



IMPACT100 TRAVERSE CITY

2022 EDUCATION FINALIST: TRAVERSE CITY CADET SQUADRON, CIVIL AIR PATROL, UNITED STATES AIR FORCE AUXILIARY

INITIATIVE: Traverse City Cadet Squadron Aircraft Hangar and Community STEM Classroom

OVERVIEW OF INITIATIVE – IN THE APPLICANT’S WORDS

The Traverse City Cadet Squadron of the Civil Air Patrol has begun the process of building a 46’x50’ multipurpose hangar at the Cherry Capital Airport. Our project will enable us to work with community youth throughout Northern Michigan, providing STEM access to students and teachers in traditional, charter, and home schools, Young Eagles, Scouts, and others. All STEM kits are provided by CAP-USAF for use at no charge.

Traverse City and our Northern Michigan areas will have an emergency services and training aircraft. Our search and rescue Cessna 182, which is currently stored in a hangar in Cadillac, enabled crews to photograph the damage inflicted on Gaylord by the May 2022 tornado. The official photographs were uploaded to FEMA and other governmental agencies for a thorough assessment of property damage. We flew numerous Covid relief missions in 2020.

Our project will provide emergency services and STEM for the community!

The following sections contain certain key information from the application, as written by the applicant.

While detailed financial information has not been provided here due to its confidential nature, each applicant submitted an initiative budget and supporting financial documents as part of their application. Each proposed initiative and the supporting financial documentation has undergone a thorough financial review by our Financial Review Committee (FRC) and the initiatives proposed by our finalists have met our standards for moving forward.

ORGANIZATION’S VISION STATEMENT

Civil Air Patrol's Vision and Mission statements are combined : "Volunteers Serving America's Communities, Saving Lives, and Shaping Futures." (2022 Civil Air Patrol National Headquarters)

ORGANIZATION’S MISSION STATEMENT

The Traverse City Cadet Squadron's mission statement is: To "Serve The 5 County Northern Michigan Communities, and Beyond By Meeting the Needs of The Citizens by Providing Prompt Emergency Response When Needed, Provide a Strong and Stable Youth Leadership and Fitness Program, and Provide an Excellent STEM Education to All Youth Who Participate. CAP Shapes Futures." 2022 Traverse City Cadet Squadron. Core Values are Integrity, Volunteer Service, Excellence, and Respect.

DESCRIPTION OF ORGANIZATION AND ITS HISTORY

Civil Air Patrol's Origins/1936-1941

The origins of Civil Air Patrol date to 1936, when Gill Robb Wilson, World War I aviator and New Jersey director of aeronautics, returned from Germany convinced of impending war. Wilson envisioned mobilizing America's civilian aviators for national defense.

From March 1942 through August 1943, armed CAP aircraft at 21 coastal patrol bases extending from Maine to the Mexican border patrolled the waters off the Atlantic and Gulf coasts. Their success in thwarting submarine attacks and safeguarding shipping lanes.

On Oct. 1, 1942, CAP leaders issued a memorandum creating the CAP Cadet Program for boys and girls ages 15 to 18. The cadet program proved to be a powerful force for imparting practical skills and preparing teenagers for the military and other wartime service agencies.

CAP's male and female volunteers engaged in an array of wartime missions, including courier service, missing aircraft searches, disaster relief, tow target and tracking operations, forest patrols and many others.

On July 1, 1946, President Harry S. Truman signed Public Law 80-557, establishing CAP as the Air Force's civilian auxiliary on May 26, 1948.

Cold War/1950-1975

Post-World War II, CAP focused its efforts on three core missions – Cadet Program, Emergency Services and Aerospace Education. The 1973 law making Emergency Locator Transmitters mandatory in aircraft vastly expanded CAP's search and rescue capabilities.

In 1975, for the first time, a civilian volunteer became CAP's national commander, signaling a shift in the CAP-Air Force relationship.

Evolving Missions/1976-2000

1985 The Federal Emergency Management Agency worked with CAP during numerous disasters: the Exxon Valdez oil spill; hurricanes, and the Oklahoma City bombing.

The final decades of the 20th century brought key changes to CAP, including a corporate-owned fleet of aircraft and vehicles. New Millennium/2001-Now

The terrorist attacks of Sept. 11, 2001, ushered CAP into a new era of homeland defense. The following day, a CAP Cessna 172, the only nonmilitary aircraft allowed in the nation's airspace, provided emergency management officials the first high-resolution images of the World Trade Center site. CAP volunteers transported blood and medical supplies, provided communication and transportation support and assisted state and federal officials.

On May 30, 2014, President Barack H. Obama signed legislation into law awarding the Congressional Gold Medal to the approximately 200,000 World War II members of CAP.

This medal commemorates the organization's unusual contributions in World War II.

On Aug. 28, 2015, Gen. Mark A. Welsh III, Air Force chief of staff, announced CAP officially a member of the U.S. Air Force's Total Force, joining the regular, guard and reserve forces as American airmen.

Today we are focusing on promoting a strong youth program and STEM training to keep science at the forefront of education. We also have an inclusive program that promotes diversity.

With the current pilot shortage, CAP has a commitment for pilot training among our cadets with the Wings and Lift programs. To date over 188 cadets ages 16-21 have been trained as pilots using Air Force Scholarships.

EXECUTIVE SUMMARY OF INITIATIVE

The Traverse City Cadet Squadron has not had a permanent home for weekly meetings or training, for over 11 years. In 2017, The Squadron began plans to build a permanent small Civil Air Patrol aircraft hangar and classroom in Traverse City in order to solve the problems of lack of meeting, storage space, and lack of an aircraft hangar.

Our current meeting space is very small, cluttered, and we don't have a secure place to store our computers, uniform items, and STEM kits. The space is not available every week for meetings and not available on Saturdays. The squadron cannot host weekend training sessions.

The CAP cadet program is a structured, standard program that requires weekly 2- hour meetings, and a monthly Saturday aerospace and STEM activity is planned for all cadets across our Northern Michigan Group. They gather in different locations now.

In 2018 the Cherry Capital Regional Airport and the Airport Commission (now airport authority) granted CAP a parcel of land on the airport for a hangar and classroom for \$1.00 monthly, an "in-kind" agreement. The airport management and board encouraged our project and have been strong supporters of our efforts.

We have been planning to work with the Young Eagles program, which is part of the EAA (Experimental Aircraft Association), a worldwide volunteer organization, but we do not have the necessary space. The EAA will be losing its building space soon due to the demolition of the building.

We have expanded the CAP program to Harbor Springs this year, and plan to continue new ideas to make STEM and aerospace training mobile-just as the aircraft is mobile and shared across Northern Michigan squadrons for cadet and senior training, as well as emergency services.

The Traverse Cadet Squadron would like to work with community youth throughout Northern Michigan to provide STEM access to students and teachers in traditional, charter, and home schools. Boy and Girl Scout groups would also be welcome to work with CAP. All STEM kits that is provided by the CAP-USAF are for use at no cost.

The need to provide the Traverse City and outlying areas, with an emergency services aircraft has been a decades-long problem. We currently have access to a Cessna 172, a 4-seat aircraft, which is provided by Civil Air Patrol. While CAP provides squadrons an aircraft for emergency services and training, CAP does

not fund hangars or rent. Because we do not have a hangar in Traverse City, CAP will not permit us to keep the aircraft here. Instead, it is stored in a small hangar in Cadillac, MI., which necessitates an hour's drive to access the aircraft, in good weather. The hangar door is usually frozen to the ground in winter, thus our response to emergencies such as lost aircraft or persons is delayed. Cadillac's higher altitude often makes it difficult to fly out there due to fog, snow, or other weather issues.

In 2019 the Biederman Foundation provided our first grant of \$50,000.

In 2021 we were awarded \$50,000 from Rotary and \$30,000 from an anonymous donor.

In December of 2021, we raised more than \$1,700 from Facebook fundraising efforts.

In April 2022, our anonymous donor provided us with another \$15,000. We will use this as a challenge to fund more. He wants to see this project finished.

We have over \$147,000 at this point. If we are awarded an Impact 100 grant, we can fully fund this project. (\$247,200).

In our budget, we have plans to assess monthly dues from all pilots, which would raise \$3,600 a year or more, to be used for building expenses. Dues assessment is a common practice in squadrons. We will increase the number of pilots yearly. Continued fundraising efforts will assure that we are sustainable.

We have been promised some volunteer efforts to work on finishing the classroom.

Our plan is continuously reviewed by our Squadron, Group, Michigan Wing, and our benefactors.

The Traverse City Cadet Squadron classroom and hangar is a transformational project that will be shared with our Northern Michigan community for decades. Youth will grow in STEM skills, and nobody will be excluded from participating and being a part of our learning community.

COMMUNITY TO BE SERVED

Our STEM and aerospace hangar and classroom project will be a transformational learning center for the youth of Antrim, Benzie, Charlevoix, Emmet, Grand Traverse, Leelanau, Otsego, Wexford, and other counties across Northern Michigan, and will include all types of socioeconomic communities across this wide expanse. Our outreach to serve more populations has extended to Harbor Springs, where we chartered the Tip of the Mitt Squadron in 2022!

Traverse City Cadet Squadron's project is to build a hangar and classroom that is designed to provide a center for learning STEM and aerospace and is available to students and teachers in our 5+ county area. It is inclusive of everyone who wishes to participate. Instruction is free and materials are provided at no cost by CAP-USAF. Aerospace Education Mentors (AEM) can pay a one-time \$35.00 membership fee and receive countless programs at no further cost, for life. This is an optional membership for teachers. Homeschool and charter school teachers and students are welcome to participate in our STEM program and other educational materials. We plan to work with the Young Eagles program, including them with all that we offer.

This is an all-inclusive program for students with disabilities as well.

In rural areas, there can be a paucity of programs and instructors for STEM education. Much of our area is designated rural (less than 50,000 people living in a contiguous area. (2014) Hill). Some areas have limited broadband for online education, which is essential, as we learned during the Covid19 pandemic. The classroom will have on-site computers for students and instructors to use. CAP offers access to education which includes online and hands-on learning.

Students can work with robotics, Raspberry Pi, flight simulators, model rocketry, radio-controlled aircraft, and other STEM kits. This link provides a look at what other learning materials are available.

<https://www.capnhq.gov/CAP.AEDownloads.Web/>

The Traverse City Cadet Squadron Hangar/Classroom can be a step toward obtaining a professional flight certification at colleges such as Northwestern Community College (NMC) Aviation Program in Traverse City. The flight school offers traditional pilot programs and unmanned flight certificates in the drone program. Civil Air Patrol also has a drone (UAS) technician and pilot certification program.

Women pilots are about 7% of the US pilot population, and female airport transport pilots make up about 4.5% of that population. CAP has a record of having more general aviation females and minorities than anywhere in general aviation. See page 26 of this link to our Report to Congress:

https://www.gocivilairpatrol.com/media/cms/CAP_RTC_2022_final_lo_res_1704C05E14730.pdf

One important goal is to increase efforts to reach out to Native American communities in our area, including the Suttons Bay, Elk Rapids, and Harbor Springs areas. We have several Native American students in the Elk Rapids school system who have benefitted from our program.

Traverse City and the surrounding areas have a broad range of socioeconomic populations. Our project and philosophy provide a common ground of respect and we offer opportunities to youth without regard to their socioeconomic status, race, or religion.

NEEDS OF THE COMMUNITY TO BE SERVED

The need for a multipurpose and unique common space has been lacking in Traverse City, a home for the Civil Air Patrol's Traverse City Cadet Squadron. For the past 7-8 decades, CAP had a permanent place to keep their necessary belongings, uniforms, STEM kits and other equipment. We have moved from space to space around the area, and are without an aircraft hangar to store the CAP aircraft for emergency missions, disasters and to search for missing aircraft and people. CAP is required to have hangar to protect the aircraft that CAP provides but they don't provide a hangar. The aircraft is also utilized for training of cadets ages 12-21, and pilots and crews who do the volunteer flights in the emergency services portion of our organization.

We are unable to have a classroom to hold STEM training. We have no place to host a community-wide open house for STEM training and Aerospace Excellence Saturdays and open houses so area children and adults can visit us and see what is available to them. This is not possible now because we cannot invite the public into the small crowded room that we have in the current facility, and our hosts will not permit that use.

With the epidemic rate of teen depression and loss of self-direction, we have a place where these young citizens of tomorrow can ground themselves and belong. Northern Michigan has a paucity of youth programs. We have brothers who drive from Cadillac to meetings in Traverse City because Cadillac does not have a cadet squadron. We have cadets from Elk Rapids and across the 5 -county area who are learning and growing in their confidence and knowledge base because of CAP.

One of the monthly meeting topics is Character Development, an approved program which is presented by a licensed chaplain. Safe and thoughtful discussions are topics. Cadet protection policies keep them safe and they have someone to listen.

The CAP membership is pooled from cadets and senior officers who live across Northern Michigan and they serve all of Northern Michigan with their volunteer efforts.

This past weekend, our senior officers were called upon to fly to the Gaylord area to take hundreds of photos with specialized camera equipment, to document the horrific loss of property and life, that was devastated on May 20 by a F3 tornado, in our Northern Michigan area. We will respond again over the next days to take photos to send to FEMA, the Michigan State Police, and local government entities. This will help to bring disaster relief and help find victims. We look for victims from the air and on the ground and have special photography to analyze the photos. CAP also has ground search and rescue teams to are part of the emergency service system. They communicate with the CAP aircraft in the air. These are the highly trained ground teams. We need so many more trained ground teams in Northern Michigan.

SUSTAINABILITY OF THE PROPOSED INITIATIVE

We will be monitoring financial security and the budget. This is controlled by Michigan Wing Banker and the finance team. Wing leadership staff will continue to assist with fundraising endeavors and assess our situation.

Wing finance committee has quarterly meetings and the Traverse City Squadron does as well. The accountability of every fundraising move that we make has to be approved by Michigan Wing Commander, There is no room for mishandling funds,

The National Fundraising department has many plans and ideas and will assist us in keeping the funds coming in for decades,

I plan to establish a CAP fundraising committee that also includes members of the community who are involved in non-profits.

Yearly reporting and accounting will be completed by Michigan Wing Bank Staff for ease in assessment and reporting to contributors.

Dues will have to be assessed from CAP pilots for expenses for the aircraft that Wing and National doesn't cover.

I would like to see this money in a 401k or other money market account to enable earnings to increase.

Wreathes Across America is a big yearly fundraiser that CAP participates in quite heavily across the nation. Wreathes are placed at over 3,500 cemeteries across the US each year. Cadets earn \$5.00 for each wreath that they sell, and it goes to their squadron for needs.

The wreathes are placed on graves of soldiers in memory of those who served our country.