

CIVIL AIR PATROL 2018 REPORT TO CONGRESS



70 YEARS  
As U.S. Air Force Auxiliary



## Overview

61K

VOLUNTEERS

\$165

FLIGHT HOUR COST

1,442

UNIT LOCATIONS

158

LIVES SAVED

560

AIRCRAFT

4:1

COST SAVINGS



Since 1948, Civil Air Patrol has served the nation as the Auxiliary of the Air Force and today it is part of its **Total Force**.

CAP is also a **congressionally chartered nonprofit**. America benefits from this dual status, giving CAP the

ability to conduct **cost-effective** missions for the government as well as communities and states.

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Contact John Swain at [jswain@capnhq.gov](mailto:jswain@capnhq.gov) for more information concerning this Report to Congress for Fiscal Year 2018. A related CAP Financial Report will be available in June 2019 and forwarded to all congressional offices.

Through its cadet program, CAP instills the organization's **core values** of integrity, volunteer service, excellence and respect in its youth. Cadets are drug-free role models in their communities and schools.

## Cadet Programs

# 26,222

RISING LEADERS

**82 PERCENT** ACHIEVE B'S OR  
BETTER IN SCHOOL

# 35,316

CADET ORIENTATION FLIGHTS

# 2,137

ATTENDED NATIONAL CAREER  
EXPLORATION ACTIVITIES

**6,026** ATTENDED ENCAMPMENTS

**28 PERCENT** RECEIVED FINANCIAL  
ASSISTANCE TO ATTEND

# 98

ACADEMIC/FLIGHT  
SCHOLARSHIPS AWARDED



The Youth Aviation Initiative recently started by Civil Air Patrol is designed to **identify young pilots and help fund their flight training** through accessible programs that allow

diversity and disadvantaged youth participation. One million dollars in U.S. Air Force-generated funds has been set aside for CAP's new "Take Off" program, which will fund flight

training for cadets, reducing their cost of attending CAP's flight academies and providing funding for scholarships to allow them to earn their private pilot certificates.



Another \$400,000 in Youth Aviation Initiative funding is expected to generate a 156 percent increase in Air Force ROTC and JROTC orientation flights in CAP planes and gliders in 2019. This follows increases in both powered and glider flights in 2018, which totaled over 35,000. The additional funds for the coming year will lead to an estimated 3,500 **more flying hours** for CAP and over 3,000 orientation flights for Air Force ROTC and Air Force Junior ROTC cadets.

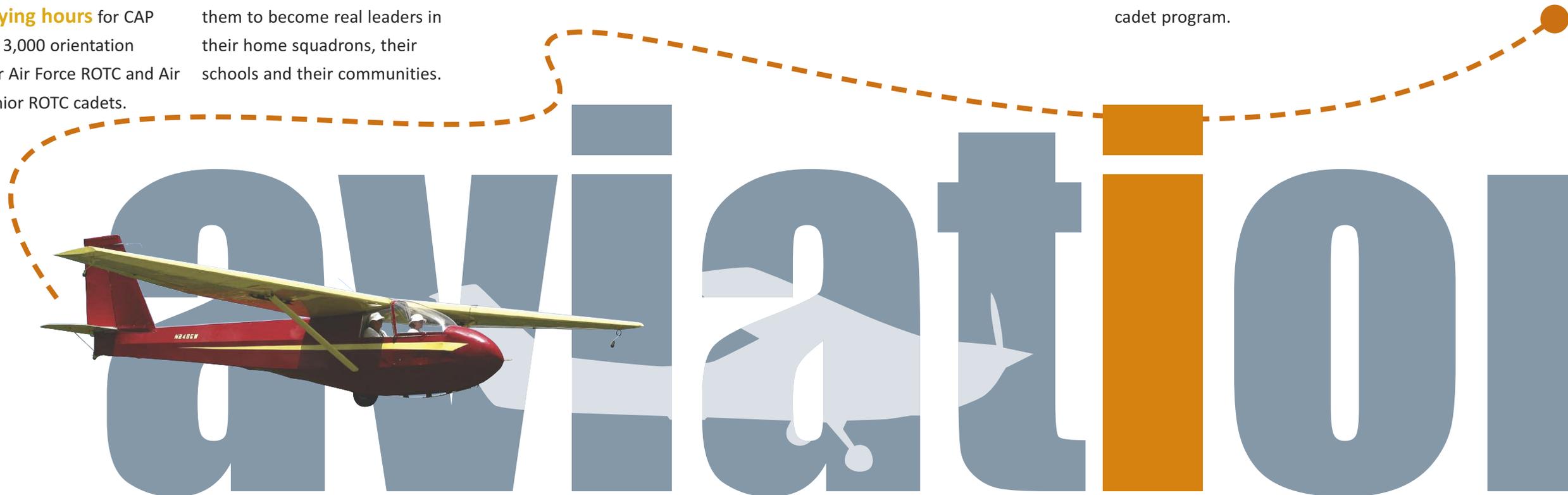
Each summer, CAP's cadet program offers more than 1,500 members in-depth **leadership** training through National Cadet Special Activities like Cadet Officer School and the Civic Leadership Academy. The training cadets receive at these weeklong activities, which often includes STEM-based initiatives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

Physical fitness and well-being are the primary goals of CAP's new Active Cadet Fitness initiative, which is aligned with the Presidential Youth Fitness Program. Through the program, cadets are **motivated** to develop a lifelong habit of regular activity.

Adult members and cadets **hone their disaster relief, search and rescue and survival skills** at the National Emergency Services Academy. Here, participants tighten the cords on a portable antenna, which is used for remote communications.

Through its National Cadet Special Activities as well as numerous field trips in their communities, CAP cadets annually **explore careers** in a wide variety of fields, including military service, aerospace and aviation. Thanks to this exposure, many CAP youth choose to pursue related careers after they leave the cadet program.

CAP's fleet of 53 gliders, located at squadrons throughout the U.S., **introduces many cadets to flight**. The glider program is led by the organization's dedicated pilots, who made over 2,600 orientation flights in 2018. Their work helps cadets learn how to fly, playing a vital role in the future of American civilian and military aviation.



## Aerospace Education

# 320,000

CADETS/STUDENTS ANNUALLY IMPACTED BY 15 STEM KITS

# 80%

CADETS/STUDENTS MORE INTERESTED IN AE/STEM CAREERS AFTER USING STEM KITS

# 4,200

TEACHER MEMBERS USING CAP CURRICULA TO REACH 400,000 STUDENTS IN THEIR CLASSROOMS

# 34,000+

STUDENTS IN 210 SCHOOLS PARTICIPATING IN CAP'S AEROSPACE CONNECTIONS IN EDUCATION K-6 PROGRAM



Led by coaches like Maj. Bill Blatchley, standing right, CAP cadets are leaders in the Air Force Association's national high school **CyberPatriot program**.

His Colorado Springs team has reached the competition's national finals eight straight years, winning the All Service Division title in 2012 and 2017.

Last year, Blatchley was chosen by AFA as CyberPatriot X Coach of the Year.

# STEM



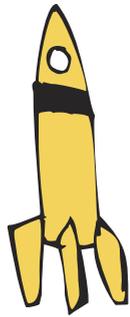
Youth interested in aerospace and aviation can become immersed in CAP's **rocketry and model aircraft** programs. Cadets build rockets and fly model planes, learning about the hobby and the science of both while earning specialty badges.

Civil Air Patrol's aerospace education/STEM curricula, which include more than 40 booklets, lesson plans, textbooks and other products, provide students and educators alike with **fun activities for the classroom**. Here, a teacher at Hillsboro Charter Academy in Virginia helps her students track the moon's craters with CAP's Bee Bot grid mat.

CAP's aerospace education program is investing additional funding in aviation-related products like these **flight simulators** to influence future pilots among its ranks, thereby helping the U.S. Air Force address the nation's ongoing pilot shortage. Through this expansion, CAP hopes to influence at least 150,000 more youth each year.

Aerospace Education Members who join Civil Air Patrol's ranks participate in the **Teacher Orientation Program**, getting an opportunity to fly in one of CAP's signature red, white and blue Cessnas. It's an experience they can share with their students throughout the year. The number of CAP's AEMs grew significantly in the past year — from 3,100 to 4,200, a 36 percent increase.

With its 15 hands-on STEM Kits, CAP's aerospace education program is encouraging over 320,000 youth annually to consider **careers in America's technical workforce**. Here, students in California work with the robotics kit, while others in Alabama, at right, try their hand at hydraulic engineering. Other kits available are Astronomy, Bee Bots, Flight Simulator, Middle School Math, Model and Remote-Control Aircraft, Quadcopter, Raspberry Pi, Ready-to-Fly Quadcopter, Renewable Energy, Rocketry, Snaptricity, Sphero and Weather Station.



## Missions

# 654/1,293

654 FLIGHTS FOR GREEN FLAG  
EXERCISES, ACCUMULATING  
1,293 HOURS OF AIR TIME

# 1,030

1,030 FLIGHT HOURS PROVIDED  
IN RESPONSE TO HURRICANES  
FLORENCE AND MICHAEL

# \$187 million+

2018 VALUE OF CAP MEMBERS'  
SERVICE TO AMÉRICA IS \$187,202,536



CAP-trained Point of Distribution (POD) teams from North Carolina, Maryland and Virginia **distributed bottled water** and other emergency supplies like ice and tarps to Hurricane Florence victims.

# Wigilant



Civil Air Patrol's highly trained aircrews, consisting of nearly 7,000 pilots and other aircrew members, amassed nearly **90,000 hours aloft** in 2018.

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 south-west Georgia. Nearly 500 sorties were flown in 68 CAP aircraft in support of both responses. One of the CAP aircrews documented this damage from Michael with new **WaldoAir technology**.

CAP aircrews provide **key airborne escort and monitoring** required for training of the military's RPA (Remotely Piloted Aircraft) pilots. This mission allows military units to provide critical training needed to qualify at least 25 percent more RPA operators.

CAP's **Chaplain Corps — one of the largest in the world**, with more than 450 chaplains and over 600 character development instructors — has launched a partnership with the Air Force Chaplain Recruiting Office that now includes CAP in the Air Force's chaplain recruiting materials.

Recently, CAP celebrated a partnership with American Airlines, which presented the organization with a **\$25,000 grant to inspire and train** CAP cadets to be among the nation's next generation of aviators.



In advance of Hurricane Florence’s arrival, South Carolina Wing aircrews prepare a Cessna 182 used for **aerial photography and observation missions** after the Category 4 storm made landfall. Aircrews used CAP planes like this one to take nearly 12,000 images of Florence’s destruction.

North Carolina Wing members work through the **flight planning process** even before Hurricane Florence moved away from the wing’s mission base in Burlington. Seven hundred and eighty-nine CAP members from 20 wings ultimately became involved in the response.

Despite damage to his family home from Hurricane Florence and a lengthy evacuation, North Carolina Cadet Tech Sgt. Corbin Endre **helped ensure storm and flood victims received much-needed disaster relief** supplies at the POD site in Wilmington. Here, the CAP cadet loads a box of MREs (Meals Ready to Eat) for a family waiting in line.

CAP ground teams helped **measure post-storm flooding** in Hawaii and South Carolina. They were tasked with identifying mud or silt lines and noting debris lines or debris snags and downloading the data to emergency managers via a FEMA app.

On 251 missions in 2018, CAP personnel served as targets of interest for **air defense intercept training and evaluations**, flying 1,635 hours on 861 sorties.

In 2018, the organization’s 34,000-plus emergency **responders supported 97 disaster relief** and other state-requested missions across the country, from small storms to major events like hurricanes, tornadoes, wildfires and even volcano eruptions. Most often, CAP’s responders were tasked with taking aerial damage assessment photos.



## Technology

# 95%

CAP-DEVELOPED RADAR/CELL PHONE  
FORENSICS SOFTWARE USED  
IN 95 PERCENT OF 1,012  
SEARCH AND RESCUE MISSIONS

# 28,000+

TOOK 28,091 AERIAL IMAGES  
TO HELP DOCUMENT  
HURRICANE DAMAGE

# 89,773

89,773 HOURS WERE FLOWN IN CAP'S  
FLEET OF MOSTLY CESSNA AIRCRAFT



The popularity of **miniature drones** has led to the formation of CAP's sUAS (small Unmanned Aerial Systems) program to enhance its existing mission capabilities. Quadcopter and

hexacopter kits, tested during the past year to allow for longer-duration imagery collection, will soon be available to nearly 40 CAP wings. CAP is working to implement options for night

operations and beyond visual line of sight as members acquire enough experience to gain FAA approval, in addition to bringing operational sUAS capabilities to the remaining 12 wings.



CAP maintains advanced **Surrogate Remotely Piloted Aircraft sensor technology** for training U.S. military and coalition forces before they deploy overseas.

These CAP aerial images show the flood-damaged Sanford Dam in Boiling Spring Lakes, North Carolina. They were taken by a Surrogate RPA aircrew tasked with flying over critical infrastructure in areas affected by Hurricane Florence.

CAP's national Cell Phone Forensics Team conducted its 1,500th mission in 2018. Since 2006, the team has assisted in finding over 700 people and saving nearly 500 lives

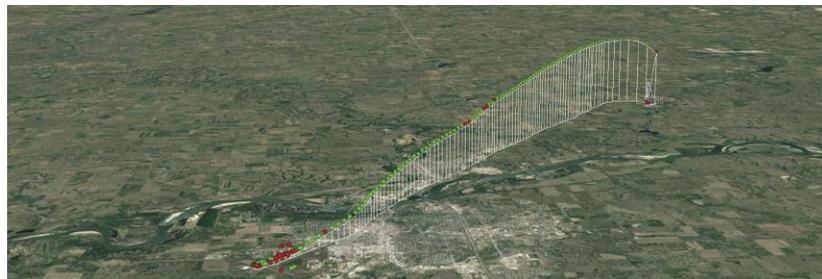
nationwide. The team uses **software developed by CAP members** to narrow down search sites like the one seen here.

ICARUS, an aircraft detection and alerting near-real-time system developed by CAP's National Radar Analysis Team, features this Mission Sandbox showing the eye of Hurricane Michael. This response tool helps CAP incident teams **watch where search aircraft are flying in real time.**

# high-tech



Civil Air Patrol's Cessna 172s and 182s make up most of the Air Force auxiliary's **560-plane fleet**, which is recognized as one of the world's largest fleets of single-engine piston aircraft.



A Google Earth screen capture shows National Radar Analysis Team tracking that helped lead searchers to a Medevac crash site in North Dakota. Using **radar data forensics** in

**collaboration with cell phone data forensics**, the CAP teams pinpointed the crash site.



CAP's **air and ground crews are in constant contact** with each other through CAP's multimillion-dollar communications network.



Over 250 of CAP's powered planes are equipped with technically advanced glass cockpits, which enhance aircrew effectiveness and safety. Another advance in avionics already available on 75 percent of the fleet is the latest ADS-B (Automatic Dependent

Surveillance-Broadcast) technology. It allows CAP pilots to **see advanced traffic and weather on Garmin portables and tablets** using Garmin Pilot and ForeFlight Mobile apps.



CAP aircrews tested a new **WaldoAir XCAM Ultra50 sensor** pod system in 2018, producing high-resolution images for disaster relief.

## Community Service

# 337

SQUADRONS

CAP MEMBERS FROM 337 SQUADRONS HELPED  
PLACE NEARLY 2 MILLION WREATHS  
ON VETERANS' GRAVES

# 47 / 2

PEOPLE/AIRCRAFT  
FOUND

LIVES  
SAVED

NATIONAL RADAR ANALYSIS TEAM  
CREDITED WITH 47 FINDS AND 2 SAVES IN 2018.

# 50+

YEARS

FOR OVER 50 YEARS NATIONAL BLUE BERET  
HAS PROVIDED CADETS THE OPPORTUNITY  
TO PARTICIPATE IN THE WORLD'S  
LARGEST AIR SHOW.



Cadet Airman 1st Class Michael Pereira of the New York Wing's Putnam County Composite Squadron carries out a dessert tray from the kitchen during the **Putnam County Veterans Chow Down**, held annually to honor those who served.

# heart



Every year, Wreaths Across America is Civil Air Patrol's signature community service mission, with members across the U.S. stepping up to obtain sponsorships for **memorial wreaths** placed on veterans' headstones nationwide. Among the thousands participating last year was this Stanton Composite Squadron cadet saluting a veteran's grave in Minnesota's Fort Snelling National Cemetery.

Civil Air Patrol members can be counted on to **salute veterans receiving Honor Flights** in tribute to their service to the U.S., whether they're taking off on a flight for Washington, D.C., or returning from such a visit to the nation's capital.

Hawaii Wing members stepped up to help ensure the success of the Kids4CPR/AED Institute's campaign to provide **hands-on training for youth** attending Child/Youth Day at the Capitol in Honolulu. Among those participating was Cadet Master Sgt. Braden Pascua of the Maryknoll Cadet Squadron, who demonstrated proper placement of Automated External Defibrillator pads to one young visitor.

CAP members' support for the military extends beyond the ranks to include service members' families. In New Hampshire, members of the Seacoast Composite Squadron participated in the **Salute to Troops Family Day** in Portsmouth. Cadets ran games and rides for the children.

Among the skills cadets develop as part of their training is flight marshaling — a **skill that can be counted on** at air shows, including the world's largest such event — EAA AirVenture Oshkosh in Wisconsin.

In addition to Wreaths Across America observances in December, Memorial Day provides a prime opportunity for CAP members to **pay tribute to those who served**. Cadet Staff Sgt. Matt McCaskill of the Arizona Wing's Falcon Composite Squadron 305 paused for a moment of reflection as he placed one of hundreds of flags on veterans' gravesites in Mesa.

# national data

2018 STATISTICS



## MEMBERSHIP

34,844 Adult Members  
26,222 Cadets  
61,066 Total Members  
6,859 Aircrew Personnel  
34,732 Emergency Responders  
1,442 Squadrons

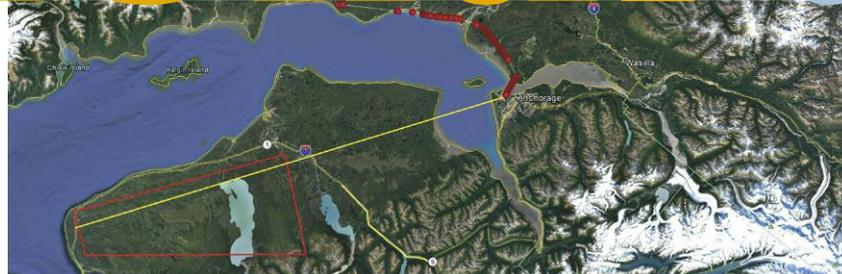
## EQUIPMENT

**Aircraft**  
560 Airplanes  
53 Gliders  
2 Hot Air Balloons

**Vehicles**  
1,076 Vehicles

**Communications Equipment**  
9,857 VHF/FM Stations  
739 Repeaters  
1,987 HF Stations

**2018 VALUE OF CAP MEMBERS' SERVICE TO AMERICA**  
\$187,202,536



## MISSION FLIGHT ACTIVITY

**Search and Rescue**  
1,012 Missions      940 Sorties      1,640 Hours  
430 Wing Finds      282 Cell or Radar Finds      712 Total Finds  
20 Lives Saved By Wings      138 Cell or Radar Lives Saved      158 Total Lives Saved

**Disaster Relief**  
28 Missions      854 Sorties      1,345 Hours

**Counterdrug & Drug Interdiction/Homeland Security**  
5 Missions      1,447 Sorties      3,540 Hours

**Air Defense/Homeland Defense**  
251 Missions      861 Sorties      1,635 Hours

**Cadet Orientation Flights**  
302 Missions      18,171 Sorties      15,626 Hours  
31,836 CAP Cadets Flown      1,043 AFROTC Cadets Flown      2,437 AFJROTC Cadets Flown  
35,316 Total Cadets Flown

**Maintenance**  
65 Missions      7,738 Sorties      7,993 Hours

**Training**  
1,101 Missions      19,217 Sorties      24,507 Hours

**Other Air Force Support/Homeland Defense**  
68 Missions      8,029 Sorties      8,264 Hours

**Other State Support**  
69 Missions      1,103 Sorties      1,793 Hours

**All Other Operations**  
374 Missions      17,953 Sorties      23,425 Hours

**Total**  
3,245 Missions      74,248 Sorties      89,773 Hours



## BOARD OF GOVERNORS

Civil Air Patrol's 11-member Board of Governors generates strategic policies, plans and programs designed to guide and support the volunteer service of the organization's 52 wings. CAP's national commander and chief executive officer, the organization's chief operating officer and the CAP-USAF commander serve as advisors to the Board of Governors.

### Air Force-Appointed Members

Lt. Gen. Judy Fedder, USAF (Ret), Chair  
Maj. Gen. Sandra (Sandy) Finan, USAF (Ret)  
Brig. Gen. Ken Ekman, USAF Vice Commander, CONUS NORAD Region, 1st Air Force (AFNORTH)  
Robert E. Corsi Jr., USAF (Ret)

### Civil Air Patrol-Appointed Members-At-Large

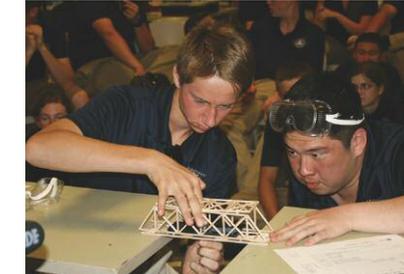
Col. J. Bradford Lynn, CAP, Vice Chair  
Col. Jayson Altieri, CAP  
Col. Dale Newell, CAP  
Lt. Col. Thomas S. Vreeland, CAP

### Industry, Government & Education Appointed Members

CDR George M. Perry, USN (Ret), Aviation Safety Advocate, Author and Speaker, United Parcel Service  
Maj. Gen. Teresa Marné Peterson, USAF (Ret), Board of Directors, National Order of Daedalians  
Stacey Bechdolt, Vice President, Safety & Operations Regulatory Counsel, Regional Airline Association

### Advisors to the Board of Governors

Maj. Gen. Mark Smith, CAP National Commander/CEO  
Col. Michael D. Tynismaa, USAF Commander, CAP-USAF  
John Salvador, Executive Secretary/Chief Operating Officer, CAP



## FUNDING

**Federal Funding**  
\$30.8 Million Operations & Maintenance  
\$10.6 Million Aircraft Procurement  
\$1.7 Million Vehicle Procurement

**In-State Funding Received by CAP Wings**  
\$3,026,928



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## Mission Statement

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

[gocivilairpatrol.com](http://gocivilairpatrol.com)

