Civil Air Patrol (CAP) Familiarization Course for Air Force and CAP Members

LEVEL II: What We Do: Our Missions

PART I: Emergency Services

Introduction

CAP’s Emergency Services (ES) function serves our nation’s communities and aids in our national defense. Did you know that the USAF is by statute responsible for coordinating search and rescue in the United States? We are a noncombat resource of the Air Force within the United States, assisting in the fulfillment of the Air Force’s mission of providing military support to civil authorities in times of need.

History

When you think about it, CAP’s coastal patrol operations, target towing, search and rescue, border patrol, forest fire patrol and other operations during World War II were the precursor to today’s ES operations. Aside from today’s charter as a noncombat organization (although CAP had combatants during WW II), the only real differences in ES operations are technology and methodology (we no longer use motorcycles or ride on horseback).

CAP was the only organization during WW II that had the capability and the time to perform aerial search and rescue, and we did so during a time when civilian radar plotting and emergency radio beacons didn’t exist. And, CAP saved lives, by the hundreds.

CAP’s Emergency Services Program

Best known for its members’ work in search and rescue and disaster relief missions, CAP expanded its role in the 21st century to include an increasing number of homeland security and counterdrug missions and is incorporating digital imaging technology into its life-saving work. CAP members undergo
rigorous training to perform safe and cost-effective missions, serving as pilots, communicators, ground team members, and numerous other roles. For instance, shortly after 9/11, a CAP aircrew was the first to fly a civilian aircraft over Ground Zero, providing authorities with vital images of the fallen World Trade Center. CAP has flown hundreds of homeland security missions performing route surveys, conducting airborne reconnaissance of border and coastal areas and critical infrastructure, exercising Air Force air defense training support, providing communications support and damage assessment and performing other critical missions. Most importantly, CAP saves an average of 80 lives per year during its ES operations; and in most cases does so in its role as the USAF Auxiliary. How does this work?

**Civil Air Patrol Combatant Commander Support**

Civil Air Patrol conducts a variety of noncombat operational missions primarily in the areas of Emergency Services (Search and Rescue (SAR); Disaster Relief (DR)), Counterdrug (CD), Drug Interdiction (DI) and Homeland Security (HLS). Most of this is done in CAP's role as the United States Air Force Auxiliary as Defense Support to Civil Authorities (DSCA) under Title 10, but CAP also provides assistance to state and local authorities in many cases before there is a defined federal interest under Title 36 as well.

The Secretary of the Air Force (SECAF) designee, the Commander, U.S. North American Aerospace Defense Command Region - 1st Air Force (AFNORTH), may respond directly to civil-support requests, including those involving counterdrug activities, using the services of CAP. AFNORTH is the Air Force component to one of the nine Combatant Commands (COCOMs), U.S. Northern Command (USNORTHCOM), whose mission is to conduct homeland defense, civil support and security cooperation to defend and secure the United States and its interests.

The Civil Air Patrol supports USNORTHCOM through AFNORTH by providing Defense Support to Civil Authorities missions including domestic disaster relief operations during fires, hurricanes, tornadoes, floods earthquakes and other natural or manmade disasters. CAP provided support in response to the Deep Water Horizon emergency in the Gulf of Mexico, Hurricane Sandy along the Northeastern coast of the U.S. as well as the recent Moore, Oklahoma tornadoes. Nearly every day, CAP is providing emergency support somewhere in the country.

**Specific Assets CAP has available for its Missions for America**

<table>
<thead>
<tr>
<th>Units</th>
<th>1,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>HQ, Region, Wings, Groups, Squadrons (Approx.)</td>
<td></td>
</tr>
<tr>
<td>Aircraft (Cessna, 172, 182, 206; Gippsland GA-8)</td>
<td>550</td>
</tr>
<tr>
<td>Gliders</td>
<td>53</td>
</tr>
<tr>
<td>Vehicles</td>
<td>950</td>
</tr>
</tbody>
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SPOTLIGHT: CAP’s Emergency Services Program

CAP’s volunteer professionals:

- Conducts 90% of inland search and rescue in the U.S., as tasked by the Air Force Rescue Coordination Center and other agencies.
- Performs 60-80% of AFNORTH’s daily Air Tasking Order supporting Northern Command’s HLS mission.
- Coordinates Air Force-assigned missions through the CAP National Operations Center at Maxwell AFB at a cost of only about $160 per flying hour.
- Performs aerial reconnaissance for homeland security.
- Saves an average of 80 lives per year
- Provides disaster-relief support to local, state, and national organizations.
- Transports time-sensitive medical materials, blood products and tissues when commercial routes are unavailable.
- Provides impact assessment, light transport, communications support, and low-level route surveys for the U.S. Air Force – contact the CAP National Operations Center for information (opscenter@capnhq.gov or 888-211-1812 x300).
- Assists federal law enforcement agencies in the war on drugs.
- Assists with mass casualty exercises; each state’s CAP wing headquarters is the contact for this.
- Maintains the most extensive VHF and HF communications network in the nation.

Focus:
1. For more information on Emergency Services provided by CAP click here!
2. For more information on US Northern Command, click here!
3. For more information on AFNORTH, click here!

Deepwater Horizon: CAP’s Most Significant Challenge

Deep Water Horizon was perhaps the most severe ecological disaster in the United States. Damage to the Gulf of Mexico’s shoreline and fishing industry will continue to affect the region for years to come.

Most of those coordinating the massive logistics of the response to this disaster were paid from dozens of agencies and hundreds of contractors. But, in the center of the massive response was Civil Air Patrol playing a significant role with its force of volunteer professionals. Although not regularly reported by the media during each day of the months-long response, CAP provided vital daily updates and information concerning the location of the oil slicks and the status of the protective boom systems employed to mitigate the spill.

The most important function CAP performed was flying about 700 miles of coastline from Louisiana to Florida taking digital images of the oil containment barriers and adjacent land area on the coast. CAP supported the emergency by flying over 2,300 hours over 118 continuous days. The effort involved
over 280 personnel from 10 states that included over 20,000 man hours and highlighted CAP’s ability to conduct sustained, high-intensity operations.

More than 28,000 aerial digital photos were uploaded to Geographic Information Systems where technicians “stitched” the photos together to provide a panoramic view of the coastlines. CAP is one of the only organizations capable of supplying geo-tagged aerial images at a moment's notice.

Former Florida Governor Charlie Crist lauded CAP when he said, “This level of response can be done only by using the aggressive reconnaissance methods incorporated by Civil Air Patrol from first light each day until dark.”

**SPOTLIGHT: CAP’s Contribution to Deepwater Horizon Response**

In the end, the volunteers of CAP:
- Flew 1,030 sorties and logged almost 2,300 flying hours.
- Contributed a total of approximately 20,000 man-hours over 118 continuous days of support.
- All efforts were done safely and accident free!
- All CAP support was provided without personal compensation to any volunteer.

**Focus:** To learn more about CAP’s response during Deepwater Horizon, click here to view the video!

**CAPabilities Handbook**

Want to know more about what CAP can do for your base and for your community? Know that the Civil Air Patrol’s CAPabilities Handbook provides a detailed overview that local, state and federal agencies can utilize to task CAP for incident response assistance (click here). This guide identifies the many ways that CAP can assist: both in routine operations as well as local and national emergency and humanitarian missions.

(Note that page i of the CAPabilities Handbook states that “The Civil Air Patrol (CAP) is a national community service organization made up of over 31,000 professionally trained volunteers.” The 31,000 figure refers specifically to those trained by CAP in the area of Emergency Services, while CAP’s total membership is over 60,000.)

**PART II: Aerospace Education**

**Introduction**

CAP builds enthusiasm for aviation and space through its aerospace education programs. CAP’s cadets and adult members learn about aviation history and the scientific principles that make flight possible. Conferences, textbooks, websites, and activity guides are available to CAP members. The public benefits from CAP’s aerospace education programs as well, since CAP provides educators at all grade levels with resources to incorporate aviation, space, and technology themes into their school curriculum. This is particularly important to the Air Force and Department of Defense because CAP’s initiatives support
DoD’s STEM (Science, Technology, Engineering, and Math) education initiative.

**Focus:** Click here to see a sample of CAP’s Aerospace Education program being implemented for America’s youth.

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**History**

CAP traces its support of aviation and space education programs to its founding in 1941. When CAP was formed on 1 December 1941, the national Director of Civilian Defense established CAP to use civil aviation resources for homeland security preparation for World War II. As you read above, a critical part of CAP’s mission during the war was the aviation education and flight training of its cadets.

When CAP was incorporated in 1946, its Congressional Charter mandated it to educate the general public about the importance of maintaining aerospace supremacy for America. In 1948, when CAP became the civilian Auxiliary of the U.S. Air Force, both organizations joined hands to promote aerospace education for the nation. The U.S. Air Force considered aviation and space education to be vital to the national security of the United States (and still does); and CAP was tailor-made to fill the education role.

By 1953, with a robust internal aerospace education program in place to teach its own members, CAP focused on how to best educate the public. It turned to America’s public school system, primarily grades K-12, as the best means to educate Americans on the importance of air and space.

**Today**

Besides supporting Aerospace Education in CAP squadrons, CAP also provides educational programs, lesson plans, and products to schools to enrich their traditional academic subjects with an aerospace theme. CAP’s *national academic standards*-based programs inspire educators and students to explore the aerospace environment, and to appreciate the Air Force’s role in maintaining air, space, and cyber superiority worldwide.

CAP develops, publishes and distributes STEM-supportive, AE curricula for kindergarten through college-level classrooms. This is done through its network of Aerospace Education Members: educators who affiliate with CAP in order to provide AE to their students in their schools and youth organizations.

**Focus:** Click here to view CAP’s award-winning AE programs.
Aerospace Education Program

CAP’s programs not only emphasize aerospace education and associated career opportunities, but they also promote character development, citizenship skills, and physical fitness for America’s youth.

Students interested in the aerospace environment join organizations such as the CAP Cadet Program, AFJROTC, and AFROTC and/or pursue flight/technical training college degrees to prepare for aerospace/STEM careers.

Students who become employed as adults in the aerospace industrial/commercial base, the Air Force, or the DoD (military or otherwise), serve to support worldwide aerospace supremacy for America, and as a result, increase national security—the primary reason why CAP was created.

In 2008, the National Science Teachers Association endorsed Aerospace Education as an important component of pre-K-12 science education programs.

Our newest endeavor is promoting cyber security by developing curricula and encouraging cadets to participate in the Air Force Association’s CyberPatriot program. Student teams representing high schools, AFJROTC units and CAP units across the country compete locally and nationally to defeat simulated cyber attacks. CAP cadet teams are nationally recognized as strong competitors!

All of CAP’s aerospace education materials meet national academic standards.

CAP's Nationally Award-winning Aerospace Education Program provides:

- Education for adult and cadet members as well as the community on the importance of aerospace for the future workforce and defense of our nation.
- Support for educational conferences and workshops nationwide.
- A special Aerospace Education Membership (AEM) category for educators in schools and youth organizations (click here for more information on becoming an AEM). These educator members introduce over 250,000 students to CAP’s AE and Cadet Programs annually. Quality educational products and programs are offered to these teacher members, who many times bring in students to the cadet program, start school cadet units, and become senior members to work with cadets, and/or bring in specialized CAP members to enhance classroom instruction (these members provide a great service to local communities, but are especially important in support of your on-base schools) and introduce the community to CAP.
- Aerospace Education Excellence (AEX) Award program: This free hands-on AE program promotes an interest in STEM subjects and careers for grades K-12 and CAP squadrons nationwide.
- Aerospace Connections in Education (ACE) Program for grades K-6: The free ACE Program uses the aerospace theme to promote academics, good character, and physical fitness to live a healthy and drug-free lifestyle to young students.
- Teacher Orientation Program (TOP) Flights: Provides educators
throughout the country with a real flying experience to aid in promoting the importance of aerospace education in the classroom.

- The Model Rocketry program: A progressional hands-on program for cadets interested in the science, technology, and aerodynamic flight of model rockets. Cadets will progress through the Redstone, Titan, and Saturn stages as they participate in the CAP Model Rocketry Program.
- National academic standards-based aerospace education curricula for kindergarten through college classrooms; developed, published and distributed by CAP.
- Grant, award, college credit, and scholarship opportunities for adult, cadet and teacher members.
- Free educational programs, products and services to educators.
- Comprehensive aerospace education resources online.

**Focus:** To view CAP’s AE curriculum, [click here](#).

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**SPOTLIGHT: CAP’s Aerospace Education Excellence Award Program (AEX)**
The AEX program is a free, hands-on aerospace program for grades K-12 and for CAP squadrons. AEX provides both schools and CAP units numerous challenging and fun activity-based curricula that teaches key science, technology, engineering, and math (STEM) concepts to students. Leveraging student interest in aviation and space, the AEX curricula uses commonly-found household items and inexpensive kits to bring physics, engineering, math, robotics, astronomy and other subjects to life for the students. Students who may not have considered themselves “good” at science or math suddenly find themselves not only good, but interested in the concepts. Some consider entering college or aerospace-related careers as they discover their true potential. AEX materials are provided at no cost (that’s right, no cost) to CAP members.

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**PART III: Cadet Programs**

**Introduction**

Through CAP’s Cadet Program, young people age 12 to 20 develop into responsible citizens and are inspired to become tomorrow’s aerospace leaders. The program is organized around five elements: leadership, aerospace, fitness, character development and activities. As cadets participate in these elements, they progress through a series of sixteen achievements, earning honors and increased responsibilities along the way. Adult members supervise the cadets and help them develop leadership skills. CAP instills in cadets a love of aviation and strives to equip them with the discipline and skills they will need to succeed in adult life.

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**GOALS FOR PART III**
1. Describe CAP’s Cadet Programs mission.
2. Provide an overview of the types of cadet activities CAP performs.
3. Identify how CAP’s programs might benefit your base and community.

**QUIZZABLE ITEMS**
1. Everything in the main body text.
2. Special emphasis items which are underlined.

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**History**

As you have read, CAP started its cadet program as a test in 1942, with the first cadets being from Minnesota. This test rapidly expanded to include up to 70,000 cadets by 1947. During the war, cadets...
were provided flight training, with the male cadets anticipating induction into the military. The training they received: drill and ceremonies, physical fitness, character development and aviation training provided them with a head start once they were inducted into or entered officer training. Since 1948, with Air Force support, CAP has provided its youth with tools to enhance their leadership skills through an interest in aviation, while simultaneously providing services to the USAF (through the cadet-popular Emergency Services program) and the more than 1,500 communities where CAP is present.

Today

The Cadet Program today does the same thing it did 70 years ago: develop young men and women to serve their communities and their nation. While not a direct conduit into military service; the education and training CAP provides, as well as the culture of integrity and service in which CAP immerses the cadets, develops them into the type of young people sought by the Air Force, its sister services, industry, and the community at large.

Cadet Programs accomplishes this with a simple formula: camaraderie, mentoring, discipline, service and aviation. CAP’s adult members educate cadets using emergency services, aerospace education and character development as vehicles to promote aerospace awareness, encourage citizenship skills and aerospace-oriented career opportunities. To that end, CAP encourages cadet membership in AFJROTC and AFROTC, or pursuit of flight/engineering degrees in preparation for careers in the aerospace industry.

The Cadet Program

Today’s cadet program gives over 26,000 youth ages 12-20 the opportunity to lead in a focused and structured environment. Its themes of aerospace and leadership create an atmosphere where service, integrity and excellence are enthusiastically strived for. Its drug-free message promotes self-determination, self-respect and self-awareness. Guided by experienced adult role-models and world-class texts and lesson plans, cadets run their own program, learning life-critical skills primarily by doing.

Cadets participate in week-long or weekend encampments, which are usually located on Air Force bases. In this way CAP exposes cadets to Air Force values and traditions.

Does CAP work? To find this answer, you might want to ask the over three dozen generals and admirals, or thousands of officers and enlisted men and women (current and retired) who got their start as CAP cadets. Or, you might want to ask the former state governors, U.S. congressmen, state legislators and other senior government officials; or, the thousands of business owners and community leaders; or, perhaps your next door neighbor. Over the years over 1 million men and women (too many to count) have benefited from the Cadet Program. So we would say enthusiastically, “Yes, CAP does work!”

**CAP’s Cadet Program provides:**

- Opportunities for approximately 26,000 annual members ages 12 through 20.
SPOTLIGHT: CAP’s National Cadet Special Activities

CAP’s National Cadet Special Activities (NCSAs) expose cadets to a variety of aviation, engineering and service-related careers. For many cadets, these NCSAs represent their first chance to discover what they would like to do for a career; and completion of the activity gives them a true sense of the possible. Many NCSAs are held at Air Force bases across the U.S., as well as flight, education and industry facilities. Cadet exposure to Air Force officer and noncommissioned officer role models enhances the experience for the cadets and provides the Air Force with a chance to “put their best foot forward.” NCSAs include:

- Cadet Officer School – Maxwell AFB, AL
- AF Space Command Familiarization Course – Peterson AFB, CO & Patrick AFB, FL
- Advanced Technologies Academy – Peterson AFB, CO
- AF Undergraduate Pilot Training Familiarization Course – Columbus AFB, MS & Laughlin AFB, TX
- AF Pararescue Orientation Course – Kirtland AFB, NM
- AF Civil Engineering Familiarization Course – Tyndall AFB, FL
- Aircraft Manufacturing and Maintenance Academy – Independence, KS
- Engineering Technologies Academy – Auburn University, AL
- Cadet Flight Academy (powered and glider) – airports nationwide
- International Air Cadet Exchange – nationwide & in 18 countries
- Hawk Mountain Search and Rescue School – Kempton, PA
- Aviation Business Academy – McMinnville, OR
- Model Aircraft and Remote Control Flight Academy – Oshkosh, WI and other locations
- Civic Leadership Academy – Arlington, VA
- National Character Development and Leadership Symposium – USAFA, CO
- Blue Beret – Oshkosh, WI

Finally, CAP’s participation in the “Wreaths Across America” initiative helps our cadets and adults to honor the ultimate sacrifices of our fallen servicemen and women through the placement of wreaths on the graves of veterans. This simple act pays tribute to the fallen while teaching the cadets the true meaning of sacrifice and honor.

Focus: Click here to learn more about the Cadet Program by watching this short video!
After reviewing the Level II materials here, take this short quick-look review to test your knowledge:

1. The Civil Air Patrol __________________ is a field operations guide that local, state and federal agencies can use to better understand about and learn how to request CAP for incident response assistance.
   a. Volunteer magazine  
   b. CAPabilities Handbook  
   c. Annual financial statement  
   d. Cooperative Agreement

2. Types of missions CAP can perform include which of the following?
   a. Airborne reconnaissance of border and coastal areas and critical infrastructure  
   b. Communications support and damage assessment  
   c. Air Force air defense training support  
   d. All of the above

3. Should an Air Force base require CAP to fly an aerial survey of the base, which of the following would the base representative contact to set up the mission?
   a. The state’s Emergency Management Agency  
   b. The CAP National Operations Center  
   c. The Federal Aviation Administration local office  
   d. The airport at which the local CAP unit is based

4. When an Air Force organization desires to use CAP cadets as “victims” for a simulated mass casualty exercise, who would the AF organization contact for this assistance?
   a. The state’s CAP wing headquarters  
   b. The state’s Emergency Management Agency  
   c. The local Red Cross chapter  
   d. None of the above

5. Which CAP program offers grants, awards, college credit and materials to its adult, cadet and educator members?
   a. Emergency Services  
   b. Aerospace Education  
   c. Cadet Program  
   d. Public Affairs

6. Civil Air Patrol’s _________________ program is a progressional hands-on program for cadets and students interested in science, space, technology and aerodynamics.
   a. Aerospace Propulsion  
   b. Model Rocketry  
   c. CyberPatriot  
   d. Engineering Analysis
7. ________________ is a free, hands-on aerospace program for grades K-12, as well as for CAP squadrons to promote STEM subjects and careers.
   a. Aerospace Connections in Education (ACE)
   b. TOP Flights
   c. Aerospace Education Excellence (AEX)
   d. CyberPatriot

8. How can CAP enrich learning in your on-base schools?
   a. Provide information about CAP’s cadet program to students.
   b. Provide educators with a wide variety of free national standards-based educational products and programs as Aerospace Education Members.
   c. Provide CAP pilots and subject matter experts as guest speakers and mentors.
   d. All of the above

9. CAP’s Aerospace Education initiatives support the Department of Defense (DoD) science, technology, engineering and math (STEM) initiative.
   a. True
   b. False

10. Civil Air Patrol cadets range from ____________ years of age.
    a. 6-18
    b. 10-21
    c. 12-20
    d. 12-25

11. CAP’s cadet program is organized around five elements: leadership, physical fitness, activities, aerospace education and ________________.
    a. political science
    b. character development
    c. combat theory
    d. sociology

12. During week-long or weekend encampments, which are usually conducted ________________, CAP exposes cadets to Air Force values and traditions.
    a. at local high schools
    b. on Air Force bases
    c. at local colleges
    d. at local airports

13. Civil Air Patrol inspires youth to be responsible citizens. Cadets serve their communities by helping with CAP’s real world ________________ efforts.
    a. humanitarian
    b. combat
    c. counterdrug
    d. bio-medical
14. What program helps our CAP cadet and adult members to honor the ultimate sacrifice of our fallen servicemen and women?
   a. “Wreaths Across America”
   b. “Hands Across America”
   c. “Sponsor a Soldier”
   d. “Civic Leadership Academy”