.



## Engage

... youth in **captivating lessons and activities** using a variety of more than 40 national standards-based educational materials. Our free resources are available both online and in print to adapt to multiple teaching and learning styles. Additional online references provide an abundance of extra STEM resources.

## Experience

...hands-on learning with free programs including

- **(Gr K-12) STEM Kits** in astronomy, robotics, flight simulation, coding, engineering, rocketry, quadcopters, and more
- **(Gr K-12) Aerospace Education Excellence (AEX)** six-lesson award program
- **(Gr K-6) Aerospace Connections in Education (ACE)** program: grade-specific program that enriches cross-curricular academics, physical fitness and character education
- \$250 **grants**

Contact: [ae@capnhq.gov](mailto:ae@capnhq.gov)



## Fly



...on a free **Teacher Orientation Program (TOP) flight** in Civil Air Patrol aircraft at your local airport. Live stream, video, and/or photograph to bring your flying adventure back to your classroom!

## Join

...**TODAY as an AEM!** CAP offers this special membership for formal and informal U.S. citizen educators in classrooms, home schools, museums or other youth organizations. A one-time \$35 membership fee brings dozens of **FREE** products and programs. Read more at [gocivilairpatrol.com/ae](http://gocivilairpatrol.com/ae).

**JOIN ONLINE**  
[gocivilairpatrol.com/joinaem](http://gocivilairpatrol.com/joinaem)





# Civil Air Patrol/Aerospace Education Member's STEM Kit Program



[gocivilairpatrol.com/stem-ed](http://gocivilairpatrol.com/stem-ed)



## Astronomy

Gaze into the skies to see planets and stars with this easy-to-use telescope



## Bee-Bot

Use arrow keys on a floor robot and gridded mat to introduce programming to early learners



## Flight Simulator

Practice flying with yoke, rudder pedals, flight simulation software and training booklet



## Hydraulic Engineering

Build simple machines designed as a hands-on introduction to hydraulic engineering



## Middle School Math

Explore 2-D and 3-D patterns to demonstrate geometrical shapes and models with this K'NEX kit



## Quadcopter

Become an expert at flying an outdoor unmanned aerial vehicle (UAV)



## Raspberry Pi

Introduce computer coding, embedded systems, and digital sensors



## Ready-to-Fly Quadcopter

Develop experience flying UAVs with this small indoor quad



## Remote-Controlled (RC) Aircraft

Build/fly balsa planes; control computer-based RC flights; fly actual RC model aircraft outdoors



## Renewable Energy

Bring renewable energy to life by investigating solar, wind and water energy with this K'NEX kit



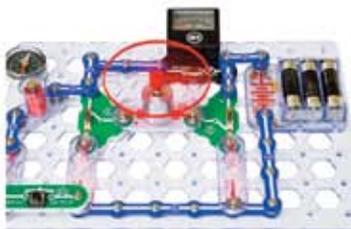
## Robotics

Assemble and program the Robotic Arm and explore numerous paths



## Rocketry

Ignite an interest in aerospace by building and launching rockets



## Snaptricity

Investigate electricity, closed circuits, switches and more



## Sphero

Explore programming with Sphero using a free app and your personal smart device



## Weather Station

Record and study aspects of weather using the weather sensor and data collection kit

# MARC FLIGHT ACADEMY 2019



*By Cadet Master Sgt. Chancey Hall, CAP  
Miller Flight*

*NCSA's MARC  
Flight Academy*

I had the privilege of going to the Model Aircraft Remote Control (MARC) Flight Academy in Oshkosh, Wisconsin in June 2019. This National Cadet Special Activity prepares cadets to become a model aircraft remote control (R/C) pilot. We had several hours of “hands on” flight time learning the basics of flying an electric model aircraft. There was also ground school instruction and several hours of R/C flight simulator training. We flew tricycle landing gear R/C planes, tail draggers and powered



*Cadets assemble their radio-controlled aircraft for flight testing.*



*Final aircraft assembly and pre-flight checkout.*

gliders. We also did a little work with small unmanned aerial systems (sUAS – aka drones). Since we were at Wittman Regional Airport at Oshkosh, we also got to tour the control tower. Each year during the Experimental Aircraft Association’s enormous “AirVenture” fly-in and aviation exposition this is the busiest control tower in the world.

We built our R/C aircraft from the ground up. This was a great way to learn about electric motors, airframe bodies, control surfaces, landing gear and R/C components. If a cadet wants to learn about R/C aircraft in a fun, relaxed atmosphere, MARC is for them. I highly recommend it! 🇺🇸



*Cadets proudly pose with the remote-controlled aircraft they built at MARC.*



*Flightline activity at MARC 2019 where the cadets got to put their remote-controlled aircraft through its paces.*



# 2019 FACT SHEET



## OUR MISSION

Supporting America's communities with emergency response, diverse aviation and ground services, youth development, and promotion of air, space and cyber power.

## ABOUT CAP

Civil Air Patrol is congressionally chartered and operates as a 501(c)(3) nonprofit corporation. CAP performs services for the federal government as the official civilian auxiliary of the U.S. Air Force and performs other missions as a nonprofit organization. CAP is made up of eight geographic regions consisting of 52 wings (the 50 states, Puerto Rico and the District of Columbia). It is a strategic partner of the Air Force, serving as a member of its Total Force. CAP has three primary missions — Emergency Services, Cadet Programs and Aerospace Education.

### The latest technology

WaldoAir camera pods like this were temporarily mounted on CAP aircraft during the Hurricane Michael response in the fall of 2018. CAP aircrews tasked with taking aerial photography in the wake of the Category 4 storm used the advanced imaging sensor to provide high resolution 3-D models of the devastation on the Florida Panhandle and parts of southwest Georgia.

## EMERGENCY SERVICES

- Conducts 90 percent of inland search and rescue in the U.S. as tasked by the Air Force Rescue Coordination Center and other agencies.
- Coordinates Air Force-assigned missions through CAP National Operations Center at Maxwell AFB, Ala., at a cost of \$120-\$165 per flying hour.
- Has more than 6,850 aircrew members and nearly 35,000 emergency responders trained to FEMA standards.
- Provides over 450 chaplains to assist during crises to help comfort survivors, render support and aid victims of disaster.
- Performs aerial reconnaissance for homeland security.
- Provides air intercept training, impact assessment, light transport, communications support and low-level route surveys for the Air Force.
- Provides disaster-relief photography and support to local,



### Future pilot

Cadet Chief Master Sgt. Emma Herrington of the Texas Wing's Sulphur Springs Composite Squadron is the first of a long list of CAP Cadet Wings graduates. The Cadet Wings program is an Air Force-funded pilot initiative to identify potential young fliers within CAP and help them earn their private pilot's certificate.

- state and national agencies.
- Transports time-sensitive medical materials, blood products and body tissues when commercial resources are unavailable.
- Assists federal, state and local law enforcement agencies in the War on Drugs.
- Maintains an extensive VHF and HF communications network.

## MEASURING OUR IMPACT

### 158

Saved a modern-day high of 158 lives and recorded 712 "finds" through Air Force-assigned search and rescue efforts in fiscal year 2018, thanks in large part to the assistance of CAP's Cell Phone Forensics and National Radar Analysis teams.

### 560

Operates one of the largest fleets of single-engine piston aircraft in the world, with 560 planes.

### 35,000+

Flew a record 35,316 orientation flights with CAP cadets, as well as Air Force ROTC and Junior ROTC cadets.

### 61,066

Consists of 1,422 squadrons and more than 61,000 volunteer youth and adult members nationwide.

### 89,773

Flew nearly 90,000 hours in 2018, nearing or surpassing that CAP flying mark for the fourth straight year.

### 700,000+

Has impacted more than 700,000 youth over the past six years through CAP's STEM Kit program.

### \$2.4 Million

Using \$2.4 million from the Air Force to provide CAP cadet training aimed at helping reduce the nation's pilot shortage.

### \$187 Million+

Contributed \$187,202,536 in man-hours in past year, serving the emergency services, youth development and aerospace education/STEM needs of communities, states and the nation.





### STEM education

CAP's six-year STEM Kit program has already impacted over 700,000 youth, teaching them science, technology, engineering and math through 15 hands-on products geared toward aviation and aerospace education. Here, cadets work with the Rocketry STEM Kit, which introduces them to the hobby and science of model rocketry and associated careers. The rockets included in the kit help cadets progress toward one stage of CAP's rocketry badge.



### AEROSPACE EDUCATION

- Educates adult and cadet members and the community on the importance of aerospace careers.
- Develops, publishes and distributes national academic standards-based Science, Technology, Engineering and Mathematics (STEM) aerospace education curricula for kindergarten through college classrooms, affecting over 400,000 K-12 students annually nationwide.
- Generates interest in STEM careers through aviation-, space- and technology-focused activities and CAP STEM Kits associated with astronomy, flight simulations, model and remote-control aircraft, robotics, rocketry, weather, hydraulic engineering, computer programming and quadcopters.
- Exposes thousands of cadets to cyber defense careers through CyberPatriot, the Air Force Association's National Youth Cyber Defense Competition.
- Provides educators with 40+ free educational programs and products as well as services that include teacher orientation flights.
- Offers grant and college credit opportunities for adult and teacher members.
- Provides aerospace support for educational conferences and workshops nationwide.



### CADET PROGRAMS

- Attracts over 26,000 members ages 12 through 20 for participation in its cadet programs.
- Educates youth in four main program areas — leadership, aerospace, fitness and character development.
- Enriches school curricula through after-school programs.
- Offers orientation flights in powered and glider aircraft, as well as flight training scholarships.
- Provides activities and competitions for cadets at the local, state, regional and national levels.
- Makes opportunities for community involvement available through color guard/drill team and emergency service missions.
- Challenges youth to be ambassadors for a drug-free lifestyle.
- CAP cadets make up about 10 percent of each U.S. Air Force Academy class.
- Cadets who have earned the Gen. Billy Mitchell Award enlist in the Air Force, U.S. Army and U.S. Coast Guard at a higher pay grade.
- Participates in the International Air Cadet Exchange program.
- Awards college scholarships in several disciplines.



### An opportunity to lead

CAP's cadet program offers more than 1,500 of its members in-depth leadership training through National Cadet Special Activities like Cadet Officer School and the Civic Leadership Academy. The training cadets receive at these weeklong activities, which often includes STEM-based initiatives like the one seen here, enable them to become leaders in their home squadrons, their schools and their communities.

### Learning to fly

Here, a cadet flies in one of CAP's 50 gliders, located at squadrons throughout the U.S. These orientation flights, or "O rides," introduce thousands of youth to flight, playing a vital role in the future of American civilian and military aviation.



### Active lifestyles

Physical fitness and well-being is the primary goal of CAP's Active Cadet Fitness initiative, which is aligned with the Presidential Youth Fitness Program. Through the program, cadets like those seen here attending their wing encampment are motivated to develop a lifelong habit of regular activity.

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# VOLUNTEERISM

*By Senior Member Chief Master Sgt. Blake Parke, CAP  
Sioux Falls Composite Squadron*

As I prepare for the 2019 Encampment, my first, I sit back and think about all the people that go into making such a colossal feat successful. I am awestruck by the sure determination by a couple of individuals to make this happen.

Like everything in Civil Air Patrol, these tenacious individuals are volunteers. They spend hours and hours of their own time to create an event that, for most CAP cadets, is the pinnacle of their cadet careers. Like basic training, it binds everyone. It's one thing that everyone experiences, everyone has one common story to talk about. You know, like the weather for everyone else.

So, as I ponder these daring souls, I ask myself, "How much have I done to add to the Cadet Experience?" Unlike most senior members of Civil Air Patrol, I never experienced CAP as a youth, never even knew it existed till I got in the Air Force. My training instructor chewed on me for like an hour when I accidentally saluted a CAP Captain that happened to be walking down the street. But for those that have experienced CAP as a youth, there were always activities that happened, things that needed to be done both behind the scenes and on stage.

Having been involved with the organization now for a little over a year, I can say there are A LOT of volunteer opportunities. If you were a cadet back in the day, ask yourself, were there activities that you just showed up to and experienced? Activities you never asked who or how they happened? Meetings you just showed up to, did your drill test, got your uniforms, and enjoyed your Cadet Experience? Who gave you that CAP experience? Who just made things happen?

Most likely there were a lot of "Who's", starting with your parents driving you to the meetings and to the squadron commander organizing and arranging everything from activities to toilet paper. Cadet Program Officers working with the cadet staff to create schedules, organize meetings, do the numerous testing, tracking cadet involvement, and making sure new members are welcomed and come back. The pilot that gives the orientation rides, the team of individuals that ensure those planes are ready, people that ensure the vehicles are cared for, and the people that ensure uniforms and equipment are available. We could go on and on, trust me; there are a lot of people involved.

All these people were and still are volunteers. They gave their time freely and often. They were the people that truly belonged to the Civil Air Patrol. They were and are the people that make the Cadet Experience.

So, I want to say thank you to all the volunteers that will make the 2019 Joint Dakota Encampment a Cadet Experience every participant won't forget.

Then I want to challenge those of you who have maybe slowed down or have never jumped into the Civil Air Patrol experience. Rest if you need it, but don't forget Civil Air Patrol needs you, we need everyone. Heck, maybe your Commander can double your pay. [*Editor's Note: This is a popular joke. All CAP members are volunteers, there are no paychecks.*]



*South Dakota Air National Guard  
Chief Master Sergeant Blake Parke  
is also a Chief Master Sergeant in  
the Civil Air Patrol serving with the  
Sioux Falls Composite Squadron.*

# FROM STRIPES TO DIAMONDS: USING THE PERSONAL CADET TRACKER

*By Capt. Heather Perkins, CAP  
Oregon Wing*

Moving up the ranks in the cadet program is no easy feat. At each step, there are numerous requirements cadets must complete to be able to advance to the next rank. It can be confusing to keep track of, especially for ranks where there are many requirements.

To help teach cadets what requirements they must meet, in April Aurora Composite Squadron held a class on the different grades and achievements, led by Maj. Carl Knox.

One of the tools Knox used in his class is the Personal Cadet Tracker, a worksheet that helps cadets see what they need to do at each grade. It is “a valuable worksheet that helps [cadets] plan and track the testing requirements for upcoming promotions,” Marc Minato, squadron deputy commander, said.

The Personal Cadet Tracker has each of the four cadet phases’ requirements laid out, with space for cadets to write in the date and score of their assessments. There is also space for cadets to write in their goals for this phase.

Phase 1, the Learning Phase, encompasses the grades of Cadet Airman to Cadet Staff Sergeant. In this phase, cadets are required to complete leadership, aerospace and drill tests. This phase is all about learning how to be a cadet, how to be a good follower, and the basics of leadership.

In Phase 2, the leadership phase, cadets deepen their knowledge of what it means to be a leader. Cadets also continue studying leadership and aerospace information. Cadets will reach the highest NCO grade of Cadet Chief Master Sergeant in this phase, and can attain the first officer grade – Cadet Second Lieutenant – as well. Cadets must complete leadership, aerospace, drill and physical fitness tests.

Phases 3 and 4 are the command and executive phases, respectively. These phases encompass the remaining officer grades. Cadets in these phases are expected to demonstrate deeper knowledge of leadership and aerospace, and are also expected to take an active role in the leadership of the cadets. In these phases, cadets have the added responsibility of shadowing senior members to learn more about the various positions within a squadron. Cadets then must showcase this knowledge through a written report.

It is important to remain organized and set goals during your time as a cadet. Knowing exactly what you need to do to promote – and then setting goals that will help motivate you to get there – is key to your success.

Curious about what requirements you need to meet to promote? Check out the Stripes-to-Diamonds superchart and personal cadet tracker at <https://www.gocivilairpatrol.com/programs/cadets/stripes-to-diamonds>

*Reprinted with permission from Oregon Wing Public Affairs*



NAME:

CAPID:

## PHASE I THE LEARNING PHASE

ACHIEVEMENT	Date Completed	Score
Leadership - Chapter 1 Test		
<b>1</b> 		
Leadership - Drill Test		
Aerospace	NA	NA
Fitness - Attempt CPFT		
Character - Wingman Course		
Promotion Effective Date		

ACHIEVEMENT	Date Completed	Score
Leadership - Chapter 2 Test		
<b>2</b> 		
Leadership - Drill Test		
Aerospace - Module ____ Test		
Fitness - 1 Activity + Do CPFT < 180 days		
Character - 1 Activity		
Promotion Effective Date		

≥ 56 days after last promotion

ACHIEVEMENT	Date Completed	Score
Leadership - Chapter 3 Test		
<b>3</b> 		
Leadership - Drill Test		
Aerospace - Module ____ Test		
Fitness - 1 Activity + Do CPFT < 180 days		
Character - 1 Activity		
Promotion Effective Date		

≥ 56 days after last promotion

ACHIEVEMENT	Date Completed	Score
<b>WRIGHT BROS. AWARD</b> 		
Leadership - Comprehensive Exam		
Leadership - Comprehensive Drill Test		
Aerospace	NA	NA
Fitness - 1 Activity + HFZ < 180 days		
My Goal Date for Completing	<input type="text"/>	
Promotion Effective Date		

≥ 56 days after last promotion

## PHASE II THE LEADERSHIP PHASE

ACHIEVEMENT	Date Completed	Score
Leadership - Chapter 4 Test		
<b>4</b> 		
Leadership - Drill Test		
Aerospace - Module ____ Test		
Fitness - 1 Activity + HFZ < 180days		
Character - 1 Activity		
Promotion Effective Date		

≥ 56 days after last promotion

ACHIEVEMENT	Date Completed	Score
Leadership - Chapter 5 Test		
<b>5</b> 		
Leadership - Drill Test		
Aerospace - Module ____ Test		
Fitness - 1 Activity + HFZ < 180days		
Character - 1 Activity		
Promotion Effective Date		

≥ 56 days after last promotion

ACHIEVEMENT	Date Completed	Score
Leadership - Chapter 6 Test		
<b>6</b> 		
Leadership - Drill Test		
Aerospace - Module ____ Test		
Fitness - 1 Activity + HFZ < 180days		
Character - 1 Activity		
Promotion Effective Date		

≥ 56 days after last promotion

ACHIEVEMENT	Date Completed	Score
<b>7</b> 		
Leadership - Chapter 7 Test		
Leadership - Drill Test		
Aerospace - Module ____ Test		
Fitness - 1 Activity + HFZ < 180days		
Character - 1 Activity		
Promotion Effective Date		

≥ 56 days after last promotion

ACHIEVEMENT	Date Completed	Score
<b>8</b> 		
Leadership - Chapter 8 Test		
Leadership - Drill Test		
Leadership - Speech		
Leadership - Essay		
Aerospace	NA	NA
Fitness - 1 Activity + HFZ < 180days		
Character - 1 Activity		
Promotion Effective Date		

≥ 56 days after last promotion

ACHIEVEMENT	Date Completed	Score
<b>MITCHELL AWARD</b> 		
Leadership - Comprehensive Exam		
Aerospace - Comprehensive Exam		
Fitness - 1 Activity + HFZ < 180 days		
Graduate Encampment		
My Goal Date for Completing	<input type="text"/>	
Promotion Effective Date		

≥ 56 days after last promotion

**SET GOALS**  
When will you earn the Wright Brothers Award? The Spaatz?

### RUNNING TALLIES

#### Aerospace: The Journey of Flight

Test No.	Corresponding module in Aerospace Dimensions	Study Journey Chapters
___ 1	Introduction to Flight	1, 7, 8
___ 2	Aircraft Systems & Airports	2, 9, 10
___ 3	Air Environment	3, 18, 19
___ 4	Rockets	4, 21, 23
___ 5	Space Environment	5, 25, 25
___ 6	Spacecraft	6, 26, 27

#### Aerospace Dimensions

During Phases I & II, complete the 6 modules in any order, marking an X in the appropriate space below.

- \_\_\_ 1 Introduction to Flight
- \_\_\_ 2 Aircraft Systems & Airports
- \_\_\_ 3 Air Environment
- \_\_\_ 4 Rockets
- \_\_\_ 5 Space Environment
- \_\_\_ 6 Spacecraft

You must complete one test during achievements 9, 10, 11, 14, 15, and 16. You may take the tests in any order. If possible, study the "Journey" chapters corresponding to the "Aerospace Dimensions" module being studied by the cadets you are mentoring or instructing. Some chapters in "The Journey" (11-17, 20, 22) are not included in your course of study.

## PHASE III THE COMMAND PHASE

ACHIEVEMENT	Date Completed	Score
<b>9</b> 	Leadership - Chapter 9 Test	
	Leadership - SDA Staff Service	
	Leadership - SDA Technical Writing	
	Leadership - SDA Oral Presentation	
	Aerospace - 3-Chapter Block, Test _____	
	Fitness - 1 Activity + HFZ < 180days	
	Character - 1 Activity	
	Promotion Effective Date	
	≥ 56 days after last promotion	

ACHIEVEMENT	Date Completed	Score
<b>10</b> 	Leadership - Chapter 10 Test	
	Leadership - SDA Staff Service	
	Leadership - SDA Technical Writing	
	Leadership - SDA Oral Presentation	
	Aerospace - 3-Chapter Block, Test _____	
	Fitness - 1 Activity + HFZ < 180days	
	Character - 1 Activity	
	Promotion Effective Date	
≥ 56 days after last promotion		

ACHIEVEMENT	Date Completed	Score
<b>11</b> 	Leadership - Chapter 11 Test	
	Leadership - SDA Staff Service	
	Leadership - SDA Technical Writing	
	Leadership - SDA Oral Presentation	
	Aerospace - 3-Chapter Block, Test _____	
	Fitness - 1 Activity + HFZ < 180days	
	Character - 1 Activity	
	Promotion Effective Date	
≥ 56 days after last promotion		

EARHART AWARD	Date Completed	Score
	Leadership - Comprehensive Exam	
	Aerospace - Comprehensive Exam	
	Fitness - 1 Activity + HFZ < 180 days	
	My Goal Date for Completing	
	Promotion Effective Date	
≥ 56 days after last promotion		

Next Step: Achievement 12

## PHASE IV THE EXECUTIVE PHASE

ACHIEVEMENT	Date Completed	Score	
<b>12</b> 	Leadership - Chapter 12 Test		
	Leadership - SDA Staff Service		
	Leadership - SDA Technical Writing		
	Leadership - SDA Oral Presentation		
	Aerospace - 3-Chapter Block Test	NA	NA
	Fitness - 1 Activity + HFZ < 180days		
	Character - 1 Activity		
	Promotion Effective Date		
≥ 56 days after last promotion			

ACHIEVEMENT	Date Completed	Score	
<b>13</b> 	Leadership - Chapter 13 Test		
	Leadership - SDA Staff Service		
	Leadership - SDA Technical Writing		
	Leadership - SDA Oral Presentation		
	Aerospace - 3-Chapter Block Test	NA	NA
	Fitness - 1 Activity + HFZ < 180days		
	Character - 1 Activity		
	Promotion Effective Date		
≥ 56 days after last promotion			

ACHIEVEMENT	Date Completed	Score
<b>14</b> 	Leadership - Chapter 14 Test	
	Leadership - SDA Staff Service	
	Leadership - SDA Technical Writing	
	Leadership - SDA Oral Presentation	
	Aerospace - 3-Chapter Block, Test _____	
	Fitness - 1 Activity + HFZ < 180days	
	Character - 1 Activity	
	Promotion Effective Date	
≥ 56 days after last promotion		

ACHIEVEMENT	Date Completed	Score
<b>15</b> 	Leadership - Chapter 15 Test	
	Leadership - SDA Staff Service	
	Leadership - SDA Technical Writing	
	Leadership - SDA Oral Presentation	
	Aerospace - 3-Chapter Block, Test _____	
	Fitness - 1 Activity + HFZ < 180days	
	Character - 1 Activity	
	Promotion Effective Date	
≥ 56 days after last promotion		

ACHIEVEMENT	Date Completed	Score
<b>16</b> 	Leadership - Chapter 16 Test	
	Leadership - SDA Staff Service	
	Leadership - SDA Technical Writing	
	Leadership - SDA Oral Presentation	
	Aerospace - 3-Chapter Block, Test _____	
	Fitness - 1 Activity + HFZ < 180days	
	Character - 1 Activity	
	Promotion Effective Date	
≥ 56 days after last promotion		

EAKER AWARD	Date Completed	Score	
	Leadership - Speech		
	Leadership - Essay		
	Aerospace	NA	NA
	Fitness - 1 Activity + HFZ < 180days		
	Character - 1 Activity		
	Graduate Cadet Officer School or RCLS		
	My Goal Date for Completing		
	Promotion Effective Date		
≥ 56 days after last promotion			

Next Step: Spaatz

### RUNNING TALLIES

#### SDA Technical Writing *no type may be used twice*

- |   |   |
|---|---|
| <input type="checkbox"/> Resume           | <input type="checkbox"/> Budget                   |
| <input type="checkbox"/> Background Paper | <input type="checkbox"/> Media Package            |
| <input type="checkbox"/> Advocacy Paper   | <input type="checkbox"/> After Action Review      |
| <input type="checkbox"/> Operations Plan  | <input type="checkbox"/> Personal Leadership Plan |

### SPAATZ AWARD

	Attempt #1	#2	#3
	Leadership - Comprehensive Exam		
	Aerospace - Comprehensive Exam		
	Fitness: USAFA Candidate Fitness Assessment		
	Character: Essay Exam		
	My Goal Date for Completing		
	Promotion Effective Date		



# WREATHS ACROSS AMERICA | FACT SHEET

## About Civil Air Patrol

- More than 61,000 members nationwide.
- Celebrates its 77th anniversary Dec. 1, 2018.
- Three primary missions – aerospace education, cadet programs and emergency services.
- Performs 90 percent of continental U.S. inland search and rescue missions, as tasked by the Air Force Rescue Coordination Center, saving an average of 82 lives per year.
- Also performs aerial reconnaissance for homeland security and disaster relief missions for local, state and national organizations.
- Operates one of the largest fleets of single-engine piston aircraft in the world, with 560 currently in the fleet.
- Flies, through volunteer members, approximately 100,000 hours each year.
- Maintains fleet of 1,000-plus emergency service vehicles for training and mission support.
- Mentors over 25,000 cadets ages 12-20 in four areas: leadership, aerospace, fitness and character development.
- Cadet activities include an active role in emergency services missions, orientation flights in powered and glider aircraft, flight training scholarships and career explorations, as well as activities and competition for cadets at local, state, regional and national levels.

## About Wreaths Across America

Civil Air Patrol is a Wreaths Across America partner. The nonprofit organization's mission is to Remember, Honor and Teach about the service and sacrifices of the nation's veterans. Founded in 2007, Wreaths Across America is an offshoot of the Arlington National Cemetery wreath project, which was started in 1992 with the annual placement of wreaths donated by Worcester Wreath Co. of Harrington, Maine. Wreaths designated for Arlington are transported on a 750-mile journey from Columbia Falls, Maine, after a sendoff ceremony. The route is known as the world's largest veterans' parade, stopping at schools, monuments, veterans' homes and communities along the way to remind people how important it is to Remember, Honor and Teach.

## Last year's observances

More than 1.5 million veterans' wreaths were sponsored by the public for placement on veterans' graves at 1,433 ceremonies in all 50 states and abroad. Civil Air Patrol's sponsorship of wreaths over the past 11 years has raised \$1.1 million for participating CAP units. Civil Air Patrol's Arlington observances annually include a wreath-laying ceremony at the CAP Memorial, the Tomb of the Unknown Soldier and the Women in Military Service Memorial. Each year Civil Air Patrol's National Honor Guard take part in a special ceremonial holiday wreath-laying at the U.S. Capitol in Washington, D.C. Similar ceremonies were held at state capitols nationwide.

# FLIGHT SIMULATORS

*By Capt. John Spangler, CAP  
Aerospace Education Officer, Rushmore Composite Squadron*



*A Rushmore Composite Squadron cadet at the controls of a flight simulator program piloting a Civil Air Patrol aircraft.*

Flight simulators have been around for a long time. I remember my first flight simulator ran on an early Apple computer with a black screen and green lines as the only graphics feature. We have come a long way since then and there are now a plethora of flight simulation programs available to pilots. Many of these are quite useful as introductory training platforms and the better offerings are high-quality aerodynamically and procedurally correct programs.

We have two excellent, stable, and very useful flight simulators at Rushmore Composite Squadron in Rapid City which we built and installed. Although the computers are not particularly high end, they do have plenty of memory and very good video cards. We have two identical systems which are very stable with little down

time. The video is provided by two 50" low end monitors – there is no need for expensive 3D hardware. This equipment runs Windows XP and MS Flight Sim 2004. I prefer the 2004 edition because it has a more easily accessed programming architecture which allows me to fine tune the handling and performance of the aircraft we fly. Our controls come from the CAP STEM kit and have served us well. We now use our flight simulators every week for both cadet and senior member experience. We have limited the simulated aircraft to the two types of CAP aircraft the Wing actually has (Cessna-172s and Cessna-182s) and we have installed panels modeled after our real world aircraft. Our flight simulation planes even carry the right aircraft colors and tail numbers. Upcoming flight simulation programs include an airborne

search training module and a simulated air/ground search communications module.

Last summer we took one of our squadron's flight simulators to Phillip, SD for two days during our Wing's Aerospace Education Extravaganza and CAP glider orientation course. I learned several things in the process. Firstly, moving all the equipment necessary to run a flight simulation program for two days is a daunting task. Secondly, simulators do NOT like to travel and are easily damaged. Somehow it seems that the most damage happens to the most expensive equipment. Thirdly, the cadets and senior members thoroughly enjoyed their flight simulation time and clearly made progress learning to fly CAP aircraft. This, of course, makes it all worthwhile in the long run.

On another note, we have installed a flight simulator in a mockup F-16 cockpit at the South Dakota Air and Space Museum. The theme here will be high speed turns and afterburner flights of short duration. This flight simulation program will only be available to the public when a CAP pilot/member is present to guide the flight and minimize equipment damage. **[Editor's Note:** Capt. Spangler later wrote: "The F-16 flight simulator we put in the F-16 cockpit at the SD Air

and Space Museum is a roaring success. I spend about 10 hours a week and fly about 4-5 pilots an hour. They range all the way from airline pilots to Air Force pilots to 5-year olds. Last week I had two Russian pilots from Siberia wring the flight simulator out very well. Even the fuselage was sweating when they got done! When I can't be at the museum the flight simulator is operated by Rushmore Composite Squadron members Lt. Col. Howard Steiner and Lt. Col. Tom Bass.

Generally speaking, flight simulators are not portable and are prone to expensive damage when they are disassembled. Squadrons who want a flight simulator need to have their own on-site simulator. The cost of acquiring and installing a good flight simulator at your squadron can be as low as \$500 although I recommend the addition of a 40" monitor and quality yoke and rudders which can push this figure up significantly. The STEM Simulator pack available through your Aerospace Education Officer can help to defray these expenses. I would be happy to help assist your unit in acquiring and setting up a flight simulator. Contact me at 605-390-1919 before 6 PM any day. I can also be reached at [jgs437@rap.midco.net](mailto:jgs437@rap.midco.net). 🇺🇸



*Two Rushmore Composite Squadron cadets fly flight simulator programs under the watchful eye of an instructor.*



*Mockup F-16 cockpit at the South Dakota Air and Space Museum in which Rushmore Composite Squadron has installed flight simulation hardware and software.*



*A visitor to the South Dakota Air and Space Museum flies a flight simulator program while sitting in the mockup F-16 cockpit.*