



Escondido Cadet Squadron 714

Cadet Basic Training – Week Five

Aerospace Education

(Ref. CAPR 52-16)

Aerospace Education is one of CAP's three congressionally chartered missions. As members, we are responsible for encouraging and aiding American citizens in the contribution of their efforts, services and resources toward the development of aviation and in the maintenance of air supremacy. CAP encourages and fosters civil aviation in local communities.

One method CAP uses to accomplish its AE mission is by providing aviation education and training to its cadet and senior members. CAP accomplishes its aerospace education mission in a variety of ways, including both an internal and external program, as well as sponsorship of the National Congress on Aviation and Space Education (NCASE). Our goal for NCASE is to provide educators with the latest hands-on techniques and tools to help them capture the imaginations of their students. CAP promotes the use of aerospace themes to help educators excite and motivate their students to excel in science, math, technology, language arts, social studies and other traditional subjects.

All cadets in the Cadet Program are expected to continue their AE training until the completion of Achievement 16. The Aerospace Education Officer will assist and guide cadets through the self-study materials. Senior cadets and cadet officers will be assigned as AE mentors to complete their requirements for Phases III and IV. These mentors will assist cadets having trouble with any portion of the material. Mentors assume an active responsibility for the individual cadet's success by motivating the cadet and frequently assessing the cadet's progress. The mentors should be thoroughly familiar with the review exercises throughout each chapter and review quizzes provided at the end of each chapter.

While the primary method of learning the material is intended to be self-study, the AEO and his/her staff will conduct classes and group-study sessions to supplement the self-study sessions. In addition, special activities will provide an opportunity for additional "hands on" aerospace education.

AEROSPACE EDUCATION PROMOTION REQUIREMENT

With the exception of achievements 1, 12 and 13, all Cadet Program achievements require the successful completion an aerospace examination. You received your AE

study "modules" in the box of new-cadet materials that arrived from CAP National Headquarters (NHQ). During Phases I and II, you may select from which module you would like to be tested from. You will be tested on one module per achievement until you reach Phase III of the cadet program, where your studies and tests will be based off a different textbook. The Mitchell Award, the Earhart Award, and the Spaatz Award exams also include comprehensive AE promotions.

Emergency Services (Ref. CAPR 60-3)

CAP's talents have augmented the Air Force in search and rescue and disaster relief since CAP's formation in 1941. It has always been there to assist the nation in times of disaster or in any emergency situation when it's resources - people and equipment - can be used.

The emergency services (ES) primary mission is to save lives and relieve human suffering. To be effective, the lives in CAP personnel performing the mission must be safeguarded. CAP demands professionalism in organization, training, and mission execution to accomplish this service. Only members who are qualified or are currently participating in formal emergency services training are allowed to participate in actual missions. CAP is most known for it's emergency service role in search and rescue, as well as disaster relief.

Search and Rescue (SAR)

The National Search and Rescue plan assigns Responsibility for coordinating inland SAR Operations in the continental United States to the Air Force. The actual coordination is performed by the Air Force Rescue Coordination Center (AFRCC), based at Tyndall Air Force Base, Florida. This coordination is provided by the U.S. Coast Guard in Puerto Rico and by the Joint Rescue Coordination Center in Alaska and Hawaii. CAP supports all three and is the primary resource available for all inland search and rescue operations. CAP routinely performs an average of 85% of all inland SAR missions in the continental United States.

Did you know?

CAP uses over 550 corporate-owned aircraft, nearly 1,000 corporate vehicles, and thousands of corporate radio and computer equipment to support its emergency services mission.

All CAP members who participate in search and rescue operations are volunteers who have been specifically trained in a variety of emergency services skills. These operations must be carried out with speed and efficiency because victims' lives might be at stake. This speed and efficiency is obtained through prior planning and practical exercises in performing the tasks required.

CAP units may not participate in SAR missions unless they have members trained and qualified to quickly and successfully accomplish a mission. A wing may have several

units which are trained and "on-call" for SAR operations, but the wing commander usually assigns the mission to the nearest unit in the area of operations (AO). This ensures familiarity with the terrain in the specific search area; enhances the relationships with neighboring agencies (police, fire, etc.); and ensures a quick response time. Larger missions often require multiple units from the affected wing, or even assistance from neighboring wings to participate. This only increases the need for professionalism and control over operations.

As you have already gleaned, a SAR mission is always a serious and critical endeavor. Good organization, methodical procedures, and safety are essential. Therefore, each mission is headed by a CAP incident commander (IC) who is experienced and highly qualified in CAP's emergency services operations. SAR missions can be quite involved with many functions and activities to be supervised and accomplished. Some of these activities include:

Incident Command - the overall responsibility for each specific mission is invested in one CAP officer qualified and trained to handle the job: the Incident Commander (IC).

Administration - involves mission personnel registration; flight orders, reimbursement claims (for fuel, oil, etc.); and control of required mission reports.

Communications - may be radio, telephone, fax, e-mail, or online instant messenger service. A communications officer establishes the net and controls the activities of all communications personnel. He or she also prepares briefing materials relative to the communications procedures to be used by mission personnel.

Air Operations - by the Air Operations Officer, responsible for coordinating all airborne activity under the overall supervision of the mission coordinator or incident commander (IC). This officer verifies qualifications of air crews; supervises crew briefings; maintains the mission status board with the appropriate and timely information; and supervises the staff under his or her charge.

Ground Operations - are controlled by the Ground Operations Officer. Very similar to the responsibilities of the Air Operations Officer, but related to the tasks required for surface operations.

Mission Chaplain - is assigned to both air and ground operations as needed.

Disaster Relief (DR) Operations

In 1979, several federal agencies were combined into the Federal Emergency Management Agency (FEMA). FEMA is the single point of contact within the federal system for disaster relief planning and management. This includes civil-defense, natural disasters and man-made emergencies.

Did you know?

CAP was a primary resource for providing disaster relief during such events as Hurricanes Katrina and Rita, the 1993 Missouri floods, and the September 11th terrorist attacks?

The CAP has national-level agreements with many government and non-government relief agencies to assist when disaster strikes. Over the years, CAP has worked closely with agencies such as FEMA, the American Red Cross, and the Salvation Army. CAP also has agreements with local agencies at the wing level and participates with various state emergency management agencies (EMA's).

The U.S. Army has overall responsibility for coordinating disaster relief efforts involving Department of Defense (DoD) agencies. In this regard, the Air Force supports the Army. As the volunteer auxiliary of the Air Force, the CAP may participate in the Military Support to Civil Authorities (MCSA) program.

The organization of CAP DR efforts is very similar to CAP's SAR mission. The main difference is the agency that controls the mission. CAP always maintains command and control of CAP resources, but the control of the mission is delegates - usually at the state level - to the agency primarily responsible for the particular DR operation.

Under the MCSA, the Air Force Reserve coordinates and does the tasking through the Air Force National Security Emergency Preparedness (AFNSEP) office. The AFNSEP office is co-located with the Army Forces Command at Fort McPherson, GA. After receiving an Air Force mission authorization, CAP works directly with the organization that requested help and performs the activities specifically requested (within CAP's capability). These types of DR missions CAP supports include:

- Courier and light cargo transport
- Mercy missions - blood, live organ, and patient transport (life saving evacuations)
- Manual labor for debris removal
- Air and ground transport non-CAP key personnel
- Damage surveying
- Communications support
- Etc.

Two good examples of the types of support CAP gives in Disaster Relief operations is illustrated by its efforts during the 1993 Missouri flood and CAP's response to the September 11th terrorist attacks in 2001. During the summer of 1993, the Mississippi River overflowed its banks and caused the worst flooding in over 100 years, flooding millions of acres of land, and submerging whole towns and cities. Civil Air Patrol members from across the country came to the aid of the flood victims; filling sandbags, surveying the damage, flying everything from mail to emergency medical supplies to needed areas and establishing emergency communication links and ferrying government officials.

CAP members were also month the first to respond to the September 11th attacks in New York City, Washington D.C., and Pennsylvania, providing communications, emergency transfer of blood, supplies and people, and rendering other types of assistance as requested by state and federal agencies.

Counter-drug Operations

In 1985, the U.S. Customs Service (now U.S. Customs and Border Protection) asked the CAP to support their counter-drug operations. Our first large-scale operation with the Customs service primarily involved reconnaissance and feedback on suspicious boats and ships off the East and Gulf coasts. In 1986, Congress authorized CAP to support law enforcement in the government's war on drugs. CAP began its support of the Drug Enforcement Administration (DEA) and the U.S. Forest Service in 1989. Originally, operations were primarily for marijuana eradication support within the United States, as well as its territories and possessions.

Today, the mission of CAP's counter-drug program is to assist federal, state and local government and law enforcement agencies involved in the fight to eliminate illicit drug production, sale and use in the U.S., its territories and possessions. CAP is involved in combating the demand for and supply of illegal drugs. CAP provides aircraft, aircrews and other personnel to support counter-drug activities. Many federal agencies as well as state and local law enforcement agencies and drug task forces routinely call on CAP to provide counter-drug support. It should be noted, however, that CAP has no law enforcement authority and may not participate in the direct execution of law enforcement operations.

CAP provides three main counter-drug interdiction missions: aerial reconnaissance, communications support, and transportation. All Air Force-assigned counter-drug missions must have a counter-drug "nexus", meaning that they must involve a counter-drug case or operation. Valid operations include:

- Marijuana eradication support - flights conducted to detect suspicious vegetation or likely growing areas for marijuana.
- Airborne reconnaissance - flown to detect potential drug operations or gather intelligence on isolated areas known to be used by drug traffickers. Also flown on a recurring basis to examine border-crossing areas.
- Marine reconnaissance - flown to detect and report suspicious marine activity in coastal areas, and to detect and identify water-borne vessels.
- Airport reconnaissance - recurring or periodic reconnaissance of airports or their surrounding access routes for evidence or likelihood of use for drug trafficking.
- Airborne video / digital photography and imagery - flown to document conditions of areas or facilities to detect change, use or suspicious activity.
- Communications support - usually flown in remote locations to provide an aerial communications relay platform and/or in support of over-water operations where normal communications would be a problem.
- Radar evaluation - flown to evaluate and calibrate air defense radars and provide controller and/or interceptor training.
- Aerial familiarization of law enforcement agents - conducted to familiarize agents with aircraft and their use in conducting law enforcement operations.
- Drug demand reduction (DDR) - orientation flights in conjunction with DDR program events for CAP cadets are permitted. Transportation of DDR personnel and materials to DDR events.

Homeland Security

Homeland security is Civil Air Patrol's heritage. The terrorist attacks that occurred on September 11th, 2001, caused the United States to reexamine its homeland security mission. No longer immune from attacks on its home soil, the United States must use all of its resources to meet an enemy that knows no national, physical or moral boundaries. The Global War on Terrorism is a multi-front campaign that begins at home.

In order to prepare for, prevent, and respond to attacks or domestic emergencies within the United States, the CAP, operating as the United States Air Force Auxiliary, increased its participation in Department of Defense Homeland Security operations by conducting Civil Support and Homeland Defense missions.

CAP provides a ready capability to enhance Civil Support and Homeland Defense operations within the HLS arena. Utilizing highly-trained volunteers and its large fleet of aircraft, CAP can rapidly respond to requests for support from military, federal, state, and local agencies requiring emergency management services; integrated, multi-layered communications; low-cost, high-technology reconnaissance; or transport or personnel or cargo. CAP provides support to civilian law enforcement, participates in Domestic Relief Operations (DRO), and aids domestic consequence management activities in response to chemical, biological, radiological, nuclear, or high yield explosive (CBRNE) situations. Increased CAP assistance in conducting Homeland Security operations acts as a force-multiplier for the Department of Defense and other governmental and non-governmental agencies. By providing additional personnel and critical equipment, CAP gives first responders the flexibility to conduct higher priority tasking, and frees defense personnel for more critical national security needs.

To prepare for Homeland Security operations, CAP assists military and law enforcement organizations with training of personnel to defend the nation. Activities ranging from active participation in exercises and evaluations, to transporting personnel, to training locations, provide organizations with greater flexibility and reduce their own resource requirements. Prevention missions usually involve active reconnaissance or patrol of potential targets, lines of communication and critical infrastructure. Response - whether training or actual - involves virtually every aspect of the organization, but communications capabilities and trained emergency management personnel play key roles in addition to those filled by CAP air or ground teams.

By increasing the number of trained personnel and low-cost, high-technology equipment available to full-time first responders, CAP leverages those organizations' abilities to provide capable, multi-level security. Specifically, to enhance detection and prevention requirements, CAP provides reconnaissance and transportation capabilities not usually available to local security forces. CAP emergency management personnel deliver much needed continuity and often round out staff normally manned with people whose primary duties may not involve crisis or consequence management. CAP communications personnel establish critical redundancy in areas often overwhelmed with communication demands in commercial frequency spectra.

CAP Aircraft and Aircrews

CAP owns approximately 550 single-engine, propeller-driven, light aircraft, such as Cessna C-172s. In addition, CAP members also make available about 4,500 of their own private aircraft, making Civil Air Patrol the largest fleet of privately owned light aircraft in the world. Combining corporate and member-owned aircraft, it had a larger fleet than the United States Air Force!

Pilots may hold aeronautical ratings in CAP similar to pilots in the Air Force. In addition, the CAP recognizes balloon and sailplane pilots with special ratings. Aircrews are also eligible for aircrew designations, such as mission scanner and observer. Cadets may receive primary flight training through the Civil Air Patrol, while senior members may take proficiency training or upgrade their qualification certificates they already have.

Drug Demand Reduction

Where counter-drug operations focus on eliminating the supply of illegal drugs into the United States, the Drug Demand Reduction (DDR) program focuses squarely on the demand for illegal drugs. DDR, sponsored by the Department of Defense and the USAF, promotes a drug-free and gang-free lifestyle to youth across America, focusing primarily on the military community. As the Auxiliary of the Air Force, CAP is the ideal agent for promoting drug demand reduction efforts, and CAP's DDR program is among the most successful programs in the country.

The focus of CAP's DDR efforts is middle school-aged youth who reside within 30 miles of a qualifying Air Force installation, and mostly cater to CAP units. These units receive DDR educational materials, access to guest speakers, and funding to support activities that promote a drug-free lifestyle. A recent addition to CAP's DDR efforts is the formulation of the Middle School Initiative (MSI). This program brings CAP into middle schools across America, providing activity materials, uniforms, and a comprehensive curriculum into at-risk neighborhoods, at minimum cost to the school systems - providing a fun, structured program to thousands of youth every year.

The CAP Communications Network



The CAP communications network supports the entire CAP mission. Involving thousands of operators, the Civil Air Patrol communications network serves three purposes: (1) it aids in the advancement and improvement of the art and science of radio communication; (2) it furthers the CAP aerospace education phases in communication; and (3) it coordinates with government agencies for planning and establishing procedures to meet local and national emergencies.

CAP's radio network is comprised of a radio and computer system involving stations that are fixed-land, mobile, water, and airborne. This network embraces the entire CAP organization - each of the 50 states, the District of Columbia, and Puerto Rico - and maintains a regular communications schedule. Whether it be for routine or emergency use, it provides commanders at each echelon the communications capability adequate for their control of overall activities. Also, in times of national emergency or disaster, it provides an additional or secondary means of communications if primary facilities are inoperative.

Manned by CAP personnel, the CAP communications network follows the chain of command structure. That is, the network is established at the national level, at the regional level, the wing level, and the squadron level. Operating in this manner, all echelons can maintain contact with each other using the network if the need arises.

Authorized frequencies are allocated by the U.S. Air Force and the Federal Communications Commission (FCC). Civil Air Patrol maintains control of the network and establishes operating procedures which comply with the requirements of the USAF and FCC.

Drill Instruction

This meeting's drill and ceremonies instruction period will be used for extensive review of previously learned drill commands, in addition to the new ones listed below, in preparation for your basic drill test. Please refer back to the Week 2 packet for the excerpt from AFI 36-2203.

1. Eyes Right / Ready Front (marching and from the halt)
2. To the Rear, March
3. Half-step March
4. Change-step, March
5. Count Cadence

PREVIOUS WEEK'S COMMANDS:

WEEK ONE

1. Attention
2. Parade Rest
3. Rest
4. At Ease
5. Sitting at Attention
6. Sitting at Ease

WEEK TWO

7. Fall In / Out
8. Line Formation
9. Right / Left Face
10. Dress Right, Dress / Ready Front
11. By the Numbers
12. Dismissal

WEEK THREE

1. Column Formation
2. About Face
3. Cover
4. Hand Salute
5. Present / Order Arms

WEEK FOUR

6. Forward March
7. Route Step March
8. Halt
9. Quick-time March
10. Double-time March
11. Mark-time March