

Home Front Episode 3: Eyes on the Coast

Welcome to Home Front¹, a production of AirSpace from the Smithsonian's National Air and Space Museum sponsored by Lockheed Martin, I'm Emily.

In this four part series we're bringing you stories of civilian contributions to aviation during WWII. Today we're talking about the Civil Air Patrol², or CAP³.

The beginnings of CAP start before the United States entered the war when a group of pilots saw a need for organizing themselves in a way that might be useful for national defence.

It started out with just a handful of pilots in a few states who communicated with each other and basically started a network of pilots who had knowledge and resources -- flight training and airplanes.

I talked to Dr. Frank Blazich⁴ to learn more *"I am a curator of modern military history here at the National Museum of American History, and in my copious free time, I am the National Historian Emeritus and the National Curator of the Civil Air Patrol."*

Frank: "The Civil Air Patrol really can and likes to trace itself back to about, uh, 1936. When a gentleman named Gill Robb Wilson⁵, who was kind of the head of aviation, civil aviation in New Jersey, noted writer, World War I veteran, minister, I mean man of many talents.

And he traveled over to Germany and he witnessed some of the developments by the rising Luftwaffe, he noted the use of German youth and, and gliders in, in training. So training young people in gliding. And he saw the war clouds on the horizon saying, ruh-roh you know, the Germans are re-arming and they're making an air minded population and they're preparing their, their people for a future conflict."

¹ <https://airandspace.si.edu/learn/airspace-podcast/homefront>

² <https://www.gocivilairpatrol.com/>

³ Always said C-A-P not cap like a baseball cap

⁴ <https://www.cap.news/blazich-returns-to-natl-historian-post/>

⁵ https://en.wikipedia.org/wiki/Gill_Robb_Wilson

After seeing German airmindedness, Wilson gets this idea that American civilian aviators need to be ready. For Wilson, it starts at home. With the consent of the Army Air Forces and the government he creates the New Jersey Civil Air Defense Services

Frank: “And so they set up, kind of, this first model where we’re gonna have squadrons organized throughout the state and it’s gonna take men and women can both serve using their own private planes, volunteer time, volunteer resources with kind of the state providing a broader oversight.”

A few other states launch similar programs. And then for the next few years Wilson and other champions of civilian air defense go back and forth with the government and the Army about what their role is going to be.

Eventually, in the late fall of 1941, it’s settled that the civilian aviators will be organized and ready to help with whatever home front aviation may be needed in the coming war.

On December 1, 1941, Fiorello La Guardia --who at that time was the Mayor of New York City, and the head of the brand new Office of Civilian Defense⁶ -- signed administrative order number nine⁷ creating the Civil Air Patrol under his office.

It isn’t until December 8, the day after the attack on Pearl Harbor, that CAP is officially announced.

Frank: “La Guardia goes on the American radio that evening to announce the establishment of Civil Air Patrol, which they define very simply as an organization of the civilian aviation resources of the nation for National Defense Service.”

At this point, CAP exists, but it doesn’t have specifically defined tasks. Over the next several months, the pilots of the Civil Air Patrol start picking up jobs: search and rescue, disaster recovery, medical flights, border patrol. But the biggest wartime job was coastal patrol

Frank: “And it’s right around this time that off the American East Coast the ships are starting to suddenly go down and sink with massive explosions thanks to, uh, German torpedoes and as the German operation, uh, code named Paukensschlag⁸ or, or drumbeat,

⁶ <https://www.archives.gov/research/guide-fed-records/groups/171.html>

⁷ https://en.wikisource.org/wiki/Administrative_Order_9

⁸ <https://www.usni.org/magazines/proceedings/1965/october/u-boats-our-coasts>

you know, snare, think quick drum strike, bang! Uh, which Admiral Karl Dönitz⁹ has unleashed originally with five U-boats in January 1942.

The success of that resulted in other waves of U-boats having easy pickings of, of merchant shipping off the United States East Coast. The Army and the Navy are both short-staffed in terms of aircraft, in terms of patrol vessels. They need help.”

Merchant Vessels carrying supplies for civilians in Britain and other parts of unoccupied Europe needed to get across the Atlantic. And the Navy was having trouble providing escorts and convoys for troopships and war supplies, let alone the civilian vessels.

In the words of Rear Admiral Adolphus Andrews: *“When we entered the war, we did not have the naval strength required to defend the merchant shipping we needed.”¹⁰*

Then the powers within the U.S. government remembered that this civilian aerial asset existed and the Civil Air Patrol are asked to begin coastal patrols. On these patrols, they’re looking for German submarines, called U-Boats, and escorting merchant vessels as far as they can in light civilian airplanes.

Frank: “And two states that really stand up and say we're organized enough are Delaware and New Jersey. And so they decide, okay, the military will authorize, give you 30 days, uh, and we're gonna use light aircraft.

And they're gonna be out of Rehoboth Beach, Delaware, and they're going to be out of Atlantic City, New Jersey¹¹. You're gonna fly 15 miles off the coast. You have two-way radios. You're gonna tell us what you see. I want dawn to dusk. You guys fly up and down the coast of the shipping lanes. Tell us what you see.

If you see anything odd. Call the Navy, you know, call the military and tell us what's going on. All volunteer planes, all volunteer crews. It's, it is somewhat slap dash, if you will, to pull this together, but they do pull it together. And on the very first missions, they're Rehoboth Beach will take off on, March 5th. March 10th for Atlantic City.

⁹ Dönitz was the leader of the German Submarine program at the time but would later become the head of the Navy and then succeed Hitler as dictator

<https://www.nationalww2museum.org/war/articles/nazi-germanys-leader-admiral-karl-donitz>

¹⁰ *An Honorable Place in American Air Power* by Frank A Blazich Jr. Pg 39

¹¹ <https://accs.cap.gov/command-and-staff/our-history/about-atlantic-county-composite-squadron>

And they start to, they see wreckage, they see survivors of ships. They can call in the military to rescue folks in lifeboats, uh, oil spills. So they're seeing the detritus, if you will, of the Battle of the Atlantic. But it is an aerial deterrent, and the military is pleased with what they see, and the 30 days kind of keeps stretching out. So 60 days and 90 days. The long story short is CAP has found a mission and the military like it, and it's freeing up resources. Notably Air National Guard resources that the military needs for the fighting war."

Charles Compton¹² was a member of the Civil Air Patrol, stationed in Rehoboth Beach and later in Atlantic City as part of the coastal patrol for U-Boats. He did this interview for a CAP event in 2013.

Compton: "We, we would get into a briefing. And told where we would pick up an escort, a convoy, and uh, just head for that location and, and, uh, lock on him and just kind of circle, do, uh, an oval circle around him. And, but, but we were supposed to be looking for periscopes, which was not too easy at, uh, 120 miles an hour and in choppy water, you know.

But, uh, I guess part of the idea was to just keep them submerged because before we were there, there are stories about how they used to brazenly surface right off shore there. They'd even, uh, uh, shell the, the coast before we had blackouts there along the boardwalk.

And, uh, at least, at least we kept them underwater for most of the time. So they couldn't charge their batteries, but of course they did at night. We had no means of doing any detection at night."

U-Boats run on batteries that were charged by diesel engines. They had to be near the surface to charge the batteries because the engines needed fresh air to run¹³.

The CAP patrols quickly figure out how they need to fly these routes to be successful and safe.

¹² <https://www.cap.news/charles-compton-wwii-subchaser-passes-at-103/>

¹³

<https://www.batterytechonline.com/materials/the-role-of-submarine-batteries-in-undersea-warfare-technology>

Frank: Within the first two weeks of these, the two bases at Rehoboth and Atlantic City, they figured out, okay, for safety sake, we have to have two aircraft. Each plane carries two individuals, one pilot, and one what they'd say observer. He was like co-pilot, but really the observer.

Pilot's job, fly the plane and navigate. Observer's job, observe and work the radios and up to four, four and a half hours, depending on the endurance of the aircraft, you're flying up and down, back and forth."

By the summer of 1942, CAP's coastal patrol is going well, and the Army and Navy are happy, so Civil Air Patrol starts to expand along the East coast. Extending their reach and their work load.

Frank: "And so CAP starts with these two bases, and then it just begins to expand. We go down to Florida, then Park City, Virginia on the Eastern shore. More bases in Florida, and it just begins sprawling along the East coast.

The U-boats in turn, as the easy pickings are going away and daytime coverage is increasing over the shipping lines, they begin moving their operations around, uh, the Florida panhandle into the Gulf of Mexico. And the next thing you see, the CAP bases begin to spring up along the Gulf of Mexico. The Navy during this time also gets far more organized.

They do begin to organize convoying along the coast and CAP will ultimately find itself convoying even, at the behest of the Navy, vessels coming out of the gulf all the way around Florida, up up to the northern New England area where they can then be joined with warships and sent over to England. So inadvertently, uh, the civilians who wasn't quite sure what we're gonna do with them in the war, find themselves in a very active position."

Patrols all along the Atlantic coast from Maine to Florida and eventually around into the Gulf would fly dawn to dusk looking to spot U-Boats or at least keep them underwater.

Then the Army started providing bombs to CAP to arm their patrols¹⁴.

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<https://www.maxwell.af.mil/News/Features/Display/Article/1024853/civil-air-patrol-a-story-of-unique-service-and-selfless-sacrifice/>

Frank: “And the military, again, doesn't really provide any resource until about May of 42, where there's an incident off Cape Canaveral where a CAP aircraft reports seeing a German U-Boat in shallow water about dusk. They thought it had run aground.

I have found German... I compared all the German U-Boat patrol data, and yes, there was in fact a U-boat at that date in time in that area. It claimed it was maneuvering on the surface to hit a ship, which in brownish water could have looked like it was run aground. And the CAP aircraft circled at a distance and the U-boat reports, it's war patrol log and we saw a plane circling the distance.

And they were calling on the radio, you know, ‘there, there they are! Come, come, attack them, come sink them!’ No help came. The military didn't send anything. Word of this made it back to Hap Arnold in Washington and I can imagine General Arnold being very irate and it's, you know, you know, ‘GRRR Grrr rgrrrr! Arm the planes!’¹⁵”

After May of 1942 the CAP's coastal patrols were armed and authorized to drop the bombs, and they did, but it was a precarious situation.

This is Robert Arn, who flew out of Pensacola, Florida for the Civil Air Patrol from an oral history recorded by Frank Blazich in 2012¹⁶

Robert: “When you had bombs or a depth charge on board, any of the planes on the flight, we were not permitted to fly over land. Okay. We had to be over water at all time. Our bomb racks were not the best in the world. They were from World War I, not World War II, but World War I, and they weren't too trusted.

And to take our bombs, we drilled through the floor of the, the mounted the bomb rack. This plane here, the Cessna, the reason it could carry the bomb so easily, that's a big tubular steel landing gear. And it went just like a U shape, like a horse shoe. Yeah. It went down to the two wheels, but then came up through the fuselage. All one piece. It went through the fuselage. All they had to do is drill through that and put the cross bracing in and you could fasten your bomb rack right to it.

¹⁵

<http://www.americainwwii.com/articles/guarding-the-home-skies/#:~:text=For%2042%20minutes%2C%20the%20CAP,the%20German%20submarines%20it%20attacked.>

¹⁶ https://history.cap.gov/media/cms/CAP_B5E1E5B8F211C.pdf

And we could carry three 100 pound demos. And what we had was three rings that I would judge were about an inch and a half, two inches in diameter. And they came up through the floor and we'd have 'em side by side. You just reach down, you pull that. Well, we had the arming wire fastened to the plane, so when you pulled the release wire that automatically pulled your arming wire when your bomb came loose. Okay. Your arming wire arms your bomb and you, it was a live bomb."

The Army supplied CAP their bombs, but CAP pilots were supplying their own planes and most of their own safety equipment.

Robert: "When we started out flying down there, we had no safety gear per se. We flew without parachutes, as you know. Yeah. Because we were too damn low. You couldn't use a parachute. But you al

Frank (in oral history): "But did you have Mae West life vest? Yeah.

Robert: "We had no Mae West, life raft or anything, but we did go and get truck tire inner tubes and to reinforce our thought that it would be all right, we wore, um, a knife, which that's the knife I wore.

Frank (in oral history): So like a Randall hunting knife that, that's, uh,

Robert: for shark attack in case we had a attack by shark, we'd have a knife. So we wore that on our belt. It was about as useless as a tits on a boar hog, I'll be honest. But anyway. Yeah. Uh, but we, uh, to make the inner tube so it would not blow away when you crash landed into the drink.

None of us ever gave it a thought. But when you pancake into the Gulf or any body of water with a fixed gear, landing aircraft, she's going over on the back.

Frank (in oral history): It's flip, it's gonna flip 'em. Yeah

Robert: "So we had the door fixed that we could have pins, we could just pull this wire and it released the hinges on the pin, whether it's up or down. And that released the door so you could get out of the plane.

We went down to the Fisherman's Wharf down Panama City and we got some old cork. Uh, they put 'em, I guess on the top of 'em next when we fish.

Frank: Yeah. Yeah. The cork floats.

Robert Yeah. Yeah. Well we cut those in two and we fastened them to this rope securely. We drilled 'em out and it fast 'em to the rope so the wind wouldn't carry the inner tube away. It would be trailing this rope with this cork and that you could get to the line and then pull the line in and get to the inner tube. And that was our gear that we would save our lives. We thought."

Most of their safety equipment was like that, improvised with the hope it wouldn't be needed. Further up the east coast, they seem to have been slightly better prepared. Here's Charles Compton again.

Charles: " So we carried, uh, all, uh, uh, equipment with us, life rafts and, um, survival suits and, and of course the inevitable Mae West."

A "Mae West"¹⁷ was an military issued inflatable personal flotation device that could give a user a buxom appearance referring to the famous actress, singer, and writer, Mae West.

Charles: "We pretty well took care of each other. On those missions. We could really tell what kind of a mission we were going to be on by our briefing in the morning. And when we came on base, if we saw that the munitions trucks were out there delivering the bombs, uh, that we were good to go. If they did not show up, we knew that in the briefing we would hear the report that there're bombing restrictions. There are American submarines in the area.

Interviewer: "So they didn't, they didn't trust you with live ordinance? with American submarines around,"

Charles: "They, they did not at all because we were, We were ready to bomb a whale or anything we might see. We were gungho."

CAP coastal patrols did drop their bombs during the war, though they are not officially credited with any confirmed U-Boat sinkings. They also did a huge amount of work that

¹⁷ https://www.armyaircorpsmuseum.org/Mae_Wests.cfm

was critical to the safety of the coastal shipping lanes; flagging sunken or struggling ships, calling in spotted U-Boats, or just reporting suspicious activity.

Robert Arn remembered calling in evidence of a local saboteur while he was stationed in Florida

Robert: "Well, we made a sweep of the outer perimeter of Dog Island up the beach. And, uh, the old guy at the lighthouse, at the St. George Lighthouse. Which was a big light white lighthouse at the end of St. George. And he'd always stand out. He could see us coming miles away and he'd stand up there and usually waved a towel or I don't know whether it was a handkerchief or a shirt or what.

He'd wave to us as we'd go by and we'd waggle our wings at him because we right down on the beach running on beach patrol and he was out there that night and we waved to him as we went past, went on out toward Sand Blas Point, turned the corner, met the other plane up at St. Joe and then we flew back to Panama City Base.

The next morning lo and behold you, we had drawn dawn patrol, same area we were to go back to, so it was up to us to run a beach patrol going back out. So we ran a beach patrol reluctantly, 'cause we'd just come up the beach and there wasn't anything on the beach.

When we rounded the lighthouse again, we waved to him that morning as we did, it was just getting light. We waved to him as we went past. We got the Dog Island, observer tapped me. I forget who was observer that day. He tapped me on the shoulder of 'my God. Look up ahead' and up on Dog Island there must have been a hundred gas drums, 55 gallon gas drums all over the interior part of that island.

Here a damn sub had put in during the night. Came around through the channel and on the backside it was deep enough water that he could get up fairly close to the land. They had a trawler had come out from Carrabelle or someplace crossed over and they had refueled the submarine out there. We reported it, but then that's all that we ever heard about it.

But it had refueled right underneath our hand during the night."

Another incident Robert called in was to clean up the mess from some military training in the area.

Robert: "Another episode I want to tell you about is the torpedo. Now what I think it was up at Pensacola they practiced torpedo dropping from planes. And one of 'em, they didn't recover, but we thought it was a live German torpedo.

Up two miles north northwest of Sand Blas Point. We were on patrol one day on the inner patrol, and that's the south end of the inner patrol. My observer says, 'Hey, what's that back here?' I said, 'what do you mean something's sticking up out of the water!' I said, 'wasn't the sub was it?' 'No, no, no. It's still in the water.'

So I wheeled around, come back and, my God, here sitting at a 45 degree angle in the water was a torpedo.

Frank: Was the tail end sticking out?

Robert: The nose was sticking out. And the tail was down in the water. And it was sitting there in the water, half of it submerged the other half above water.

We called the base, we told 'em there's a torpedo down there floating in the water, dead. It's not moving. 'Oh my God. Well circle it, but we're gonna send other planes out to take relieve you 'cause you'll be needing gas before long.'

So they sent two other planes out to circle to keep the area clear. Then when we went back and refueled, they were sent us out immediately back to the same spot to patrol the area until the Coast Guard and the Navy got there."

By the end of the coastal patrol CAP had flown over 86,000 missions, reported 173 U-Boats sightings, and dropped 82 bombs. They also reported 91 ships in distress and rescued more than 300 survivors of U-Boat attacks. Not to mention the various other spottings like torpedoes in the water and local sabotage.

Frank: "Just the Coastal Patrol mission, which ultimately will grow to 21 bases. It, it operates all the way until late August of 1943, uh, 18 full months. And we'll fly over 244,000 flight hours, uh, patrol hours, uh, logged, and it's a tremendous operation. But at a cost, 26 men will be killed, seven will be seriously injured. 90 private aircraft will be

lost. Quite a few of those men killed will die because they have inadequate safety equipment."

Coastal patrol was not the Civil Air Patrol's only job,

Frank: "And by the summer of 42, military commanders are kind of being told, look, you CAP, you know, if they have a job they can do, let 'em do it.

I'm just gonna rattle off some of the missions here, but CAP was involved in aircraft radio calibration flights, radar calibration and training missions. We did emergency relief, be it, uh, for actual disasters, floods, blizzards, hurricanes, tornadoes, railway wrecks, fires, explosions. Medical flights, so we did early medical flights. We transported medicine, blood, plasma, Red Cross supplies. We transported civilian defense and military officials for inspections during blackouts, uh, camouflage, other defense work. War bond drives. We promoted war bond drives.

We did flights for state municipal agencies upon request. We did recruiting drives for the Women's Army Corps as well as the armed forces overall. We guarded and maintained civil airports. When aircraft military aircraft crashed CAP members could often provide a guard around the crash site. Uh, we patrolled lakes and rivers in the Great Lakes on ice conditions to report on ice conditions. We assisted in the training of the state guard units.

Some of the more really odd ones are we did hunt for fugitives of justice for state and federal law enforcement agencies. In fact, when, uh, German/Italian prisoners of war escaped in prison camps in the United States CAP actually put up planes. Try to find, find the escapees.

My two favorite oddities are we herded wild fowl by air to prevent crop destruction. And by far the most absurd, and yes, we actually did this. We conducted aerial hunts of wolves and coyotes destroying livestock. So the observer would lean out the plane with a rifle, uh, out of the plane's window or at the door off, you know, trying to shoot wolves or coyotes from the air."

Most men who were members of Civil Air Patrol were either too young or too old to fly for the military. Or they were medically unfit in some way. Charles Compton, who was flying out of Delaware and New Jersey was 4F because he had only one kidney¹⁸.

¹⁸ He says this in part of his oral history

For the most part, anyone could be a member of CAP as long as they were older than 16. In practice, not everyone could hop in a plane and fly.

All the equipment, airplanes and sometimes gasoline were paid for by CAP members. If you could fly but you didn't *own* a plane you could maybe fly someone else's airplane, or fly as the co-pilot observer. Or you could join the Civil Air Patrol and do non-flying jobs like maintenance or secretarial work.

Women and people of color were allowed to serve in the Civil Air Patrol as well, but they were not allowed on coastal patrol flights. The 'reason,' at the time, was that they would be in extra danger if the airplane ever went down.

The only Americans not allowed to join the Civil Air Patrol were those whose family heritage was tied to the Axis Powers

Frank: "If you were an immigrant of a country that was deemed an enemy country, Japan, Germany, and Italy, you were not allowed to join Civil Air Patrol. And I, there is some correspondence of Italian Americans who were trying to join and they were told, we're sorry. You, you, you came from quote a 'fascist' country. Even if they themselves were absolutely 100% loyal Americans, they were blocked."

Today, anyone can join the Civil Air Patrol. Their most robust program is for youth starting at age 12, promoting airmindedness and providing flight training scholarships.

The Civil Air Patrol is the only surviving piece of original WWII civilian defense, and also the only organization we're talking about in this series that still exists today. In part, that's because shortly before the end of the war it was transferred to the War Department.

If CAP had stayed with the Department of Civilian Defense it likely would have been dismantled along with the department at the end of the war.

Music theme in and under

Stick around for our final episode about Britain's wartime ferry service, the Air Transport Auxiliary. Or if you'd like to learn about manufacturing during the war and hear from a real life Rosie the Riveter, go back to our last episode.

---Credits---

Home Front is a production of AirSpace from the Smithsonian's National Air and Space Museum.

Home Front is produced by Jennifer Weingart and mixed by Tarek Fouda. Narrated by Dr. Emily Martin. Our Managing Producer is Erika Novak, our production coordinator is Joe Gurr and our Social Media Manager is Amy Stamm.

Music by Story Mechanics.

A big thank you to our guest in this episode Frank Blazich from the National Museum of American History and the Civil Air Patrol.

Oral histories heard in this episode are from the Civil Air Patrol Oral History Project¹⁹.
Voice over by Joe Gurr

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Music theme up and out

¹⁹ <https://history.cap.gov/collections/oral-histories>