Wing highlights 2011 accomplishments

The Massachusetts Wing served the state and its residents in a variety of ways in 2011. Air and ground crews provided mission support for 12 distress missions resulting in five finds and three disaster relief missions. In the wake of Hurricane Irene, wing crews flew missions to locate damage and threats to the population, reporting their findings directly to the Massachusetts Emergency Management Agency, which used the information in briefing Gov. Deval Patrick.

In June, aircrews provided the agency with aerial images showing destruction caused by two EF-3 tornadoes that struck western Massachusetts. That information helped critical response agencies determine where to provide aid and shore up critical infrastructure needs.

In addition, the wing provided cadets across the state with hundreds of aircraft orientation flights. Cadets also participated in the wing’s summer encampment, and they turned out for numerous community service projects, including providing assistance during the Boston Marathon.

In December, members helped honor America’s veterans by participating in Wreaths Across America observances throughout the Commonwealth.
CAP aircrews regularly support air defense intercept training for fighter units around the country. These missions often support no-notice alert air interceptor evaluations. CAP flew more than 2,500 hours on 272 of these missions in 2011.

In its 70th year of vigilant service to America, Civil Air Patrol saluted its rich heritage and asked the U.S. Congress to honor its founding members with the Congressional Gold Medal. Pending in both houses of Congress, S. 418 and H.R. 719 will rightly recognize these patriotic men and women of the Coastal Patrol, whose heroic actions in the early days of World War II helped defend America’s shores.

**Congressionally chartered mission #1: Emergency Services**

Throughout 2011, Civil Air Patrol members across the country responded to the needs of their communities in crisis. CAP supported 123 requests for support from federal, state and local authorities in disaster relief operations; the organization’s unpaid professionals practically bounced from one disaster to another.

CAP provided aerial reconnaissance after tornadoes, winter storms, flooding caused by spring thaws and summer rains, wildfires, hurricanes and tsunamis. Flood response operations took on a new meaning this year, as CAP supported 39 separate missions across all eight CAP regions. In Missouri and South Dakota flood response operations lasted almost six months.

CAP’s dedicated volunteers also helped save 54 lives across the nation in 2011. Among the high-tech tools used to assist with these search and rescue missions was full-motion, in-flight video equipment.

In addition, crews conducting counterdrug and drug interdiction operations helped law enforcement agencies seize more than $475 million in illegal drugs and currency, leading to 212 arrests.

As the Air Force auxiliary, CAP also worked hand-in-glove with the Department of Defense, flying more than 2,500 hours of air defense intercept training missions to help prepare fighter units across the country, a 36 percent increase from 2010.

Civil Air Patrol crews across the nation used digital imagery resources to help document the path of destruction of several massive spring tornadoes in 2011. Members took thousands of geo-referenced photos like this one generated in Tuscaloosa, Ala., to assist first responders in determining critical infrastructure needs.

In addition to aerial photography, infrared imagery was used during the spring and summer in response to Midwest flooding. Geospatial Information Interoperability Exploitation Portable Go-Kits added state-of-the-art communications and full-motion, in-flight video to CAP’s emergency services toolkit.

CAP’s new infrared sensor, attached here to the bottom of a Cessna 182, has thermal imaging and video capabilities that are ideal for CAP’s search and rescue and border patrol missions. The equipment, which has day and night capabilities, was used very effectively during CAP’s response to heavy flooding in the upper Midwest last year.
Civil Air Patrol inspires youth to be responsible citizens who embody the organization’s core values of respect, integrity, volunteer service and excellence.

In school- or community-based squadrons, cadets aged 12-20 benefit from a complete curriculum that teaches leadership, physical fitness, character development and aerospace education. Cadets serve their communities by helping with CAP’s humanitarian efforts. In addition, they gain an appreciation for America’s role in the global community by serving as goodwill ambassadors abroad or hosting aviation-minded youth from around the world.

Cadets attend regular weekly meetings and participate in weekend activities once a month, on average. Each summer, they have the opportunity to participate in one or more of 30 national cadet events, which offer hands-on training and activities covering subjects as diverse as Air Force career familiarization, aerospace technology, leadership development and flight training.

As a testament to its relevance and appeal, the cadet program grew 2.4 percent over the past year, from 26,335 cadets in 2010 to 26,977 in 2011. The opportunity to fly is a major attraction for cadets, 26,463 of whom received orientation flights in CAP planes last year.

Eager to show off their aerospace knowledge, physical fitness and precision on the drill field, cadet drill teams and color guards vie against one another in competitions at the state, regional and national levels. Rising to the occasion with good sportsmanship, cadets amaze spectators with their skill and esprit de corps. The competitions are varied, but this activity is all about character. Each year, 144 cadets earn the right to compete for national honors, and about 800 more compete locally.

Civil Air Patrol cadets experience flight firsthand through the efforts of CAP adult volunteers – aviation enthusiasts eager to share their love of flying. Often, it is through CAP that a young person receives the first flight of his or her life. Aviation education is delivered in both the classroom and the cockpit. Cadets gain an understanding of the complex forces that cause an aircraft to achieve lift and other fundamental topics, such as navigation, engines and aerospace history.

Civil Air Patrol develops youth through self-paced study of the art of leadership. Cadets learn how to lead through formal classroom instruction and a laboratory of hands-on experiences where they apply leadership principles to real-world challenges. Through a graduated curriculum, they first learn to follow, then to lead small groups, ultimately experiencing command and executive-level leadership, advancing in rank and earning honors along the way. Topics include how to think critically, communicate effectively, make decisions, motivate and manage conflict.

National Flight Academies are among 30 cadet activities that help mold the next generation of citizens through top-notch instruction that emphasizes hard work, self-discipline and teamwork.
Civil Air Patrol’s award-winning aerospace education program promotes aerospace history, flight principles, careers and relevance in today’s world. CAP’s nearly 27,000 cadet members, as well as more than 125,000 K-12 students nationwide, benefit from the program, composed of a plethora of inquiry-based products aligned with national standards of learning that perpetuate an interest in science, technology, engineering and math (STEM) subjects and professions. Both cadets and teachers are given orientation flights that encourage real-world application of skills and investigation of potential STEM careers. Cadets also receive a variety of employment exploration opportunities in partnership with aerospace business, industry and educational institutions that are helping prepare the country’s workforce to maintain national security well into the future.

The K-6 Aerospace Connections in Education program provides engaging, cost-free, grade-specific, aerospace-themed academics, character education and physical fitness for living a healthy, drug-free life. ACE program data reveals that students achieved a 27 percent increase in national science standardized test scores and a 75 percent increase in program knowledge, based on ACE pre- and post-test scores. Also, 91 percent of the ACE educators registered again the following year for the program. With a 64 percent increase in student participation this year, 700 teachers in 27 states are exposing almost 18,000 students to STEM-related careers.

CAP offers more than 20 free aerospace education products and programs designed to generate interest in STEM careers for more than 150,000 cadets and K-12 students nationwide. The Aerospace Education Excellence Award program includes 150 inquiry-based activities easily accomplished within the squadron and/or classroom. Subjects such as robotics, as seen at left, cyber security, satellite imagery and rocketry help inspire young people to pursue STEM careers.

The Teacher Orientation Program (TOP) Flight is a unique opportunity to take teachers and administrators out of the classroom and into the sky to learn firsthand about the applicability of STEM instruction as it relates to flight and motion, geography and history. At no cost to the teachers, CAP also provides professional development and learning opportunities aligned with their flight experience, which are transferred into the classrooms of some 15,000 youth.

The Air Force Association, CAP’s leading educational partner, provides annual funding to promote aerospace education in CAP units and America’s classrooms that benefits more than 50,000 youth each year. AFA’s support also includes the opportunity for every cadet to participate in a unique national cyber defense competition free of charge. CAP’s Team Wilson, above, a composite group of cadets from the Orlando, Fla., area, was the national 2011 AFA CyberPatriot champion. Four CAP CyberPatriot teams are also leading contenders for the 2012 championship to be held in National Harbor, Md., in March.

Civil Air Patrol’s aerospace education program was recognized with two prestigious national honors in 2011 — the Crown Circle for Aerospace Education Leadership Award and the Dr. Mervin K. Strickler Jr. Aerospace Education Leadership Award. Presented by the National Coalition for Aviation and Space Education, a coalition of more than 60 government, industry and labor members, the awards acknowledge CAP’s professional-quality products and programs. CAP National Commander Maj. Gen. Chuck Carr accepted the Strickler Award from Sheila Bauer of NCASE during the National Aeronautic Association’s annual conference.

The K-6 Aerospace Connections in Education program promotes aerospace history, flight principles, careers and relevance in today’s world. CAP’s nearly 27,000 cadet members, as well as more than 125,000 K-12 students nationwide, benefit from the program, composed of a plethora of inquiry-based products aligned with national standards of learning that perpetuate an interest in science, technology, engineering and math (STEM) subjects and professions. Both cadets and teachers are given orientation flights that encourage real-world application of skills and investigation of potential STEM careers. Cadets also receive a variety of employment exploration opportunities in partnership with aerospace business, industry and educational institutions that are helping prepare the country’s workforce to maintain national security well into the future.

The Teacher Orientation Program (TOP) Flight is a unique opportunity to take teachers and administrators out of the classroom and into the sky to learn firsthand about the applicability of STEM instruction as it relates to flight and motion, geography and history. At no cost to the teachers, CAP also provides professional development and learning opportunities aligned with their flight experience, which are transferred into the classrooms of some 15,000 youth.

The K-6 Aerospace Connections in Education program provides engaging, cost-free, grade-specific, aerospace-themed academics, character education and physical fitness for living a healthy, drug-free life. ACE program data reveals that students achieved a 27 percent increase in national science standardized test scores and a 75 percent increase in program knowledge, based on ACE pre- and post-test scores. Also, 91 percent of the ACE educators registered again the following year for the program. With a 64 percent increase in student participation this year, 700 teachers in 27 states are exposing almost 18,000 students to STEM-related careers.

The Air Force Association, CAP’s leading educational partner, provides annual funding to promote aerospace education in CAP units and America’s classrooms that benefits more than 50,000 youth each year. AFA’s support also includes the opportunity for every cadet to participate in a unique national cyber defense competition free of charge. CAP’s Team Wilson, above, a composite group of cadets from the Orlando, Fla., area, was the national 2011 AFA CyberPatriot champion. Four CAP CyberPatriot teams are also leading contenders for the 2012 championship to be held in National Harbor, Md., in March.

Civil Air Patrol’s aerospace education program was recognized with two prestigious national honors in 2011 — the Crown Circle for Aerospace Education Leadership Award and the Dr. Mervin K. Strickler Jr. Aerospace Education Leadership Award. Presented by the National Coalition for Aviation and Space Education, a coalition of more than 60 government, industry and labor members, the awards acknowledge CAP’s professional-quality products and programs. CAP National Commander Maj. Gen. Chuck Carr accepted the Strickler Award from Sheila Bauer of NCASE during the National Aeronautic Association’s annual conference.