



# Vermont Wing of The Civil Air Patrol

Capabilities, Resources and Request for Assistance

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September 2019



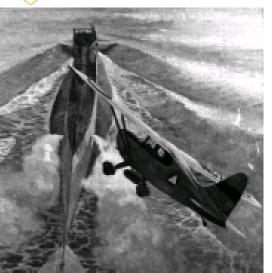
### History

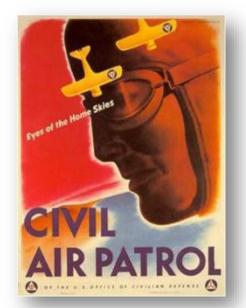


- CAP was established December 1st of 1941 under the Office of Civilian Defense.
- During WWII, CAP volunteers flew 24 million miles on anti-submarine patrol for 8 months.
- Spotted 173 submarines, attacked 57 and sank 2.
- Summoned aide for 91 ships in distress and helped rescue 363 survivors.









# History



- World War II Missions
  - Coastal Patrol including anti-submarine combat
  - Homeland Security
  - Search and rescue and natural disaster support
  - Emergency transport of personnel and cargo
  - Border patrol
  - Air defense (targets for AA, aircraft, search light)
  - Observation training support for Army units
  - Forest fire spotting
  - Flight training
  - Cadet programs and aerospace education
- 1946: Incorporated Non-Profit (Public Law 476)
- 1948: Became Auxiliary of the USAF (Public Law 557)
- Most core WWII missions are still CAP's core missions



### Civil Air Patrol Mission Statement



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





### **Congressional Charter**





Emergency Services





**Cadet Programs** 



**Aerospace Education** 

Search and Rescue, Disaster **Relief, Defense Support to Civil Authorities Homeland Security** Counterdrug **Humanitarian Services ROTC & Junior ROTC Flights UAS** Chase Sensor Test and Evaluation Leadership **Core Values Character Development Aerospace Education Physical Fitness Drug Demand Reduction** STEM, Cyber & UAS Adult & Cadet CAP Members **AE (Teacher) Members** Youth of America **General Public** 



### Legal Authority



Title 36 Title 10 CAP / AFAux

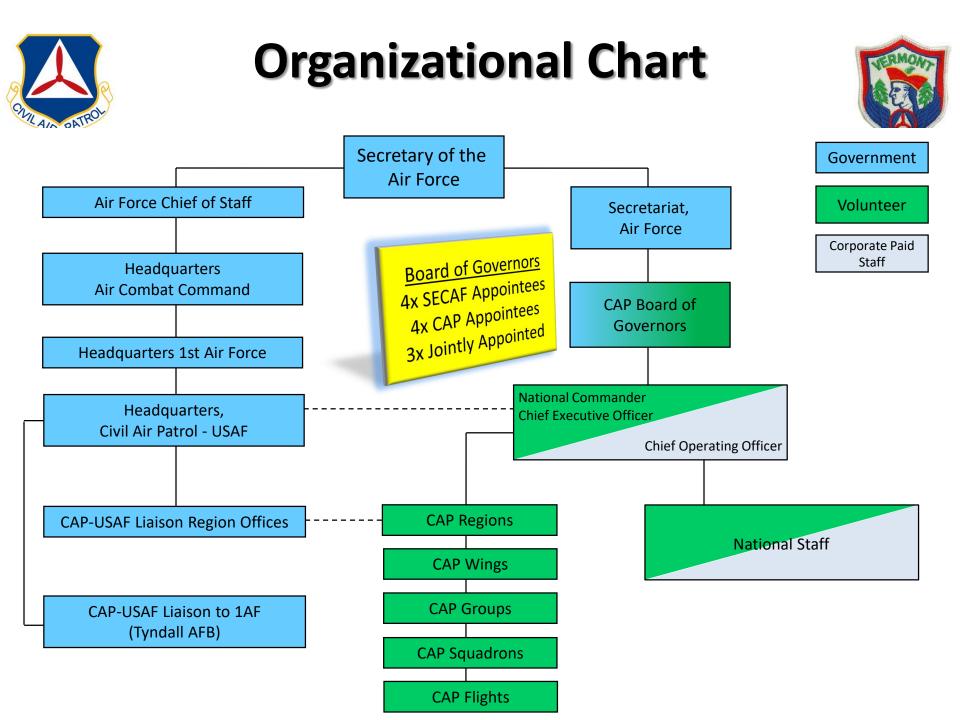
#### Title 36, USC 40301 – Federally Chartered Corporation

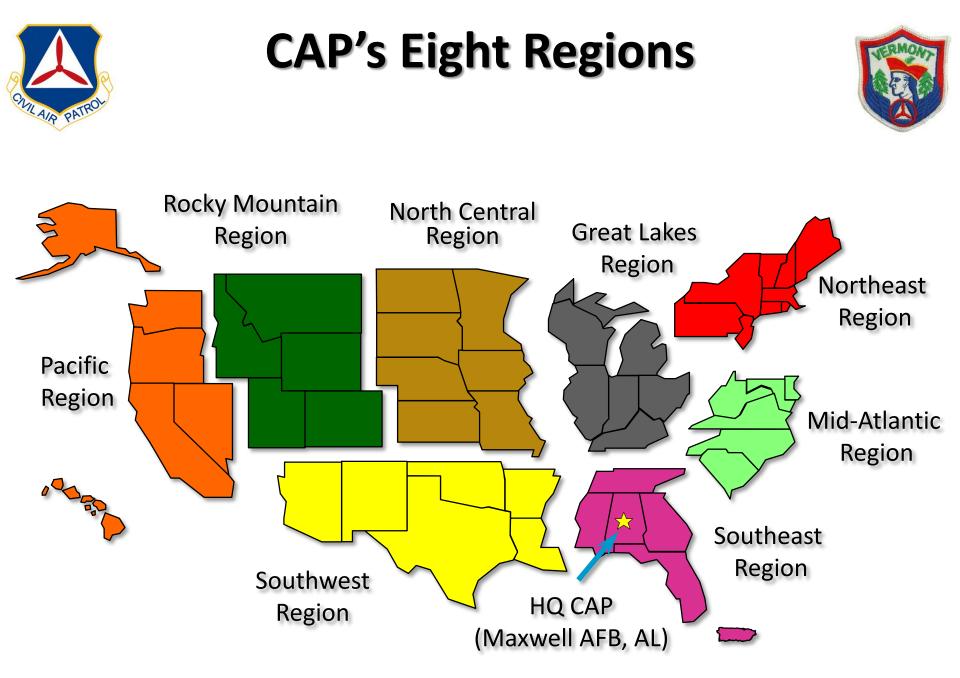
Serving our communities while not under federal response.

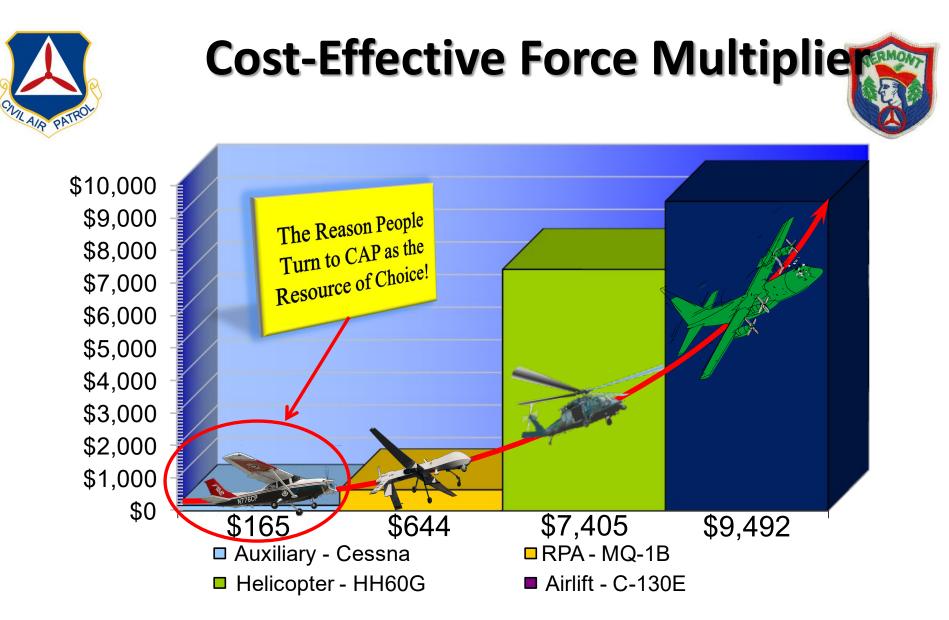
# Title 10, USC 9442 – Volunteer Civilian Auxiliary of the United States Air Force

Volunteer Civilian Auxiliary when the services of the Civil Air Patrol are used by any department or agency in any branch of the Federal Government.

The Civil Air Patrol shall be deemed to be an instrumentality of the United States with respect to any act or omission of the Civil Air Patrol, including any member of the Civil Air Patrol, in carrying out a mission assigned by the Secretary of the Air Force.







Notes: Chart shows average cost per flying hour CAP normally receives agency mission funding via a Military Interdepartmental Purchase Request.



### **Emergency Services**



Civil Air Patrol saves lives (an average of 82 a year, as awarded by the Air Force Rescue Coordination Center, 112 lives saved to date-FY 2019); and provides assistance in communities all across the nation through our emergency services and operational missions:

- Disaster Relief
- Humanitarian Services
- Air Force Support
- Counterdrug









### **Air Force Missions**





Intercept Training



**Perimeter Surveys** 



**UAV** Chase



Surrogate UAS





#### America's Future Cadet Programs & Aerospace Education



CAP turns America's youth into disciplined cadet leaders

- •Demonstrated interest in aerospace, cyber, UAS, STEM and military service
- •Academically, morally and physically eligible for service

#### **Today's Cadets...Tomorrow's Aerospace Leaders**

#### Cadets' STEM education

- Career explorations and job shadowing
- Growing cyber emphasis





### Cadet Programs



CAP motivates over 26,000 youth, ages 12-20, to live the core values (Integrity, Volunteer Service, Excellence and Respect)

Cadets advance through a hierarchical curriculum

- Advanced cadets mentor junior cadets
- Cadets meet in community venues or in school settings

CAP cadet officers (top 15% of all cadets) are eligible for E-3 upon enlistment in USAF.

Approximately 10% of Air Force Academy cadets get their start in CAP





# **Vermont Wing Membership**



- Senior Members: 117
- Cadets: 63
- Six Squadrons:
  - S. Burlington (2, inc.HQ) (KBTV)
  - Montpelier/Barre
  - Springfield
  - Rutland
  - Bennington







### **VTWG Aircraft**



#### Cessna 172 Skyhawk (2)

#### Performance:

- Cruise Speed: 120 knots
- Range: 520 nautical miles
- Useful Payload: 755 pounds
- Passengers: 2-3
- Endurance: 3½ hours (with 1 hour reserve)
- Service Ceiling: 13,000 feet
- **Communications:** Aviation Band; VHF-FM
- Navigation: IFR Capable; G-1000/G-400W GPS
- <u>Airborne Imagery:</u> High Resolution GPS encoded Digital Imagery
- Search and Rescue: Direction Finders-
  - Military and Civilian Aviation Emergency Locator Transmitters (ELT)
  - Marine Emergency Position Indicating Radio Beacons (EPIRB)
  - Personal Locator Beacons (PLB)





### **VTWG Aircraft**



#### Cessna 182 Skylane (1)

- Performance:
  - Cruise Speed: 135 knots
  - Range: 630 nautical miles
  - Useful Payload: 650 pounds
  - Passengers: 2
  - Endurance: 4.5 hours (with 1 hour reserve)
  - Service Ceiling: 15,000 feet
- <u>Communications</u>: VHF-FM, Satellite Telephone & Airborne Tactical Repeater
- Navigation: IFR Capable, G-1000 GPS, VHF Omnidirectional Range
- <u>Airborne Imagery:</u> High Resolution GPS encoded Digital Imagery
- Search and Rescue: Direction Finders-
  - Military and Civilian Aviation Emergency Locator Transmitters (ELT)
  - Marine Emergency Position Indicating Radio Beacons (EPIRB)
  - Civilian Personal Locator Beacons (PLB)





### VTWG: 2018 Accomplishments



- USAF Biannual Evaluation: "Successful" Rating (17 Air, 13 Ground Sorties).
- Two "finds:" With VSP Ground Team, located missing Piper Seneca; Missing glider on Sterling Mt. (VSP, Stowe Mt. Rescue, Morrisville Fire and PD).
- Aerospace Education statewide.
- Monthly SAREX drills— wide range of scenarios: photo reconnaissance/imagery; ELT and visual searches, etc.

# QUIL A/P PATROL

# **VTWG Vehicles**



- 12 Passenger Vans (5)
- 7 Passenger Vans (2)
- Sport Utility Vehicles (2)
  - Equipment:
  - Mobile VHF-FM Radio
  - Direction Finders
- Military and Civilian Aviation Emergency Locator Transmitters (ELT)
- Marine Emergency Position Indicating Radio Beacons (EPIRB)









- Very High Frequency (VHF) Frequency Modulation (FM) (138-160 MHz)
  - 5 Fixed Base: Bennington, Burlington, Montpelier, Rutland & Springfield
  - 3 Aircraft and 8 Vehicle mounted
  - 32 Handheld
- VHF-FM Repeaters (138-160 MHz)
  - 3 Fixed: Mt Mansfield, Mt Equinox
  - 2 Tactical (25 watt): Field deployable or airborne
- Aviation Band (118-136 MHz)
  - 3 Fixed Base (Burlington, Montpelier, Rutland)
  - 3 Aircraft Mounted
  - 3 Mobile/Handheld
- High Frequency/Automatic Link Establishment (HF/ALE) (3-30 MHz)
  - 5 Fixed Base: Bennington, Burlington, Montpelier, Rutland & Springfield
  - 2 Portable Field Deployable
  - Nation-Wide Strategic Communications
    Network











### **Emergency Services Personnel**



- Aircrew: 49
  - Pilots: 11
  - Observers: 28
- Ground Teams: 4
- Incident Command Staff
  - Incident Commanders: 3
  - Mission Base Staff: 18









# **VTWG Capabilities**



- Aerial Imagery/ Incident Awareness and Assessment (IAA):
  - Oblique High Resolution GPS encoded digital imagery
  - Nadir GPS encoded digital mapping
  - IAA of critical infrastructure
  - Law enforcement or VIP transportation/incident over-flight
- Emergency Airlift & Light Air Transportation:
  - Human blood, tissue or organs
  - Equipment, passengers and search dog teams
- Search and Rescue:
  - Missing/Overdue Persons, Vehicles, Watercraft or Aircraft
- Communications:
  - Fixed and mobile VHF-FM radios and tactical repeaters
  - Nationwide HF network
  - Interoperable ground and airborne communications platforms









# **VTWG Capabilities**



- Rapid Deployment Communications Trailer (RDCT):
  - Field Deployable, Stand-Alone Communications Capability
  - Deployable into areas with diminished/non-existent communications due to Natural Disaster or Man-Made Event
  - Provides communications link for First Responders and Local Authorities to the State/Federal Government
  - Equipment:
    - VHF-FM Mobile and Handheld
    - VHF-FM Tactical Repeater
    - HF/ALE Mobile
    - Aviation Band





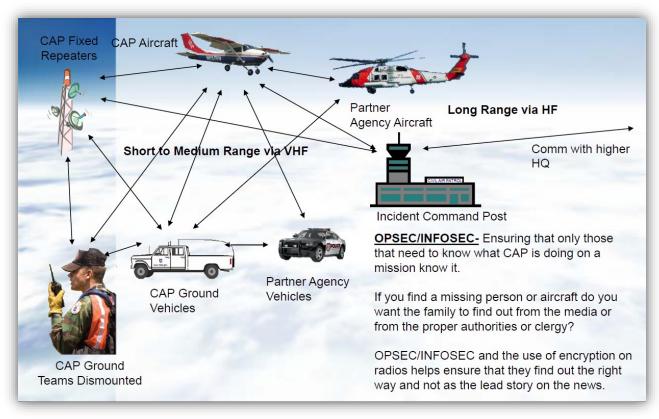




# **VTWG Capabilities**



- Local/Regional VHF-FM Communications Network:
  - Quantar Fixed Repeaters (550 Nation-wide)
  - P25/Encryption Capable Fixed and Mobile Stations (3870 Nation-wide)

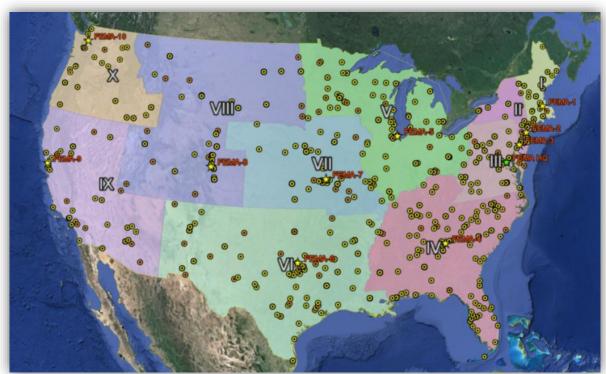




# **CAP Capabilities**



- Nation-Wide HF/ALE Communications Network:
  - 285 Fixed and 261 Mobile Stations
  - 3 Daily National Traffic Nets (1400Z, 1900Z & 0100Z)
  - NORTHCOM Contingency C<sup>2</sup> network



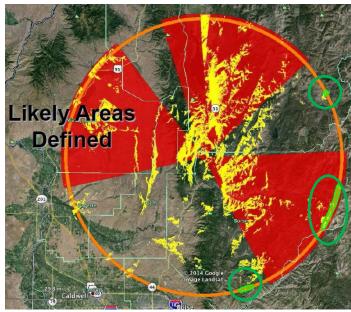


# **CAP Capabilities**



### • Cellular Telephone Forensics:

- Primary resource for locating missing persons.
- Carried by most people while hiking, hunting, boating or flying.
- Collection and analysis provides detail on most probable location based on real-time, historical interaction with network.
- 911 calls also include GPS Metadata.









- Federally Approved/Funded Missions (SAR/DR/HLS): \$0
- Local/State/Regional (Not Federally Approved):
  - Aircraft: Typically \$160-200 per hour of flight time
  - Ground Team: Fuel Cost Reimbursement
  - Lodging / Meals: Expenses usually required for volunteers deploying for multi-day/multi-location missions.
  - Federal Employees' Compensation Act / Federal Tort Claims Act (FECA / FTCA) benefits
    - For Air Force assigned missions (i.e. federal missions) CAP members receive these benefits;
    - They do not normally apply to missions performed for state or local entities, unless the missions are specifically approved in advance by the Air Force;
    - For missions executed solely for state or local entities, these entities are expected to provide their equivalent of FECA / FTCA benefit coverage for CAP personnel and equipment if allowed by state law.



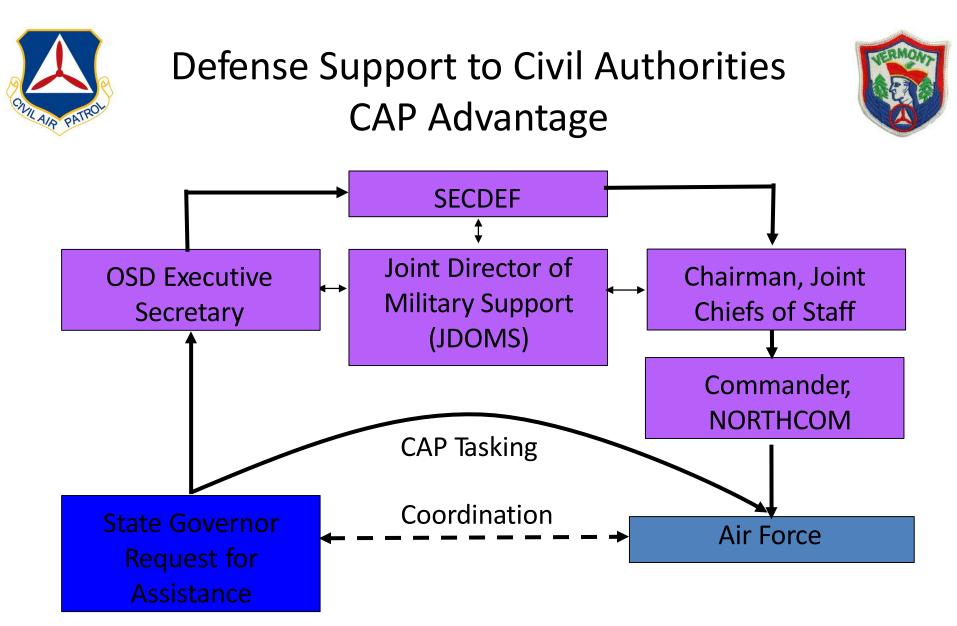




- <u>Search & Rescue/Life Saving:</u>
  - Missing Persons/Aircraft or Emergency Tissue/Blood Transport
  - Air Force Rescue Coordination Center (AFRCC): (800) 851-3051

#### • **Disaster Relief and Aerial Imagery:**

- Prevent human suffering, mitigate property damage and non-emergent missions
- CAP National Operations Center
  (NOC): (888) 211-1812, Ext 300



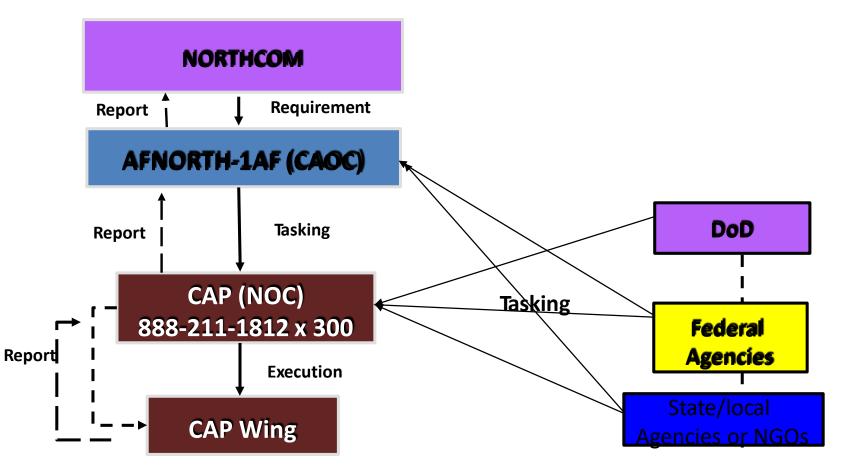
- **Special CAP rules:** AF Policy, *endorsed by OSD* allows direct requests for CAP from State/Local agencies bypass SECDEF approval process.

- This Allows CAP to react more quickly





### **Request for Assistance**



CAP Remains Under Military Operational Control



# For more information



- VERMONT WING HEADQUARTERS:
  - Telephone: (802) 660-8057
  - Email:

- vtwing@vtcap.org
- Webpage: <u>www.vtcap.org</u>



### **Questions?**

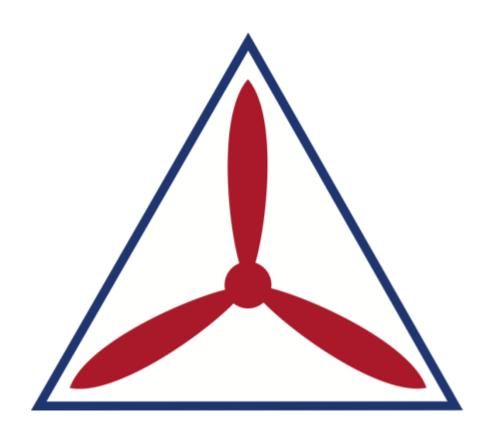






### **Civil Air Patrol**





#### ... Citizens Serving Communities!