CIVILIAN VOLUNTARY ACTIVITIES IN THE AF

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FOREWORD

It is the desire of the President, the Secretary of War, and the Commanding General, AAF, that a solid record of the experiences of the Army Air Forces be compiled. This is one of a series of studies prepared as "First Narratives" in the projected overall history of the AAF.

The decision to make the information contained herein available for staff and operational use without delay has prevented recourse to later primary sources. Readers familiar with this subject matter are invited to contribute additional facts, interpretations, and constructive suggestions.

This study will be handled in strict confidence with CR 560-5.

[Signature]

Major General, U.S. Army
Assistant Chief of Air Staff,
Intelligence

Notes: Readers are requested to forward comments and criticisms, and any authenticated pertinent details, properly addressed, to the head of the study.
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INTRODUCTION

Responsibility for the defense of the continental United States during World War II, including both active and passive measures, was charged to the Defense Commanders, who in turn delegated certain of these responsibilities to subordinate commanders. Categorically, active air defense comprised all measures aimed to destroy or threaten destruction of hostile aircraft and their crews in the air, while passive air defense included all other measures taken to minimize the effects of hostile action.

1. In the Eastern and Western Defense Command, the responsibility for active air defense was delegated respectively to the First and Fourth Air Forces and by them to the I and IV Fighter Commands. Since no means were available for active air defense measures in the Central and Southern Defense Commands, the Third Air Force was charged with the operation of an aircraft warning service in the Gulf Coast area, and the Central Defense Command was charged with the operation of an aircraft warning service in the area of Sainte Marie.

2. For a short period immediately after entry into the war, defense commands were designated as theaters of operations.

3. This discussion is based upon a memo prepared for the Historical Division, AG/AS, Intelligence, by Lt. Col. John Holbrook, Executive, Fighter and Air Defense Branch, AG/AS, G2R, 2 July 1942, in AFIHI files.
AAF responsibility in this general plan of defense for the continental United States consisted primarily in providing the Eastern and Western Defense Commands with the means to conduct an active air defense, consisting of fighter aviation and an aircraft warning service. Other active defense measures such as antiaircraft artillery, searchlights, and barrage balloons were furnished to the Defense Commands by the Army Ground Forces.

Since, however, modern warfare is waged against civilians and civilian centers as well as against armies and fleets, defense has ramifications extending far beyond the defense of military objectives. Civilians, aware of this fact, were anxious to volunteer for defense service. Since the greatest and most immediate danger was from aerial attack, it naturally fell to the Army Air Forces to coordinate any civilian air defense measures. Survey of the possible services to which volunteers might be put indicated that they best could serve in passive defense. This fact was apparent immediately after the Pearl Harbor attack because at that stage it would have been foolish to equip all the civilians with miscellaneous weapons. On the other hand these civilians could be welded into an effective organization through which passive defense steps could be taken, the administrative responsibility for which rested in the Office of Civilian Defense and the regional offices under its control. The only responsibility of the Army Air Forces was to furnish warning. All subsequent measures thereafter were up to the civilian defense organizations which operated under the supervision of the Defense Commands.
Because of these many manifestations of defense measures, civilians were provided a wide field from which to choose the type of volunteer service in which they wished to participate. Those who volunteered to work in the Aircraft Warning Service may be divided roughly into two groups—ground observers (spotters) and those who worked in the information and filter centers, later known as members of the Aircraft Warning Corps. They may be said to have worked directly for the Army Air Forces in an active air defense role. Those others who became air raid wardens, fire watchers, or who worked as members of other air raid precaution services were under the jurisdiction of the Office of Civilian Defense and its regional directors. They performed no less important passive defense role. All were representative of the different social strata, the bond among them being their desire to participate actively in the nation's defense.

There was, however, another group of volunteers which constituted a different kind of defense organization. That group was known as the Civil Air Patrol. Organized by the OSS but under the jurisdiction of the AAF, these fliers had in peacetime flown either professionally or as a hobby. Now they were serving as civilians in a wartime capacity, and had at their disposal private planes and landing fields. Thus, in contrast with the ground observers who had been able only to relieve military personnel from certain duties, these pilots were able to perform a conspicuous number of missions which relieved both military personnel and material.
However, the military mentality could not immediately endorse the taking over of functions by civilians although it was aware of the immediate necessity of doing so. Because of an innate doubt that civilians suddenly could be fitted effectively into a carefully planned military system, Army personnel often were incapable of appreciating the military value of private volunteers. Furthermore, military men seemed to have an ingrained, although not altogether unfounded, distrust of civilian capabilities and dependability. In fact, even after they had accepted civilian aid, the Army officials upon occasion looked the perspicacity to recognize the fundamental differences between the military and nonmilitary reaction to Army direction. Consequently they could not always appreciate the fact that discipline and cooperation had to spring spontaneously and willingly from the volunteers rather than from impersonal coercion; and that this willingness of the volunteers, if the organization were to remain intact, had need of stimulation through constant encouragement and through unremitting test. On the other hand it should be remembered that in any organization there will always be complaints, justified or not. While generally speaking the Ground Observer Corps organization moved along smoothly, inevitably there developed causes for complaint on the part of the volunteers. It is the aim of this study to present these complaints as problems confronting the AGC, and then to indicate the steps taken to solve them. The reader, therefore, must not lose sight of the high level of enthusiasm with which the volunteers generally fulfilled their duties. The AGC, realizing that these
sporadic complaints among the volunteers were symptomatic, considered
them as such and proceeded wherever possible to eradicate their causes.
By such a process, it was believed, nationwide morale at a high level
could be maintained.

Headquarters responsibility for this policy rested with Brig. Gen.
(them Colonel) Gordon P. Stevillo, who, after the reorganization on
9 March 1942, was named Director of Air Defence. In the general
reorganization of AF on 20 March 1943 most of the duties of the
Directorate of Air Defence were reassigned to the new office of the
Assistant Chief of Air Staff, Operations, Communications, and Require-
ments. By the end of 1943, however, the civilian volunteer activities
in the Aircraft Warning Service had been virtually inactivated.
Volunteers in the Aircraft Warning Service were no longer needed and
their activities were history.

The Civil Air Patrol, on the other hand, followed a slightly
different organizational process. In the general reorganization on
9 March 1942, it was assigned to the Military Director of Civil
Aviation who had the following responsibilities:

1. Supervises, operates and administers that part of the
Civil Air Patrol used by the War Department.
2. Activates Civil Air Patrol Units on request of proper
authority.
3. Establishes and maintains liaison with the Air Division,
OGD, and the Air Priority Section of the Transportation
Division, SCG.

3. Eg., AF, Functional Organization Chart (Preliminary Draft),
16 June 1942.
4. Arranges for the use of equipment of Civil Air Patrol members and for personnel for operations of such equipment.

5. Jointly with the Technical Executive supervises the Regulations Division.

In the general reorganization of 20 March 1943, however, Civil Air Patrol, like the other civilian agencies, was assigned to the Assistant Chief of Air Staff, Operations, Commissary, and Requirements (AG R). Assigned specifically to the Tactical Services Branch, Movements and Operations Division, G3R, the Civil Air Patrol Section duties were listed as follows:

a. Establishes policies, plans and programs for Civil Air Patrol operations, commitments and requirements.

b. Supervises all activities of the Civil Air Patrol.

c. Makes visits to Civil Air Patrol units to explain policies and to gain first hand information of their problems.

On 8 May 1943, then the Tactical Services Branch was redesignated the Technical Services Branch, these Civil Air Patrol duties remained unchanged. At the end of 1943, Civil Air Patrol activities, still expanding, remained the responsibility of AG/R, G3R whose duty it was to "supervise . . . the activities of the Civil Air Patrol."

There was one Civil Air Patrol unit, however, which, because of the nature of its mission, varied within the general organizational structure. That unit, called the Coastal Patrol, worked with the Antisubmarine Command which had been established 15 October 1942 to

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fight the submarine menace. It was assumed, naturally, that as soon
after Pearl Harbor as possible the Navy would resume its responsibility
for coastal defense, at which time the ANC Antisubmarine Command would
no longer be needed. Since that time did not come until 24 August
1943, both the Antisubmarine Command and the Coastal Patrol unit of the
Civil Air Patrol were engaged in what ordinarily should have been naval
activities. Like the Civil Air Patrol, the Antisubmarine Command was
under the jurisdiction of AG/CC, CGF. Yet these details of AN organization and administration which provided for the utilization of
volunteer civilian defense activities represent only the periphery of
the history of civilian volunteer activities; it was the civilian
himself and his reactions to this self-imposed military discipline
which form the basis for judging the soundness of this particular
military concept. The resulting narrative notes one of the most
readable chapters in the history of the Army Air Forces.

Chapter I
THE AIRCRAFT WARNING SYSTEM

The impact of Pearl Harbor made necessary the reappraisal by civilians of their particular aptitudes and opportunities in relation to national defense. There were, consequently, approximately 700,000 civilians who volunteered for service in the aircraft warning system. Military air defense plans made in anticipation of possible attack recognized the potential value of civilian participation in certain air defense activities, and the soundness of this concept was proved in the Battle of Britain. It was obvious that a need existed for an adequate aircraft warning system for the United States.

Yet in January 1941, less than a year before Pearl Harbor, the United States had no air defense system. There was a scarcity of fighter aircraft for defense purposes and a scarcity of military personnel to man an aircraft warning system, although as early as 1938 the War Department had begun making definite plans for its antisubmarine defense system. In May of that year the Army commanders were directed "to prepare plans" for such defense. Four years later,

1. For general discussion see records on file in Fighter and Air Defense Branch, Requirements Div., SC/13, G-2.
2. See the file, AG 320.2 (3-5-41) (2), Aircraft Warning Service and Air Defense.
in March 1939, the Chief Signal Officer was directed to make a study of the aircraft warning system with the idea of installing detectors in both the United States and overseas possessions. As a result of the recommendations offered in this study, the War Department directed in May 1940, eight months after the outbreak of the European war, that Army and overseas department commanders "Prepare or revise A/S plans and include provisions for the use of aircraft detectors," and by July of that year approximately $12,000,000 had been made available for Air Warning Service installations, the sites of which were to be determined by Army and Navy officials." A combination of these detectors and civilian volunteers were later to make up the aircraft warning system, the means by which approach of the enemy was to be detected and this information disseminated to the proper authorities.

Certain Army officers visited England in the summer of 1940 to see its defense system. Already the British had devised a warning plan which made possible the use of a ground alert instead of an air alert. The use of this system, which was to prove effective in the 1940 blitz, meant that instead of having the skies constantly patrolled by aircraft searching for enemy planes, the aircraft could remain on the ground, alerted for definite action as soon as warning was received. It was "determined in the United Kingdom that one fighter aircraft operating on ground alert under conditions of controlled interception with an adequate early warning system, would
be able to provide the same protection as approximately forty aircraft operating on air patrol without adequate warning service."

In addition to the knowledge gained from observation of the British system, still further knowledge of what was needed for an adequate air defense system was gained as a result of extensive exercises conducted in January 1941 by the Air Defense Command in northeastern United States. A conference was then held at the direction of Maj. Gen. H. H. Arnold, to adapt existing plans to obvious needs. At this conference, Maj. Gen. James H. Cheney and Maj. Gordon P. Saville described the lessons that had been learned about air warning service. Emphasizing the fact that "the disposition of detectors, the locations of information centers, and the location of pursuit airfields were all interrelated factors in the conduct of an air defense," it was recommended that "Air Defense Commands, later called Interceptor and then Fighter Commands, be created as soon as practicable in each appropriate area in the continental United States."

Major Saville described a good aircraft warning system as one made up of four components: detection, reporting, evaluation, and dissemination. These requirements were fulfilled in the continental United States through a system consisting of: (1) a forward screen of detectors,

8. Ibid.
(2) the Ground Observer Corps, (3) filter and information centers. Yet, if the aircraft warning system were to be effective, it obviously had need of both: interworking with the plan for interception. The general defense plan, consequently, called for the following steps: (1) a seaward screen of detectors of early warning; (2) the Ground Observer Corps, (3) filter and information centers, (4) interception, and (5) passive measures for defense. When the enemy approached, detectors afforded early warning and possible immediate preparation for interception by the fighter control, and early warning to passive defense units. In case of vital targets, the enemy upon his arrival would encounter, in addition to fighter airplanes, balloon barrage, searchlights shellings, and antiaircraft fire. If he continued his course, it could be reported to the filter centers by the ground observers. Volunteers manned the observation posts over which the enemy passed and immediately sent in "Fire March" to the nearest filter center. Here the course would be plotted and evaluated and relayed to the information center. In this way it could be determined in which direction the planes were heading; and local defense measures undertaken accordingly.

This aircraft warning plan obviously was dependent upon a large personnel and required the closest cooperation between all elements of the system—both active and passive. The detector would be manned by technical experts; naturally, military personnel would run the

0. Assigned to this task at the outset of war were the First and the Fourth Air Forces.
interceptor planes. But the remaining activities, it was agreed, could be handled by personnel, including women, who were not eligible or available for field service. Consequently, although the entire aircraft warning system was under the jurisdiction of the continental air forces and recruited, organized, and trained by the interceptor commands, it was with the last two places only—the Ground Observer Corps and the information and filter centers—that civilians were concerned.

It was the mission of the Ground Observer Corps to observe and report the movement of aircraft. As early as the spring of 1941 efforts had been made to organize this civilian group, at which time it had been hoped by AG Headquarters "to have the particular phase of service involving the use of volunteers tentatively organized and ready to begin operations in the Atlantic and Pacific Coastal areas not later than June 15" with other areas to be organized soon afterward. But these plans were not successful because, generally speaking, the public was still skeptical toward national defense. With the news of the attack on Pearl Harbor, however, the public cast off its lethargy.

Air defense representatives were sent out from Headquarters to the fighter commands in order that they might observe the operations of these volunteers at first hand. The stories they brought back

have become legendary. For although civilians had gone to war, it was obvious that until they could receive training they were neither equipped with Army terminology nor oriented to the military point of view. But they were enthusiastic and they were willing to learn. In the meantime, if they could not speak Army language, they would translate information into their own frame of reference. A blimp was reported as "one submarine flying high." A P-38 was described as "something that looks like two planes with their wings around each other." Another plane was described as having "reglan sleeves, flared bodice, and a nipped-in waist." Such reports, however, were typical of the very early days only, because soon training courses for aircraft identification were given. General Severle, describing the activities of the Ground Observer Corps, wrote:

The Corps fortunately is no respecter of personalities, the chief requisites for a good observer being patience, ability to stand some amount of hardship, on-the-job training, and overwhelming desire to serve with and for the men in the Army Air Forces and their country. There can be no selfish motives connected with being a volunteer observer, for these people have taken upon themselves one of the most thankless jobs in the nation. They do not wear uniforms, nor tin hats, nor any other characteristic insignia in public, and they are specifically asked not to talk about their work.

Numbers, called into sudden action by the emergency, had little in common except their desire to contribute to national defense. It was

necessary, if their efforts were to be effective, that they be a well-integrated unit. This necessity had been pointed out in the spring of 1941, half a year before Pearl Harbor: "... the task of effectively executing these programs rests upon each community. The Federal Government can advise and coordinate but it cannot execute the job directly."

After Pearl Harbor, this fact was even more apparent than could possibly have been envisioned in the spring of 1941. The HCP was so busy gathering its own potential resources that it had little time either to guide or to coddle civilian activities. It had to be assumed that once these activities were set in motion they could progress along with other individual constituents of the air defense program. Organisation and operation of the Ground Observer Corps were standardized. Observation posts were scattered throughout the United States, each covering about a ten-square-mile area. Although the site of each post was determined by military personnel, it was set up and maintained by the local community. The chief requisite was that there be a telephone accessible within 30 seconds.

Observers running these posts served on a purely voluntary basis. Qualifications necessary for eligibility in the corps were that a citizen have normal hearing, that he be able to speak English clearly and distinctly "so that a message may be given without difficulty or misunderstanding," and that he be able to exercise good judgment.

13. C-16 Information Letter 61, 14 May 1941.
### Spotters' Report Sequence

<table>
<thead>
<tr>
<th>Number of Airplanes</th>
<th>Type of Airplanes</th>
<th>Altitude of Airplanes</th>
<th>Were Airplanes Seen or Heard?</th>
<th>Your Observation Post</th>
<th>Location of Airplanes from O.P.</th>
<th>Distance of Airplanes from O.P.</th>
<th>Airplanes Heard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Single-engine</td>
<td>Very Low</td>
<td>Seen</td>
<td>N</td>
<td>(Report Distance in Miles only)</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td></td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
<td></td>
<td>W</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Few</td>
<td>Multi-engine</td>
<td>Very High</td>
<td></td>
<td>S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If airplanes were directly over O.P., cover columns 6 and 7 by reporting: "OVERTLAP" delay in report.

15. Ibid.
and make decisions.

Throughout the country were well-qualified patriotic citizens, the so-called "Eyes and Ears of the AAF," who volunteered their time and service. Ranking each post were the Chief Observer, his Assistant Chief Observer, and an appropriate number of observers. It was the observer's duty, as soon as he spotted a plane, to phone immediately to the filter center. There was a standardized procedure for reporting the presence of planes. The observer said to the telephone operator "Tiny Flash." As soon as the plotter said "Army, so cloud please," the message was reported in flash message form to the observer.

The sequence of the report is indicated in the chart on the preceding page. If the observer were dubious about the type of plane, he was cautioned to report it as "unknown."

The telephone over which the report was given would be one designated for official use. The call, sent immediately to the nearest filter center, would rate a priority 1 rating. It would be the responsibility of the filter center to evaluate and to disseminate this information to the Army Information Center. These filter centers each served several ground observer posts within a certain area called the filter area. (See chart following page 17). In an effort to clarify terminology, Col. George H. Hill, Jr., of the Directorate of Air Defense, wrote:

A filter area, I conceive to be a 'telephone watershed'—an area of a size considered tactically appropriate by the Army and within which existing communications facilities are satisfactorily or reasonably satisfactorily grouped. The functions of a filter center in which the Army Air Forces Ground Observer Corps is concerned are the reporting to a central point (the Filter Center) of all aircraft in flight.

These filter centers, like the ground observation posts, were manned largely by volunteer civilians. It was necessary immediately, however, that these volunteers, known as plotters, have adequate technical training if they were to fulfill their duties. Therefore the work of these volunteers was more specialized than that of the ground observers.

It was with a plotter at the filter center that the observer was connected when he lifted his phone and said to the local operator "My Chief." The information received from the ground observer was then displayed on a map table. (See following chart for equipment.)

The information displayed on the table was then analyzed by the filterers, who were responsible for seeing that the analyzed information was correctly displayed for the plotters. It was the duty of the plotters, at that point, to pass on the information to the operations rooms in the Army Information Center. This information was transmitted over "hot" telephone wires leased by the Army for its exclusive use.

The operations room of the Army Information Center was, according to General Groome, the nerve center of the whole aircraft
Details of how controlled interception guides our fighter planes.

L M -9
HEIGHT CARD NUMBER OF MOVING CAPS STAETH CARD

X 33
IDENTIFICATION TARGET NUMBER CARE

Legend

RED

Strength Counter Thay

Equipment Needed to Display Information on Map Table

Sample of Report on Map Table

Source: HQ AAF, Standing Orders for Fixed Ground Observers Filter Centers, July 1943
17.

assumed to be hostile until such time as they were positively identified. A red "x" was placed on the target, and the controller, acting for the commanding officer, was responsible for getting fighter squadrons into the air. It was also his duty to coordinate the work of other key personnel in the gallery.

The antiaircraft artillery officer keeps in constant touch over his own direct wires with the AAF units, but he doesn't give the word to shoot until the Controller says OK; those fighter planes must be out of the way first. barrage balloons go up, searchlights pierce the darkness. The CIA representative has ordered all civilian craft grounded. Ground force officers are notified. The Civil Air Raid Warden Officer orders a blackout.

At this point those civilians concerned with this one phase of defense—the aircraft warning system—had performed their particular assignment. It was now the duty of other civilians to perform those duties involved in passive defense—air raid wardens, fire wardens—while military personnel undertook combat operations in active defense.

It is obvious that the civilian element in an aircraft warning system so elaborate as that in the United States could not emerge completely standardized immediately after operations had been undertaken. In the first place there was no strong central authority to integrate the activities of these heterogeneous civilians. Since, however, the volunteer civilian personnel—later called the Aircraft Warning Corps—in the information and filter centers operated constantly in conjunction with military personnel, their activities were

automatically integrated with those of the military system. It was, therefore, in the Ground Observer Corps that the weakness resulting from a lack of centralization was most apparent. Obviously these heterogeneous people were brought together in an organization which had no central source for controlling the administrative procedures of local personnel, attention inevitably became focused upon these administrative details. As a result, often operations could not proceed until these details had been cleared up.

Another factor which contributed to the over-all picture was the fact that in their initial enthusiasm volunteers had geared themselves to meet air attack. Weeks passed and this attack was not forthcoming, and civilian volunteers lacked that disciplined patience which characterized the military organization. They were, in short, not prepared to wait indefinitely for an attack which probably would never be forthcoming. Operations became routine, and when operations became routine they sometimes tended to become monotonous. By the end of six months, they were indeed monotonous for the ground observer. Yet, it was necessary that there be constant observation in case the enemy were to come.

Around the clock—day, after day, after night—in each and every day, war is a reality to the man and the woman, to the civilian volunteers and the military personnel of the Aircraft Warning Service. The stakes are high. There can be no time out, no relaxation from this match to meet the ever-present threat of attack by a desperate enemy.10

19. Ibid., 10.
Homogeneous routine, however, was one factor which contributed toward the general slowness in morale apparent by the end of six months.

Another factor was that the ground observers had no officially standardized name. They were called by many names—aircraft spotters, air raid spotters, and observers, civilian observers. Furthermore when a problem confronted the organization it was often difficult, because of the lack of centralization, to determine the authority by which it could be solved. It was not enough to say that the Ground Observer Corps was a civilian volunteer organization under the jurisdiction of the Army Air Forces, yet maintaining always close liaison with the OOD, the American Legion, and local defense agencies. Yet interpreting the source of authority was often difficult. For example, in the letter of appointment to the Ground Observer Corps, General Seville, 20 in a letter to John H. Landis, Director, OOD, wrote: "Instances have been reported to me of misunderstandings between local representatives of Civilian Defense, the American Legion, and the Army Air Forces Ground Observer Corps... I would appreciate it if you would institute action to dispel any such misunderstandings that may exist among the lower echelons of your organizations."

In a further effort to clarify the situation, General Seville wrote to Lorrin L. Atalano, National Chairman of Defense, the

20. Gen. Seville to John H. Landis, 6 Jan. 1943, in LOC 522, Ground Observer Corps; also in NARA files...
There are two particular points I want to make. The first is one that I am making at the same time to the Office of Civilian Defense. It is that there is no justification for the occasional conflicts that have arisen as to who, other than the Fighter Commands, must approve appointments in the Ground Observer Corps. The sole appointing authority is the Fighter Command. Recommendations from the Legion, from OOD, and from any other responsible and patriotic agency are always earnestly solicited, but any misunderstandings which exist to the extent that a 'clearance' is to be made by anybody but the Fighter Commands should be dissipated.

A major problem arising from this confusion of authorities was that of determining who should assume the financial responsibility for organization and operations. For example, it was sometimes necessary that observers travel to other communities than the posts were being organized. Although these members were willing to pay any costs involved in getting to and from their local posts, they felt that if they left their community in an effort to help other communities organize, the defrayal of the expenses should be undertaken by the Army Air Forces. One example was that of travel expenses. Although it had been understood that local communities would be responsible for the local expenses involved in the supply and in maintenance of observation posts, these expenses often exceeded the local expectations, and the results were that at the end of six months individual leaders were saddled with financial responsibility which they had not anticipated. Although the Army had arrangements to reimburse...
the situation in the beginning represented a cause for complaint.

Another major problem was that of priority for gas and tires. Volunteers were responsible for getting to and from their posts. If they had to travel by car, they were not allowed extra gas nor were they given priority for tires. In isolated spots—such as stretches in the states of Washington and Oregon—often it was necessary that an individual use his entire allotment of gas in line of duty. He was willing, if necessary, to maintain certain roads leading to observation posts, and was further willing to wear out his own tires traveling over these roads. But he reasoned logically the fact that the Army did not appreciate his sacrifices and his service enough to give him the right to buy more tires in order that he might continue this service.

Referring to the lack of priority on tires, V. L. Campbell, Executve Director of the American Legion, wrote in a letter to the Directorate of Air Defense:

This is really a problem that your office must not only face but answer. It is certain that these volunteer citizens cannot answer it and it is certain that if the raid warning service is to be maintained, it must be answered... then new areas to be the stepchild of both the Army and O.C.S. and can claim just one parent and that parent accepts responsibility, to even some minor questions and problems will be answered.

Still another aspect of the priority problem was that of acquiring enough fuel—in instances where the allotment was felt to be insufficient—to keep observation posts. Yet it was the responsibility of local leaders to maintain these posts in a satisfactory manner.

Thus, these problems, which in 1941 appeared to cross the civilian volunteers into the spring of 1942, had by the summer of 1942, continued to lower morale exceedingly. With the first lapses of enthusiasm, there was for the ground observer no shelter, no protection. There was simply the duty piling up of hours. In the AOC department files are letters indicative of the wakening of morale evident six months after the war began. One such letter from Carl, III, addressed to the Under Secretary of War, R. R. Peterson, stated that the “civilian observation posts of Aircraft Warning Service are fast breaking down. That is the true picture...generally all over.”

Arthur S. Lewis, who had been responsible for organizing the Marion County, Fla. branch of the Ground Observer Corps, offered one possible solution:

The observers are craving official praise and assurance. They want to be reassured over and over again by military authorities that they really are important. They want to be told that those lonely hours and hectic hours are really necessary to the armed forces of their country. Their ego craves to be cuffed up. It will buoy up their morale if only someone of importance, someone in uniform...

23. Arthur S. Lewis to R. R. Peterson, 15 May 1942, in AEBM files; also in LOC 522.4, Aircraft Warning Service.

24. Ibid.
with shoulder in rite, will tell them, encourage them, and pet them on the back. They want to be proud of the part they are doing.

Levis wrote in conclusion that he was "positive that something must be done very soon if the Interceptor Command is going to continue to rely upon the observers for sustained help." He was afraid, he said, "that under the present set-up a terrible catastrophe..." Unless the armed forces officially show a more active interest in and supervision over each observation post."

Another possible solution to the problem of morale, proposed by the American Legion, was that the Volunteer Aircraft Warning Service be taken over and maintained by the War Department.

It is obvious that these problems could not be solved immediately. Their solution had to come as a gradual process. It was necessary first of all to standardize the new "ground observer." In a memo to the Chief of Staff, the Commanding General of the Army Air Forces wrote that the "confusion in terminology is undesirable for many reasons. It is not conducive to good morale among observers, it multiplies the problems of obtaining publicity... and it has a tendency to confuse the public." It was stated further that the public was "often not sure whether reference..." being made to Air Raid Wardens of the OSS or to Ground Observers of the Army Air Forces... the same confusion even existed to some degree within the Armed Services." To eradicate this situation, the Secretary of War directed that a letter be written in which the "ground observer..."
organization of the aircraft warning service, hereafter be designated as the "Ground Observer Corps," and that this letter "be directed to the Commanding General, Eastern, Western, Southern, and Central Defense Commands." In view of the total of difficulties which had to be solved, however, it was apparent that the solution of a single problem could not immediately resolve them. Apparently nothing less than total reorganization indicating one clear-cut source of authority would be effective. Realizing this fact, military officials began making definite plans for reorganization. It was believed the most effective method would be for the organization to be under obvious military supervision although Expenditures tend to be placed upon the fact that the job of observer and expenses thereon reside fundamentally the responsibility of civilian volunteers, subject to my supervision and instruction outlined. Since the Ground Observer Corps was essentially a civilian organization, it was believed that so far as possible it should remain that way, and civilians should feel that the Army was working with them instead of over them. It was decided that civilians with proper qualifications could be commissioned in the Army of the United States and appointed as regional and filter area directors. While this plan for reorganization was being studied by

27. Expenditures for Col. Stilwell, forwarded to Signal Officer, IV Interceptor Command, 2 Apr. 1942, in WAVP Files, 03-20, Organization Ground Observer Corps.
28. Ibid.
military officials, civilian volunteer. circle had reached such a state
that Lynn E. Stewart, National Commander of the American Legion,
circle of his concern over the situation to President Roosevelt. The
President replied, "I am advised that a study of the Air Force Warning
service has been completed by the Army Air Forces and that certain of
the disturbing factors you outline in your letter... have either
already been corrected or are to be corrected in the near future."
Two weeks later, on 15 July 1942, it was announced that the Ground
Observer Corps had been made officially a part of the Army and would be
designated as the Army Air Forces Ground Observer Corps. The problem
did not automatically resolve itself at this point, naturally, but it
was hoped by military authorities that there would be no further con-
fusion about authority.

In the meantime, during the spring of 1942 steps were being taken
to ease the financial burden which had been placed upon the volunteers
of the Ground Observer Corps. Since the largest expenditure involved
was that of telephone installation, rental charges, and administrative
calls, it was decided that the Army should defray this expense.

Accordingly, on 22 July 1942 the following directive was issued:

within the continental United States, the installation
costs for telephones which are installed expressly for the
official use of volunteer civilian Ground Observers and the
monthly rental charges on telephones used exclusively for

20. 1 July 1942, (41540) Gold, Ground Observer Corps.
22. 10 April 1942 (4-22-42) Gold, 22 July 1942.
official calls by volunteer civilian Ground Observers will be paid by the Signal Corps.

For other expenses, however, the Army officials could not, they felt, assume responsibility. President Roosevelt, in explaining the reasons why such a step could not be taken, wrote:

I am sure that every Observation Post required for the Aircraft Warning Service have been built and paid for by the observers themselves. This prompt and generous response of individual initiative and enterprise to solve a problem thrust upon us is typical of the best qualities of American character. Great reliance must be placed upon these qualities to meet the needs of this war, for it will not be possible for the Government to supervise and undertake all efforts that will be required for its defense.

The Army Bullets, that in most instances where such posts have been built and paid for by the observers themselves, in accordance with their own ideas, initiative and initiative, national and local pride and interest and a strengthened morale, has resulted.

The problem of reimbursing volunteer civilian personnel who had to travel outside their own community, however, was considered to be one which the Army should handle, and the President issued the directive that all expenses incurred by volunteers in the performance of their duty, whether paid for directly or on a per diem basis, were to be reimbursed. Financial difficulties arose which could not be met by local organizations, or even by local volunteers, to use a confident that the Army would devise some method by which to overcome the -

32. President Roosevelt to Stilwell, 1 July 1942.
33. See also the following documents in "Precautions of Air Raids," in WAC File: Ground Observer Corporation for Lt. Col. I. C. "how by Underg. 1 Officer, 9 Apr 1942; "3 to Defense Coordinator, 1 June 1942; to to Defense Coordinator, 30 Jan 1943; Acting Controller General to Secretary of War, 12 June 1943.
Although the problem involving fissions could be solved once the
War Department assumed the responsibility for the, the log of
priority rating could not be so easily solved. Confronting military
officials almost as soon as the Ground Observer Corps was organized,
it remained constantly in the foreground. In the early days before
militarization was undertaken, there was little the War Department
could do except appeal to the patriotism of the volunteers. The
official attitude was that while appreciating the civilian's desire for
extra gas and tires in order that he might, from his viewpoint, do of
greater service, nevertheless, there could be no promise of priority
given either for gas or tires. The lack of gasoline was an
incapable fact. Furthermore, the War Department pointed out,
volunteers apparently had a misconception of how priority was
determined. While it was realized that observers had no gasoline left
after their travel in service, it had been hoped that the volunteers
would be willing to sacrifice their personal travel in time of
emergency. Meanwhile steps were being taken behind the scenes to
obtain the priorities necessary for efficient operations. But the
time involved for determining priorities was too long and there had to
be some kind of explanation of policy given to those concerned. The
President wrote in his letter to Stimson:

34. There is a large body of correspondence in OPM files on such
matters as the effect of gasoline rationing on the Aircraft
Ground Service, rental of automobiles for transportation of
observers, and priorities for construction or equipment of observ-
eration posts.
35. President Roosevelt to Stimson, 1 July 1942.
No completely satisfactory solution to the problem confronting ground observers as a result of the tire shortage has yet been found. There are approximately 700,000 ground observers enrolled in the Aircraft Warning Service. Their hours of duty range from three or four a month to eight or ten a day in certain notable cases, and the distances they travel to the Observation Posts ranges from a few blocks to fifty miles. To obtain tire priorities for each one of these would deprive our combat forces of vitally essential rubber...but the Army has had several conferences with the Office of Price Administration with regard to the gasoline rationing regulations, and a method has been worked out whereby volunteer civilian ground observers, under regulations shortly to be issued, will be authorized to purchase sufficient gasoline to meet their transportation needs to and from Observation Posts. This quota will be in excess of the gasoline allowed them for their personal use.

Comparatively speaking, the Army had less trouble procuring priority for fuel to heat observation posts than it did in procuring priority for gasoline and tires. General Srallolo, in a letter to the War Production Board, pointed out that the life of ground observer was a hard one in that it necessitated duty in all kinds of weather and at all hours. Since the observation posts were manned by volunteers, it was obvious that these volunteers would not function unless they were assured of adequate rest; yet considerations of manpower, expense, and administration made it impracticable "to operate the vital Ground Observer System in any other way than by the use of Civilian volunteers and Observation Posts constructed by them."

And such co-ordinations as those of President Roosevelt and General Geville been not known immediately to the public, volunteers would not have felt themselves slighted and unduly sacrificed, but they did not know, for example, that President Roosevelt had written, "The duties of a volunteer civilian ground observer are often inconvenient, sometimes physically incompatible, almost never glorious and the job they perform is one whose vital importance is not yet properly understood by the public at large." They knew only that if they wanted to get a strip of wire for the observation post they had built, they had to encounter a struggle with local NPS authorities.

Although military personnel were aware of the importance of good service to effective collaboration by the citizenry in defense measures, they neglected many opportunities to strengthen that service by giving praise where praise was due. Consequently, it was necessary that steps be taken to counteract this obviously unintentional neglect.

General Geville in February 1918 submitted to the Commanding General, I Fighter Corps, a list of projects to be accomplished prior to June 1918. He recommended that a training film be made and that there be regular distribution of Air Force Magazine and of aircraft recognition material to all observation posts. Also he suggested that there be awards given for meritorious service. These steps were to be taken in addition to those already undertaken toward solving the most pressing problems. Although these problems naturally inspired operations, they

37. President Roosevelt to Inobugh, 1 July 1918.
never halted then entirely. In one case, because of heavy snow it was
impossible to travel to and from the Live Oak Mountain observation
post in Corral Valley, Ore. There seemed to be nothing to do except
close the post, but the observers held a meeting to see if anything
could be done. When the question was specifically put to the observers
as to whether or not the post should be closed, one "very little middle-
age woman" shouted, "Not if I can help it... If snow will come
with it, we'll go up there and live until the roads are clear again."
The next day the two women, taking with them supplies for the remainder
of the winter, went to the lonely chink that was the observation post.
"For 72 long days and nights they kept around-the-clock duty. In all
that time not one plane flew over the post. Yet, this negative
information was just as important to the Air Forces as if there had
been a flight every hour."

These watches often resulted in id being given to lost aircraft.
In one instance two four-engine bombers on a trans-Pacific flight were
overdue. The weather along the Pacific that morning was thick and the
sky overcast. Because of peculiar radio conditions the two planes
were unable to keep contact with Hamilton Field, and Army personnel,
although assuming the pilots were on their course, were naturally
worried when they lost contact with the planes. Yet, at 9:30, an hour
after the planes were due over San Francisco Bay, there we received

30. In AIRD files, 50-26, Retrenchment.
At Monterey, Calif., a report from an observation post that an unknown plane had just passed. The only information given was that the plane had been heard, not seen. Since it was known that no flights were under way for that particular area at that specific time, this report was especially interesting. Within a few minutes another report came, this time from Santa Cruz. Thus the location of the plane was established.

Radio stations were then instructed to blanket the area, and it was not long until contact had been established with one of the observers. From the other observer located the same way. It was about fifty miles north of San Francisco. With radio contact established again, both planes were directed into the San Francisco area. Because of the weather it was decided as soon as it was learned that the observers had seen and heard one of the planes respectively, to have the planes meet about 600 miles south of Bur dank. This decision was made after consideration, however, because cross-country flying in the heavy fog would be dangerous. While the decision was being considered, reports kept coming in from the observation post. Noting the scarcity of these reports, Capt. E. L. Nuvirtz, the controller, decided to order one plane to fly at about 200 feet over Alameda County, which is on the east side of San Francisco Bay. The other plane, however, was instructed to circle at about 6,000 feet over Alameda County on the west side of the bay. Thus, any possible collision was prevented while the two planes waited for landing instructions. In the meantime, airports had been instructed to report the first field to "break-in."
Hills Field reported first, and the pilots were directed to proceed there. Each observation post over which they flew reported to the information center. Consequently the controller was able to look at the operations board and direct the pilot to "change course 30 degrees and 'break-in' to Hill," or "stay on heading of 200 degrees for four minutes," or "change course." Through the participation of about 55 observation posts, located in five counties, the two planes were landed safely. "To post was unexcelled and the rapid fire type of report came in, with no breaks in the continuity, allowed the controller to use the G/S in the area he might use a compass."

By the spring of 1943 operations of the Ground Observer Corps were going along as smoothly as could have been hoped for. Then suddenly, without previous warning, in July 1943, the supervisors in certain areas were informed that their observation posts and information centers were to be partially inactivated. (See following map. Shaded area represents areas inactivated.) Letters dated 1 July 1943 were sent to the supervisors of the areas concerned. Volunteers, instead of being on 24-hours-a-day duty, were to be alerted and ready for service should the occasion arise. This inactivation was to the plane gradually, however, and by official order there was to be no publicity given. Supervisors and volunteers involved were naturally annoyed and at a loss to understand why they were.

being instigated while near-by posts were allowed to continue.

Letters registering protest from local officials began to come into AT Headquarters. But for the volunteers the real bombshell came on 4 October 1943, without previous warning of any kind, they were abruptly informed that their services were no longer needed. The entire Ground Observer Corps and Aircraft Warning Corps were partially instigated and would no longer operate on a 24-hour-a-day schedule. A nucleus, however, would be kept in case an emergency should arise, and certain units were to be on an alert status. "Effective immediately, observation posts and observer filter centers of the Aircraft Warning Service served by civilian volunteers will be placed on an alert status and operated at intervals rather than on a 24-hour basis as heretofore."

There were, of course, very definite reasons for the abrupt termination of activities. Those military reasons resulting in the termination of activities had shaped themselves gradually. In the first place it was officially believed that the serious threat of air attack had passed. As early as June 1943, Secretary of War Henry L. Stimson wrote to the President that the fact should be transmitted in confidence to Congress and the press so that their utterances might be couched in terms to reveal this fact gradually to the public. If suddenly the information were thrust upon the public, it was believed

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40. 18 Frame No. 105-22-45, "Aircraft Warning Service," 20 Sep. 1945. See Appendix I for full text of memo. The public announcement was made on 4 Oct. 1943.
that the erroneous feeling might arise that the war was won. In a
handwritten note, dated at the bottom of this letter and initialed
"S.D.L.," the President replied, "Sly. You do it."  A process of
gradual revelation was undertaken accordingly, and it was in line with
this policy that the announcement of partial restriction of certain
areas had been made on 1 July 1943. Consequently, the announcement came
as a directive from the Secretary of War. However, this procedure led
disadvantages which were clearly perceived by AAF officers well
with the problems of coordinating civilian efforts with military.
In a memo for Col. George H. Hill, Jr., Civil Air Defense Secretary,
CAS, there were indicated some of the reactions that could be expected.

While the plan of the Secretary of War for gradual limiting of defense
resources was applicable insofar as guns and ammunition were concerned,
this officer wrote, it was not satisfactory where the services of human
beings were involved unless satisfactory resources were forthcoming. As
defense resources were developed and strengthened, and as more aircraft
became available to supply early warning of approaching enemy aircraft,
dependence upon civilian observers diminished. Civilians were gradually
made aware of lessening danger of invasion and that their services were
not so vital.

41. E. L. Stimson to President Roosevelt, 22 June 1943, in CAS Files,
CAS-46.
42. Memo for Col. J. H. Hill, Jr., by Capt. Roscoe Stebbins, Jr.,
2 May 1943, in CAS Files, CAS-46.
when the War Department assumed certain financial responsibilities for the Ground Observer Corps, it naturally expected service rendered to justify the expenditure. Before long, however, the IV Fighter Command felt that expenses were too great to be justified in view of the fact that total operating costs to the IV Fighter Command for the fiscal year ending 1 July 1944 were:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black smoke toll charges</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Rental Observation Posts (automobiles)</td>
<td>$500,000</td>
</tr>
<tr>
<td>Telephones</td>
<td>$40,000</td>
</tr>
<tr>
<td>Travel and travel expense of Civilian Supervisors</td>
<td>$18,000</td>
</tr>
<tr>
<td>Motor Fuels</td>
<td>$20,000</td>
</tr>
<tr>
<td>News, Local, Congressional</td>
<td>$4,000</td>
</tr>
<tr>
<td>Printing and Supplies</td>
<td>$20,000</td>
</tr>
<tr>
<td>U.S. Forest Service Co</td>
<td>$4,000</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$10,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,862,000</strong></td>
</tr>
</tbody>
</table>

Consequently, it was estimated that if the activities for the IV Fighter Command were terminated there would be a monthly saving of approximately $35,000.

The IV Fighter Command made known its wishes to IV Headquarters in Washington. Military personnel in the Air Defense Branch, CIC, who were intimately acquainted with the problem of the Ground Observer Corps and Aircraft Warning Corps included, besides General Scoville, both Col. George S. Hill, and Capt. Roland Stebbins, Jr. On 31 August 1943, Colonel Hill departed from Washington for Oakland, Calif., to discuss

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43. [Footnote reference]
44. [Footnote reference]
situation with the IV Fighter Command. There it was decided that under the circumstances the Ground Observer Corps and the Aircraft Warning Corps should be inactivated. To lessen the anticipated shock to civilian morale, however, it was felt that this inactivation of operations should be only partial. Colonel Hill then went to Washington, D.C., and discussed the situation with officials of the Central Defense Command and to Michoel Field, N.Y., to talk with officers of the First Air Force and the IV Fighter Command. Both the Central Defense Command and the IV Fighter Command concurred with the recommendation of partial inactivation.

On 7 September 1943 Colonel Hill wrote Colonel Nosee that it was advisable to effect virtual inactivation of the Ground Observer Corps because: 

1. Its cost (including telephone) will run fifteen to twenty million dollars per year; (2) the volume of flying is such that planes reported cannot be identified.

At this time plans for inactivation were still tentative and no arrangements had yet been made for official announcement, but at a press conference on the next day the following situation was created:

"This question was asked to the Aircraft Warning Service: we have inactivated on 1 October and in reply General Cramps answered it is no longer necessary because our radio detection equipment now is..."

45. "Record of Action Taken by Major Hill (AFM) with Respect to Partial Inactivation of Ground Observer Corps," in AFM files.
46. Ibid.
sufficiently complete. Therefore, it was decided to withhold the
information temporarily. In the meantime, conferences were held to
determine how best to meet the situation. It was finally agreed that
the announcement to the volunteers should come from General Arnold.

Accordingly, on 21 September 1945 he signed a message "To all Volunteers
of the Aircraft Warning Service" to be released with the announcement of
inactivation. It was further decided that the public announcement should come from the President at his regular press
conference on 7 October 1945, by which time individual volunteers
would have received the order from General Arnold.

Thus, the message was not by the War Department, but to the dis-
plesure of both the OSS and the War Department Bureau of Public
Relations. Although the OSS had been notified informally on 15
September 1945 of the action to be taken and formally on 30 September,
it nevertheless felt ignored because the announcement of the still
apparent need for civilian volunteers in war service. On 2 October
1945, however, it was decided by the War Department that it was too
late to change. But it was thought by the War Department that the
announcement could not be withheld longer even though the OSS desired

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23. CI, IV Fighter Command to CS, AF (radio ops.), 10 Sep. 1945, in
NSU files. It should be noted that General Leese's basic concept of the reason for inactivation was inaccurate. This error
was quickly noted by IV Headquarters officials familiar with the
problem of air defense. It was, however, with the announcement itself rather than the reason behind it that volunteers were
concerned.

24. See Appendix 2 for text of letter.
25. See NSU files, 09-12.
It so that it might relate its own policy. On 2 October Colonel Hill wrote:

"Everything is going to be all right except that I may yet be thrust out as a result of the action set forth ... but my conscience is fairly clear ... The [Department] Bureau of Public Relations is annoyed that the matter was not coordinated through them since it is related indirectly to the CNO and has a letter of national consequence.

Letters on record in the war [Department] files indicate that there was some dissatisfaction among the volunteers because of the abruptness of the announcement; but under the circumstances the exigency of the situation left no other alternative. In appreciation of the way the situation had been handled by Headquarters, Maj. Robert O. Hexter, Senior Observer Officer of the TF Fighter Group, wrote to Colonel Hill:

"This is just a little personal note to express our appreciation for the excellent manner in which you handled a very difficult problem ... so that this situation is safely buttoned up we are much relieved because we did not worry about the situation here on the Pacific Coast ... Thanks for a small job.

Total inactivation, although not an accomplished fact by the end of 1943, was obviously inevitable. It was approaching because the end of one phase of the war was finished. In the continental United States, the threat of air attack was believed to have passed, and

military force could turn their whole attention to the offensive.

Consequently, it is no longer necessary that civilians watch hour
after hour for the enemy. Now it is the enemy who watched through
the long, lonely stretches. It was the enemy who listened for the
inseparable approach of Allied planes.

63. In a memo filed for the Commanding General, N.C., 21 Sep. 1913,

on "The Necessity for the Eastern and Northern Defense Command

in the Defense of the Continental United States," it was

stated by the Operations Division of the General Staff;

"Although threats of invasion to the continental United States

have been removed, our coasts are still subject to the follow-

ing types of attack: (1) sporadic shell fire by submarine;

(2) landing of small raiding parties of saboteurs from sub-

marines; (3) Tossed air raids." Copy of same in JODM files.
Chapter II

ORGANIZATION OF THE SYSTEM

The Army Air Forces, besides being responsible for the aircraft
lying system, had also to determine how the passive measures might
be coordinated most effectively with active air defense. Many
measures were employed to prevent the enemy from finding and destroy-
ing strategic targets. One type of passive system defense was
an envelopment of possible targets. Another was the use of barrage
balloons. Finally, another was the dispersion of aircraft so that the
enemy could not strike a single blow of great magnitude. Also, flight
strips were maintained inside high-traffic areas when landing of planes
was necessary. The most familiar type of passive defense, however,
was that of blockouts which were initiated because it was apparent
that the enemy could not strike accurately in the night at targets
within critical areas if they were darkened.

Thus, through coordinated passive defense resources, the AF
was able to sustain its own passive defense system. Some of these
resources concerned civilians, excepting blockouts which necessitated

1. For complete discussion, see II Historical Study, No. 3,
"Pre-War Silicon Development in the United States Air Force, 1930-1942."
2. See Section, Hearing on the Defense Military Jet at 19th, 77 Cong.,
1 sess.
both army and civilian participation if they were to be effective.

Furthermore, if total active defense were successful, it had
necessarily to be coordinated with active defense. Since total air
defense was the duty of the Army Air Forces, civilian participation
in blackouts was naturally a matter of interest to military authorities,
and civilian participation became an integral part of the national
defense system.

The civilian, while he individually was a susceptible target
in case of air raid, cooperated willingly in enforcing blackouts.

Citing the example of civilian helplessness during air raids in
Poland, Belgium, and Holland, E. E. Le Maitre, Director of Civilian
Defense, pointed out that the "horrors of all-out air war are not
pleasant to consider. But unfortunately facts are facts." He
warned that "the older and the young, the poor having few, weak,
and children to their homes." It was the aim of civilian defense, then,
"to prepare for the day..." to have every man and
woman, young and old, prepared to defend their
homes and liberties.

If this were to be realized, however, it
was necessary that every civilian serve to the degree of his ability.

"All of us," President Roosevelt replied, "from all walks of life,
all kinds of political opinions, all races and creeds, must organize
and train ourselves to defend ourselves." Civilian defense of this

2. Statement by Major Le Maitre in A Civilian Defense Volunteer
Office, prepared by the Office of Civilian Defense.
3. Ibid.
4. Ibid.
5. Quoted in this.
need was indicated by the range of volunteer personnel. It included
Longer household on 8th St., South, East Street, Phoenix. It included
the most physically active citizens and completely bed-ridden patients
at the same Springs Foundation in Georgia.

These individual civilian volunteers could not function as
private entities, obviously. If they were to be effective, it was
necessary that they be organized, trained, and integrated by some
central directorship. This responsibility was delegated to the CED
chief, although never acting as an administrative force, served in a
purely advisory capacity. Administration was the responsibility of
local agencies.

It was realized immediately by the CED that previous preparation
for air attack did not necessarily constitute a solution to the prob-
lem. There were other aspects to be considered. What did the
civilians do during an air raid? And afterwards? Consequently,
blackouts and civilian defense plans were to include: (1) preparation
for possible attack, (2) activities during an air raid, (3) services
after the air raid. It was with these three aspects of the problem in
mind that the CED undertook to organize civilians for duty in case of
air attack.

Since the United States was divided into nine military defense
regions, civilian defense regions were established. These regions in
turn were divided into defense areas. (See Chart 1.) It was, as has
been indicated, one of the duties of the Air Information Center to
relay warnings to the civilians in any affected areas. (Chart 2.)
"One of the functions of the Aircraft Warning Service is the delivery of notice of incoming raid to civil air raid control centers. At each information or filter center there must be an officer on duty at all times charged with originating this order. He must be under military control, but should be familiar with the general organization for civil air raid precautions. Upon the approach of the enemy the controller would give word for the fighter forces to go into action. At the same time the areas toward which the planes were heading would be warned.

The instruments by which local public warning was given naturally depended upon equipment at hand, but generally speaking there were three types of warning instruments available: siren, sirens, compressed-air sirens, and self-generating sirens. In every instance it was assured that there would be one of these types available. It was obviously necessary that these instruments be virtually instantaneous in operation, that they should not be of a type which would get out of order easily, and that they be spaced so that the area would be adequately covered. In many areas, for example, the local fire alarm systems were used to transmit the warning.

Although the instruments by which warning was given were determined by local equipment available, the code was standardized. As soon as the signal had been given, the area was blanked out.


blackout of itself does not conceal the presence of cities. For
example on cloudless clear nights, then there is moonlight or even
starlight alone, there is sufficient light for usual activity.
but it helped conceal the pattern of streets and centers of activity.
It would hinder operations of air attacks against vital objectives
such as military positions, airfields, and bases; industries;
munipal utilities; transport facilities; stores of food supplies;
stores of materials; civilian population.

As the early approached, the blackout was in effect. Citizens
performed the service for which they had volunteered and trained. Of
all these volunteers the air raid warden is the best known. It was
his duty to see that no lights shone during the blackout. If persons
were on the street, he directed them to shelters. If bombs fell or if
fires started as a result of incendiary bombs, he reported to the
control center and assisted in fighting them as soon as they fell.
Should poison gas be used, this was also to be reported to the control
center. He had to know how to administer first aid as well. Should
there be victims in damaged buildings, it was his function to help
assist them. The air raid warden, although he did not have police
power, usually functioned as part of the police force. Supplement-
ally, the regular police force were civilian auxiliary police appointed
to help enforce emergency restriction on blackout, to guard docks,

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8. CSD, Blockout, 3.
9. Ibid.
bridges, and factories, for traffic duty, to help prevent sabotage, to prevent looting of partially demolished shops, and to assist the necessary in air raids. Bomb squads were organized so that if bombs dropped failed to explode, they could remove them to safe places where they could explode without harm. This work, of course, required the services of persons especially trained for this type of work. But bombs dropped might be incendiary bombs, and it was necessary that there be someone assigned to take care of them. Volunteers included auxiliary firemen and fire watchers. The duties of the auxiliary firemen were similar to those of regular firemen, because wherever fire broke out, it was their duty to go there and help extinguish it. But it was also necessary that there be stationed throughout the area volunteers whose duty it was to watch for incendiary bombs and extinguish them as soon as they were dropped.

It was probable that in case of an air raid that there would be persons injured. The organization of an Emergency Medical Service for Civilian Defense included preparation for this emergency. Although the responsibilities of this organization were not limited to duty only in case of air attack, such service was of major importance. Since it was absolutely essential that the volunteer medical corps function with dispatch and precision, every detail had to be planned and integrated. Physicians were available for duty in every locality.

11. Ibid., 21-22.
12. See CIB, "North Bulletin Number 1: Emergency Medical Service for Civilian Defense."
Borough field units were ready to go where needed. Transportation was carefully provided for; medical and surgical equipment were readily available. These field units, then they arrived on the scene of the disaster, were to go to the casualty stations and first aid posts. It was realized, however, that the medical corps alone could not take care of widespread disaster; they could not be everywhere as soon as they were needed. Until the time of their arrival there led to be others to care for the wounded. Furthermore, the slightly wounded could not necessarily demand a physician's care.

In order that this need might be fulfilled, and in order to supplement the need for nurses, training of volunteer nurses' aides was initiated by the CCO in collaboration with the American Red Cross. But, it was realized, even with this organization, there was still need for the individual civilian to know the fund until first aid treatments. First aid classes were established, and these classes became a focal point of American Red Cross. Cartoons and jokes centered about the helpless volunteer who suddenly had to put a practice splint on a broken leg; the martyrred volunteer who submitted himself to be practiced upon. Manuals on first aid were issued to assist the volunteer in his training. Since, too, it was inevitable that persons would be caught in shattered buildings in case of air attack, it was necessary to have rescue squads whose duty it was to retrieve trapped persons. It was also their duty to shut off...
broken gas, electricity, and water lines. Moreover, if civilian defense were to be effective, there had to be reliable messenger service. It was in this capacity that boys and girls could best serve. Also there were needed adult volunteers with available cars. Furthermore, preparations had to be made to house and feed civilians who could be in areas as a result of bombing. Volunteers enlisted for these various specific duties. Should the enemy use poison gas, the Decontamination Corps would go into action. But if we attack, it would be necessary that demolition and salvage crews be ready to begin clearing the rubble of demolished buildings, and there would be need of road repair crews to restore traffic as soon as possible.

Obviously an organization as intricate as that for civilian defense against air raids could not function efficiently without adequate training on the part of the volunteers. In this capacity the CDW proved to be of excellent value. For every type of service it published formal training manuals, pamphlets, and booklets which were given nationwide distribution. Through the constant display of posters the American public was kept aware of the importance of civilian defense. In every public place there were displayed posters describing air raid signals; within every building and in every place there were posted instructions for reaching the nearest shelter. This particular phase of the informal training of civilians to require certain action in case of air attack was equally as important as that of
Training volunteers for specific civil defence roles, this co-production training program undertaken by the Cowan & Co. Ltd.

It was planned that through this organization and training of civilian volunteers, defense against air raids could be achieved.

Until such time, the exact nature of the threat was determined, it was considered impossible to build shelters, distribute protection, or undertake to rescue civilians from air raids. Or, reasonably it was considered impossible to build shelters, it was that such a project could require the use of critical materials and resources both of which were needed for military service, and they might not be readily available. In case the building of such shelters were unnecessary, however, it was realized that a study of the British shelters would be of value. These structures, of course, had been studied by the committee of military personnel who went to England in 1940 to study the British system of defense. Further study had been undertaken by civilian personnel, including Warbridge. Also there were studies published on the subject of British air defense which, it was believed, would be of help in guiding missions should buildings be required.


15. Correspondence in CO 602/414 (E-11-33), Anti-Aircraft Defense of the United States; CO 602/611, Air Planes, National Defense, etc.

16. See Robert F. Hawley, Architect, Harvard, this study was based on the investigation of structural production to resist air attack in the Metropolitan Borough of Manchester. See also, Curt Architect, Air Raid Defence.
It was realized that for the blackout to be effective it would be necessary for individual homes and public buildings to be equipped with blackout materials. Obtaining this equipment, it was decided, would be the responsibility of the individual, with the result that immediately after Pearl Harbor, civilians were scurrying around trying to buy prewar blackout materials. It was not until Jan. 1942 that the War Department issued specifications for standard blackout materials.

Other standard equipment kept available by the civilian included a tubeful of sand, a staple, a watch, and a stirrup pump. Even the American apartment dweller accepted these items as a part of his standard household equipment. If he had bothered going to the top of certain buildings, he probably would have assured the large sacks full of sand there were standard roof equipment.

Although it was considered inadequate to issue to civilians until the nature of attack was known, it was decided to remove valuable art objects to places of safety. In Washington, Philadelphia, and Boston art museums certain paintings, for example, became unavailable for the duration, or until the danger period should pass.

It was apparent that civilian defense had many ramifications. There was no citizen in the country left untouched by it because there was no living person not susceptible to the danger of attack by air. The fact that the attack did not materialize in no way lessened the importance of the measures of preparation undertaken.

17. ND via FM Release, 18 June 1942.
Although it took Pearl Harbor to make tangible the need for volunteer civilian defense, these volunteers, once raised, were impatient because the ponderous organization could not move swiftly. They were impatient then, the day after Pearl Harbor, they could not secure blockout equipment. The New York Herald Tribune reported on 11 December 1941 that "despite assurances by Louis J. Valentine that the city soon would have a system of air raid sirens potent enough to jolt every citizen into his desk or out of bed," the situation was alarming.

The fourth day of war found few volunteers equipped with as much as a tin whistle in their back. In most cases the extent of this training was this: They had attended a few lectures, jotted down the location of fire plies, public telephones and police and fire alarm boxes along their routes and learned a few fundamentals about first aid.

Their chief grievance, however, was the city's failure to provide a sufficiently loud and distinctive air raid system.

The Washington Daily News reported the next day that civilians were told to put blackout curtains over windows, but the material was not available in the stores. Other grievances included the lack of adequate air raid shelters.

We have the People's Office of Civilian Defense publishing a book which . . . educates air-raid leaders to site gasproof air-raid shelters on their maps. How the correct approaches to any vital air-raid shelter in Washington are the tiny Capitol subway, portions of the Government Printing Office Annex, and a hole in the ground at American
University there were no tests in World War I.

Being a flexible-minded population, however, civilians adjusted themselves before long to the idea of wartime existence and met the situation with predictable humor and complaint. They traveled on trains which had the shades pulled at sunset; they blinded automobiles driving lights at night; they draped clumsy blackout cloth over their windows. While a constant direct or sustained air attack in certain eastern cities, there was fortunately never need for total blackout. Except for practice blackouts, the whole background network for passive civilian defense was like a giant stage prepared for a tragedy never performed.

10. This precaution was undertaken to prevent the silhouetting of ships in the Atlantic hidden then easy targets for submarines.
Chapter III

Civil Air Patrol

A striking example of how a free people in time of emergency can call together its resources to stave off a common enemy, the Civil Air Patrol was organized a week before Pearl Harbor "to mobilize ... resources ... not immediately required in other phases of the war effort." The resources available were surprising. There were approximately 160,000 licensed pilots in the United States and about that many student pilots. Potential volunteers also included engine mechanics, radio experts, photo flyers, and countless persons not trained for any possible type of service. Private owners possessed some 37,000 aircraft. About 1,000 airports were then being used for private flying.

In 1940 and 1941, various private flying groups started organizations along the lines followed later by the CAP. A study and recommendations were made by the Aeronautical Advisory Council of the Department of Commerce. Since the air units of the National Guard had gone on active duty, some of the states began to form new units under the State Guards and others under the state aeronautical commissions. In June 1941, shortly after the CAF had been forced to mobilize ci-

2. Ibid.
vilians for war emergencies, duties, a group of aviation enthusiasts prevailed upon Niello E. Mccarroll, the Director of Civilian Defense, to re-appoint a committee composed of Bill Rob Wilson, Jay P. Connett, and Thomas K. Ruck to plan plans for a Civil Air Patrol. Randall A. Hoyt voted as secretary of the committee. Later Jack Rasmussen was appointed aviation dues to McCarrill to devote full time to this work. By September Director McCarrill was able to offer the Department of Air, Navy, and Coast Guard a plan for the organization of a Civil Air Patrol, which these departments approved early in October. This new organization was to be under the control of the Office of Civilian Defense, but it was to maintain close liaison with the War Department. During the next two months the plan was considered in detail. Early in November a meeting was held with officials from both the Army and the CDS to decide that an agreement of cooperation would be necessary between the Civil Air Patrol and the War Department, and a board of officers was appointed to determine the basic for this cooperation.

On 1 November 1941 the Civil Air Patrol was established by executive order of McCarrill. Wherever distributed by the Office of Civilian Defense a bulletin, Civil Air Patrol, in which was described the purpose, the plan, and the procedure of the organization. Civilian pilots were reminded of their importance to national defense.

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6. See remarks for full text of the letter.
7. This order was rescinded on 9 Dec. 1941 as CDS Administrative Order No. 9.
CIVIL AIR PATROL
America's private pilots are mobilized for war

Today more than 100,000 civilian pilots are at war on the home front. They are the civilian airmen of the Civil Air Patrol, the auxiliary of the Air Force. In their spare time, they fly in formation with their fighter planes, over the sea, over cities, over battlefields. They are the eyes and ears of the military. They are the eyes and ears of the people. They are the eyes and ears of the nation.

The Civil Air Patrol is the air arm of the National Guard, the Air Force, and the Coast Guard. It is the only civilian group that operates under the authority of the President of the United States. It is the only civilian group that operates under the authority of the President of the United States.

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Civil aviation has ever been a necessary influence for air power. The Civil pilot ... has blazed trails, provided the vast majority of airports, conducted a constant accrual of education, ... Grave times have fallen upon us ... control of the skies, rigid discipline among those who visit them, and coordinated traffic in them has become essential to the common defense. 6

Consequently, by the midin of 1941, civilian pilots were kept from being grounded except temporarily until they could submit proof of their citizenship and loyalty. Earlier, it had been the opinion of many Army officers that private flying would have to be discontinued because of the dangers of espionage and sabotage, the traffic lienza to military aircraft, the difficulty of securing pilots by the Air Transport Service, and the shortage of materials and fuel. Persons were considered that the private pilots would undertake the necessary organization, discipline, ... train to overcome these objections. General Arnold approved the Civil Air Patrol on condition that these aims would be taken care of personnel available for military duty could be diverted from the armed forces. The CAP therefore faced the challenge of proving that it could do these things and could, in addition, perform useful services for the war effort, in order to earn the privilege of continued flying.

The organization developed a plan, the lines prescribed by ... Guardians in his initial letter to the Secretary of War. Briefly the plan called for a National Headquarters to be the center of authority.

6. OCTS, Civil Air Patrol (1941).
The entire country was divided into nine regions, based upon the War Department corps areas. From the beginning, however, authority extended directly from National Headquarters to the 43 wings and wing commands. On the day of Pearl Harbor there was a wing commander for each of the 43 wings. (See appendix 4.) Whenever possible, operations were under the control of a wing. For instance, it was obviously desirable that each operation as lost-plane searches or the carrying of emergency supplies be under the control of a wing. On the other hand, Coastal Patrol operations, which extended beyond state boundaries, could be directed most advantageously by National Headquarters. Thus, CAP functions were controlled and directed either by Headquarters or by local organizations in accordance with the nature of the service rendered.

The Civil Air Patrol as an organization owned no property but operated with the equipment and facilities of its members. Normal organizational expense was assumed by the Office of Civilian Defense, whose funds covered the overhead of CAP National Headquarters and limited aid to each "in" headquarters, but gave no financial help to lower echelons. Excesses of operations were either taken care of by CAP members themselves or by the organization or agency for which the mission was performed. For example, CAP members volunteered their service in a sudden local disaster, such as a flood, tornado, or train wreck. On the other hand, the CAP performed regular missions for the

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8. See chart A, following p. 44. This regional system was later to be abandoned.
Army and for certain war plants as well as for the Red Cross and the OED.
For certain of these missions CAP members received allowances for their
subsistence costs and for the use of their planes.

As operations progressed, administrative procedures and policies
gradually took form. Directing all activities from Headquarters was
the National Commander. First to hold this office was Maj. Gen. John
F. Curry. It was under his directorship that the Civil Air Patrol was
officially activated, and it was under his leadership that the wings
and wing commands were organized and progressed rapidly. Because they
were so well established, these wings were unaffected by the change of
national director in March 1942 when General Curry was relieved of his
post in order that he might assume duty elsewhere. Chosen to succeed
him was Erlea L. Johnson who, as State Director of Aeronautics for Ohio,
had organized the pilots of that state for the purpose of defense long
before Pearl Harbor.

Although operations were unaffected by this change in administrative
personnel, that fact did not mean operations were being performed with-
out administrative snags. It must be remembered that operational policy
was not yet clearly established; that there were many ramifications of
the over-all program which had to be considered before any single mis-

9. Assuming the national directorship as a civilian, Commander Johnson
was soon commissioned a captain in the Air Corps and presently
serves in the grade of colonel.
was a communication for Brig. Gen. George E. Stratemeyer from Reed Lans-
dis, the Aviation Aide to the Director of Civilian Defense:

I have been quite careful to avoid bothering you during the present days of stress and strain on your time and strength, but I want you to know that the Civil Air Patrol is going ahead quite rapidly and with less birth pain than I had expected. General Curry seems to be putting Dr. Defoe clear into the shade by delivering forty-eight lusty infants instead of a mere five.

Yet to the military minds these "lusty infants" sometimes seemed like obstreperous youngsters. It was not clear immediately to military men that care had been taken to obviate any conflict or overlapping in military and CAP operations. In addition to this lack of understanding, military officials were given some cause for apprehension as a result of the enthusiasm and impatience of CAP members, who in turn were unable to appreciate fully the importance of observing strictly established military procedures. Referring to a list of personnel in a certain California squadron, General Connolly wrote:

"It was my impression that the main objective of the Civil Air Patrol during the war would be to act as an auxiliary to the armed forces of the United States and that, in so doing, it would attempt to use planes and personnel that could not otherwise be used by the Army or Navy."

Noting the large number of these men who had considerable experience in the air, General Connolly stated that it seemed to him as if "these men might be of greater relative use to the armed forces doing..."

work other than that contemplated for the CAP." The qualifications of those volunteers as well as those from the State of New York—which he cited by way of example—led him to conclude that if the setup in these two states was "indicative of what is being attempted by CAP over the whole United States," it was possible that they were "competing with the Army and Navy for personnel." If these volunteers were within the age limits and had physical fitness, the general felt they could be used to better advantage either in the Army or Navy than in the Civil Air Patrol. If they were not eligible for military service, he believed it probable that they could be used in the Army or Navy for other purposes. "For instance," he wrote, "General Olds is trying his best to get civilian pilots for ferry work and General Weaver has an idea of building up a force of utility pilots in the Army Air Corps." It was suggested that the enrollment of the CAP be looked into with the view to determining whether or not its members might be used to better advantage, and it was suggested further that a policy should be laid down for the future enrollment of the CAP. Civil Air Patrol authorities replied that CAP certainly was not trying to compete with the Army, but rather that its sole purpose was to supplement the Army. Its volunteers were persons not eligible for military service either because they could not serve full time or because they were deferred or rejected by the Army. This reply was substantiated by a memo from Brig. Gen. Robert Olds who headed the Air

12. Ibid.
13. Ibid.
Corps Ferrying Command. "The ADC has had several opportunities to take advantage of the availability of flying personnel as listed by the Civil Air Patrol," he wrote. "This has been successful to a degree, but very often we have found that the personnel are not available except for a portion of the time and therefore cannot adequately come under military control which is definitely required in the activities of the Air Corps Ferrying Command."

Furthermore, CAP motives were mistaken by military officials who believed that members were soliciting missions from various branches of the Army to be paid for with AAF funds. Arrangements had been made whereby the AAF would assume responsibility of remuneration for any CAP services performed for it to relieve military personnel for other duties. A sum of $5,534,400 was set aside as a fund to defray the cost of operations by the Civil Air Patrol for the Army Air Forces that year; yet the expenditures were being made at the rate of $9,000,000 per year. Investigation by War Department officials revealed that field unit officers of the CAP were engaged in canvassing the commanding officers of ground and air units, and requesting their cooperation in utilizing CAP facilities. Units of the CAP throughout the country, it was reported, had been "drumming up a trade with other branches... for services of the Civil Air Patrol to be paid with Air Force Funds."

This practice in itself appears to be extremely unhealthy in
that the initiation of the new Civil Air Patrol is insured
by the desire of the Civil Air Patrol to grow big rather
then the existence of a military necessity for the Civil Air
Patrol service determined independently by the military units
receiving this service. In this case the tail seems to be
preaching the dog.\textsuperscript{16}

In order that these "lusty infants" stop such practices, it was
recommended that requests for use of the CAP be paid for from funds
appropriated for use by the AAF only when such services fulfilled "a
mission normally performed by the Army Air Forces. . . ."\textsuperscript{17} It was not
improbable that their enthusiasm carried CAP pilots to the point of
seeking to press their services on military leaders. That their motive
was one of "arousing the trade" was questionable. Yet, if they had not
made known their availability, it is probable that many missions they
performed—and for which they were compensated—would have been under-
taken by military personnel. It was that these pilots saw a need to be
fulfilled; they had at their disposal the resources with which to per-
form these services; it seemed logical to let this fact be known in
the right quarters.

In a memo to the National Commander, CAP, Major Hoyt pointed out
how, probably, the military viewpoint crystallized:

\begin{quote}
... nearby Army installations had received no information
as to the existence of CAP or what to do about it. So the
only way for the Army officers to know was for CAP people
to tell them. . . . Few officers in Washington knew much
\end{quote}

\textsuperscript{16} Ex, AFEO//Budget Officer\textsuperscript{2}/ to AC/1S, n.d., 26 Aug. 1932, in ibid.
\textsuperscript{17} Ibid.
\textsuperscript{18} Memo for National Commander, CAP by Major Hoyt, 8 Aug., 1944, in
AFHRC files.
about CAP since it was so small and since it was part of
COA. Many of them confused CAP with OAP. So they seldom
heard of CAP unless some problem arose. Thus it was natu-
ral for them to jump at conclusions to the effect that CAP
units were trying to sell their services, tap federal
funds, ride on their Army's coat tails, . . .

Major Hoyt stated further that actually "all they were doing was trying
to find some useful employment for the training they had been urged to
undertake" since "in most areas no missions were forthcoming." The
matter was settled, however, when Commander Johnson forbade CAP members
to approach any officer in the Army with an offer of service. When
CAP service was desired by military personnel thereafter, the request
was made through channels. From a military point of view this method
was obviously more satisfactory since in some instances it might have
been necessary to refuse CAP service had it been offered.

There were, naturally, other problems arising from time to time
concerning the relationship of the Army and CAP. Although they were
not major in character, they nevertheless had to be solved if that
relationship were to be maintained satisfactorily. For example, while
private flying in the interior of the country went on almost as usual,
with more rigid rules as to the guarding of airports and the clearance
of flights, it became necessary before the end of 1943 to ground civil-
ian fliers in a zone about 150 miles wide on the entire West Coast and
in a zone of varying width from Maine to North Carolina on the East
Coast. This naturally led to difficulties on the part of CAP units in
maintaining the interest of their members. The Army, on the other

19. Ibid.
20. Ibid.
hand, was faced with the problem of coordinating all CAP activities.

To aid in this coordination, Brig. Gen. D. H. Connolly, Administrator
of Civil Aeronautics, was appointed Military Director of Civil Aviation.

According to the announcement made on 15 January 1942 it was his duty,
under the jurisdiction of the Chief of Air Staff "to maintain ... direct liaison with the air division of the Office of Civilian De-

fense ... and other civil agencies related to civil aviation."

But his appointment only made the problem of the budget more com-
plicated. Writing to General Arnold a few days later, General Curry

stated:

“For the past six weeks I have been endeavoring to get a
small amount of funds to run our outfit in the field.
Several times we received word that our budget had been
approved and each time the budget people came back for
further specific information. The appointment of General
Connolly to his present position has clouded the issue
very much, and we must start all over again in our efforts
to obtain the money we absolutely need to run the show.

Referring to his efforts to remedy the situation, General Curry
described the conference held that morning with Dean Landis, who re-
quested that "in order to strengthen his position in the budget matter,
I obtain from you a statement that the Army expects to utilize the Civil
Air Patrol in different missions and believes in the value of the organi-
ization of private flying resources along these lines. This you have al-
ready said in your letter of November 10, 1941, but Mr. Landis feels
that he needs additional supporting data at this time."


23. Ibid.

24. Ibid.
General Arnold, viewing the needs in terms of nation-wide defense, took a different viewpoint. He was not sure, he wrote, whether General Curley was referring to an application for funds before the Bureau of the Budget, or before the budget office of the Office of Civilian Defense.

In either case, I do not feel it would be appropriate for me to inject myself into the situation... In view of the 100,000,000 requested by the CGD and now pending before Congress, I would not feel justified in supporting you before the Bureau of the Budget for any additional funds at this time. Neither would I feel it appropriate for me to advise Mr. Langard of the proportion of the 100,000,000 he should allocate to the CAP.

This did not mean that General Arnold doubted that the Civil Air Patrol was fulfilling a valuable function, or that its services should not be fully utilized by the War Department. In fact, it seemed that he could see the value of close liaison between the CAP and the Army even better than could many other military personnel.

He saw places where the CAP could supplement many military activities; he saw where it could relieve the Army of many assignments; it was his desire that this vast potential energy be utilized. For instance, it seemed to him that the CAP could well train volunteer ground observers whose training was the responsibility of the First Air Force. In a memo to General Curley, written in the middle of January 1943, he stated that it had "now become apparent that the Civil Air Patrol possessed a great potential value in training ground observers, flying check-flights for our air defense system, and in the performance of many missions of direct aid to our training and operations. It was

hoped, he concluded, that efforts to weld CAP into a useful service for the military forces would be expedited by all practicable means, since already plans were "being formulated for the extensive use of Civil Air Patrol in connection with Army Air Forces activities."

Colonel Scoville, Director of Air Defense, was appointed to bring about this integration. The advisability of thus utilizing CAP service under military supervision was endorsed by Brig. Gen. St. Clair Streett, who stated that "functioning properly, the Civil Air Patrol should prove of excellent service to the Air Forces, in addition to fostering the flying spirit and training in the country." It was his suggestion that the Civil Air Patrol might be used for the following purposes:

a. Ferrying on short trips of Army air corps personnel for inspection, conferences, etc., where train schedules would cause unnecessary delay and Army air transportation is limited.

b. Flying tracking runs for training purposes in any of the following:
   (1) Air Warning Service
   (2) Anti-aircraft defenses, searchlight, gun, and sound location tracking exercises
   (3) Interceptor plotting exercises

c. Transportation of military survey personnel where landing areas required in small fields or pastures, inadequate for the operation of Army aircraft.

d. Transportation of military personnel to and from the scene of a crash, where landing areas adequate for Army planes are not available.

27. Ibid.
g. Assist in search for lost or crashed aircraft and personnel, using their advantage of low slow flying over the critical search area.

i. Shuttle mail service between headquarters where no air mail service exists and train schedules are complicated and infrequent.

j. Ferrying of medical personnel and supplies under emergency conditions.

k. Preliminary air orientation of ground troops scheduled for training as air observers.

l. General courier and special messenger services.

The soundness of General Streett's concept of the best possible uses for CAP was indicated by the fact that eventually every one of these suggestions became a part of CAP operations. Furthermore, it was the opinion of General Streett that "the decision to make any of the uses of the CAP set forth above, is in my opinion one for the War Department." His opinion proved to be the opinion of other military officials because in a little more than a year this vast network of CAP was to become an auxiliary of the Army.

But understandings reached in the early part of 1942 were tentative. At that time, although operations continued, there were always problems confronting the Civil Air Patrol, the most delicate of which was the lack of complete coordination between the military and the civilian points of view. The general situation regarding CAP six months after its inception, was well summed up in the following communication:

"Inasmuch as membership in the Civil Air Patrol is strictly voluntary, as in other civilian defense units, no provisions

28. Ibid.
have been made by the Air Department to concentrate those who join the Civil Air Patrol for the time and equipment expended in organizing and training their units. However, if and when any member of any C.A.P. unit is called upon to perform a mission for the Air Department, he will be compensated not only for his time, but also for the use of his aircraft and for the gas and oil consumed while performing the mission.

The military point of view toward C.A.P. was naturally colored by the effectiveness of its operations. That effectiveness could not be determined immediately. The general consensus of opinion seemed to be, however, that once the C.A.P. was militarized it could function smoothly and most of its problems could be automatically solved. Such a re-organization was done by Lt. Gen. Ken Hearne early in June 1942.

"In case the Civil Air Patrol were given definite missions for active defense of the airfields and landing areas and were trained in the execution of these missions the protection of the landing fields and areas in the Central Defense Command could be materially increased."

But until it was militarized, the fact remained that whenever any problem arose involving Civil Air Patrol versus the Army, it was the effectiveness of C.A.P. rather than the Army which was scrutinized. During the summer of 1942, as one example, the Coastal patrol, that unit of the C.A.P. which had been organized to fight the submarine menace, was at the height of its operations. It was inevitable that the need for priority on parts would become more and more urgent. If these parts were directed to the Civil Air Patrol, it was felt by Army officials that the Army would be deprived

accordingly. Civil Air Patrol leaders believed that the organization should be discontinued rather than be left to wear itself out. The military reaction was summed up by General Connolly in a communication for Col. A. I. Ennis: 31 "...are not, as I understand it, interested in the CAP as a training ground for future work in the AAF. We are interested only in using the present asset as long as it continues to be an asset. Then the present planes become inoperative due to lack of spare parts and due to wearing out, this will cease to be an asset."

The Army, he maintained, could assume no responsibility whatsoever for furnishing spare parts, for maintenance, or for replacements. The manufacture of many of the types of planes was being discontinued by the factories, and General Connolly pointed out that these planes "could only be replaced in large numbers by those of the Army type and at the expense of the procurement program of the AAF."

In order that the two points of view be either reconciled, or the basis for priority determined, it was recommended by General Arnold that there be an investigation to decide "whether the CAP will be retained in its present status or not." 33 It was decided, consequently, that since the Navy was not ready to assume the responsibility for Coastal patrol activities, the CAP should be given priority on the needed parts so that it might continue operations. But this was only one instance of the Army adopting its viewpoint to meet that of a civilian agency. It was obvious that basically many officers considered

32. Ibid.
33. SCR, 53/15 to AO/1.3, 2-3, 12 Nov. 1942, in ibid.
the CIP a minor competitor rather than a valuable ally.

In the other hand, CIP members, although conscious that flexibility was their strength, felt that it was they who made every concession, every adjustment to the Army. For to the Army was an impersonal system; and a system could not appreciate the value of individual effort or the degree to which an individual must adjust himself. Probably the most crucial part of the individual's relationship with the Army resulted from his conviction at times that the military mind was simply unaware of the potential value of the Civil Air Patrol or of the circumstances under which it operated.

CIP pilots knew from the very beginning that they were entering the organization voluntarily; that they stood no chance of draft deferment for such activity; that they were responsible for all their expenses including those for uniforms and training. If they had planes to rent, they were given no guarantee of priority on parts. But in the beginning the impact of such regulations was softened by the initial enthusiasm with which civilian pilots met the national crisis. The process of draft deferment did not assure the same proportion as that of priority on parts, but it was felt by CIP leaders that lack of deferment often led to a hungering of the organization's operations. This was especially true in the case of Civil Air Patrol members who often had left jobs and signed up for the duration. For example, it did not seem fair to members that, since they were giving their time and wearing out their own aircraft for use in national defense, they should not even be allowed to replace these parts so that they might continue to work for national defense. It simply
did not make sense to them that they should have to encounter stone
walls, especially since they were relieving military personnel for
other duties. Furthermore, they felt that if military personnel had
been operating the planes, spare parts would have been forthcoming
as soon as the need arose. Finally this problem reached such pro-
portions that General Commander Johnson recommended "that CAP . . .
be dissolved at once and not permitted to wear itself out."

The initial problem which confronted Coastal Patrol members was
that of whether or not they were to be allowed to carry bombs.
Initially it was the function of the CAP to locate enemy aircraft
and report their location immediately to the proper military forces,
but when submarines escaped before Army bombers arrived on the scene,
civilian pilots felt that their efficient work was being nullified by
the unwillingness of the Army to equip them with bombs. This grievance
was removed in May 1942 when CAP planes were equipped by the Army to
attack and destroy enemy submarines.

Another problem immediately took its place. For although engaged
in bona fide combat operations, CAP fliers were not members of the
armed forces, and under the terms of the Hague Treaty there was some
question as to whether or not they should be allowed to carry weapons.
Should anything happen to their single-engined planes and they be
captured by enemy submarine crews, they were liable to immediate exe-
cution. Once their planes were equipped with bombs and bomb racks,

34. Memo for 10/13, 4-3 by D3/13, 12 Nov. 1942, in NAG 324.5 A,
Independent Organizations.
these volunteers ceased to be civilians engaged in measures of passive defense; instead they were civilians performing active defense service. In fact, they could even be considered as being engaged in offensive action once they dropped a bomb. 35

All factors taken together added impetus to the idea that the Civil Air Patrol should be militarized. But while official action was being considered, these details, gnawing always at the morale of members, had eaten so deeply into the CAP that the whole structure was ready to collapse. Indicative of the situation was the following report in a popular magazine: "Among all the nation's weapons against the axis the Civil Air Patrol has been completely unsung and ... unhonored. Though nothing was admitted officially, a complete overhauling of CAP ... [is] in the making ... to take the CAP out of OOD hands and turn it over to the Army in toto." Definite military plans for this reorganization, in fact, had been seriously considered as early as 1942 although there was a minority of officials who did not concur with the idea. This nonconcurrence was expressed informally earlier by General Connolly, who had remarked that if CAP personnel and material were taken into the Army there would result "in the not too distant future ... a perfectly impossible situation." 37

Nevertheless events in the ensuing months had proved the necessity for reorganization and on 11 December 1942 the AAF Headquarters Office of

35. See correspondence in AAG 324.5, Civil Air Patrol, for complete discussion.
37. Memo for Col. J. L. Ernis by Gen. Connolly, 7 May 1942, in AAG 324.5, Civil Air Patrol.
Management Control was directed "to take necessary action to carry out the recommendation approved by General Arnold that the AAF take over C-1P 'lock, stock and barrel!'" In February 1943 the War Department Bureau of the Budget informed that:

If the Civil Air Patrol is transferred from the control of this office of Civilian Defense to the Army Air Forces, we propose to continue all operations performed for the Army Air Forces practically in status quo, with the exception that the antisubmarine patrol will be decreased as combat aircraft of longer range become available for use of our Anti-Submarine Command.

On 29 April 1943, almost a year and a half after its inception, the Civil Air Patrol became by presidential order in auxiliary of the Army. CAP enthusiasm soared, but only temporarily. Members of the organization were chafing for action the moment the ink had dried on the executive order, and nothing happened. Obviously the motive for transfer had been misinterpreted by CAP members. They did not comprehend that, from a military point of view, the transfer was for the purpose of dovetailing CAP needs and operations with those of the Army rather than for the purpose of increasing the scope of CAP activities.

From a military viewpoint, however, the transfer did not effectively clarify the status of the Civil Air Patrol. The reason for this confusion was that by the summer of 1943 the Navy was ready to assume responsibility for coastal defense, and consequently there would be no further need for the Coastal Patrol. Since, however, in the mind of

38. Daily Log, 4-4 Division, 11 Dec. 1942, in office files of the Air Adjutant General, "Daily Log, 4-4 Division."
40. See Appendix 5 for text.
the public, it was not always realized that the Coastal Patrol was only one unit of the CAP, the term was often used interchangeably. Thus rumors spread to the effect that the CAP was being discontinued, and these rumors following so soon upon the transfer of the CAP from the Office of Civilian Defense to the War Department, added to the state of general confusion regarding the status of the Civil Air Patrol. In fact, when these rumors reached the War Department, certain officials were forced to ask for a clarification of the situation. The Adjutant General requested a report "as to the status of the Civil Air Patrol program, whether still active or in the process of being liquidated." 41

In reply it was explained that activities of the CAP were continuing "under the supervision and control of Technical Services Division of the Office of Assistant Chief of Air Staff, Operations, Commitments and Requirements" and that "Further expansion of . . . activities" was "presently under way" and there was "no prospect of Civil Air Patrol being liquidated." 42

Officially, however, it had been decided to withhold public announcement of Coastal Patrol inactivation until such time as the announcement of the discontinuance of the Antisubmarine Guard was released. It was believed that if the two announcements were made simultaneously, with that concerning the Civil Air Patrol subordinated, civilian morale would be better sustained. Also it was decided to

41. AG to OS, AAF 12 Nov. 1943, in AG 324.5 A, Independent Organizations [copy apparently misdated].
42. 1st Ind. (AG to OS, AAF 12 (? Nov. 1943), Col. R. H. Hayes, Cas., to AG, 6 Nov. 1943, in ibid.
refer to the inactivation in terms of a transfer rather than as a
discontinuation, for it was realized that at this point civilian
morale should be carefully sustained. As the Navy gradually took
over Coastal Patrol activities from the CAP, certain of the released
personnel were employed in other ways. One such assignment was that
of assisting with the aviation cadet recruiting program. Results
were so successful that the CAP was soon given added responsibilities.
Almost imperceptibly at first, and then with rapid consensus, the degree
of enthusiasm began to mount again. Its feeling of futility sloughed
off, the CAP felt that as an organization it had finally come of age
in the military mind. Then, a little later, it was informed that the
Army was turning over 202 planes for use in recruiting activities,
morale skyrocketed again, for this was the first tangible evidence
that the CAP had not been forgotten by the Army.

By the end of 1943 members of the Civil Air Patrol had finally
achieved a satisfactory relationship with the Army. From the CAP point
of view, this relationship had not come easily, but once it was estab-
lished, a unity of perspective could be constantly maintained. With
the official reassurance that there was "no prospect of Civil Air Pa-
trol being liquidated," CAP members could concentrate upon operations
rather than upon annoying administrative details.
Chapter IV
CAP OPERATIONS

Coastal Patrol

The most spectacular and the most dangerous of all Civil Air Patrol operations were those of the Coastal Patrol. Organized as an experiment to help the Navy fend off the submarine menace, this patrol functioned for a year and a half. The experiment was undertaken because of the frequent tanker sinkings which were occurring in the early part of 1942. Since at that time the Navy was too crippled to meet the submarine menace, owners of those tankers turned to the War Department for help. Defense against the submarine was not an Army function, and the Army was not prepared to furnish either planes or personnel for such defense. One ready source of help available, however, was civilian aviators and their planes. Although the Army appreciated the eagerness with which civilian pilots in the CAP had offered their services, it was skeptical of the ability of these men to perform this particular mission. But there was no alternative. Consequently, that unit of the CAP called Coastal Patrol was organized. Two bases were established immediately on the Atlantic Coast where offshore submarine activities were thickest, and civilian patrol of these waters was undertaken as a 30-day experiment. While this experiment was under way other bases were established and the period of operations extended to 90 days. At the end of 90 days operations were extended indefinitely.
When organization was complete there were 21 bases extending geographically from the Canadian border line to the Mexican Gulf (See Appendix 7 for list of bases). Volunteers manning these bases brought with them their own equipment and were responsible for the maintenance of the bases as well as for operations.¹

It was soon realized, however, that the smallest types of planes could not be used satisfactorily because they were too fragile. Consequently, they were used for flying inland missions, and those in excess of 90 horsepower were reserved for Coastal Patrol flights. By using such planes as the Stinson, Fairchild, Waco, Beechcraft, Howard, and Cessna, it was possible to extend regular patrol from a 15-mile offshore patrol to a distance of more than 50 miles.

Each mission was undertaken by a pilot and an observer. The remaining space in the plane was used for radios, for lifesaving equipment, and for extra fuel. Leaving its base for regular patrol duty, each plane operated according to a prearranged schedule. In some instances the Coastal Patrol assumed full responsibility for offshore patrol. At other times it alternated with Navy planes, each patrolling for two hours at a time.

In the beginning Coastal Patrol planes were not equipped with bombs and depth charges. Since there were Army and Navy bases located near enough so that help could reach any given point within 10 or 15

¹ Similar operations were not undertaken on the West Coast. They were not needed because there were few tankers there and only an occasional submarine. Sea lanes extended much farther out than in the Atlantic, and any patrol that civilian single-engine planes could offer would have been ineffectual.
minutes, the procedure was for the Coastal Patrol plane, once it had spotted the submarine, to radio the nearest base for help.

But operations did not always proceed so smoothly as planned, and several times help was not forthcoming. A submarine would escape unharmed while the Coastal Patrol plane circled helplessly above it. Although pilots often felt that under those circumstances all their efforts were wasted, there still remained some question as to their right to take offensive action against an enemy. In one instance, for example, a CAP plane came upon a submarine off the coast of New Jersey. Because the enemy never knew whether or not civilian planes carried ammunition, they usually dived whenever a plane came into sight. In this particular instance the submarine dived so fast into shallow water that it hit the muddy bottom and stuck fast. Immediately the plane radioed for help and continued to circle overhead keeping watch. It watched the submarine struggle for almost an hour but no help came. Nor had help arrived when finally, free and unharmed, the submarine escaped.

Probably the incident which more than any other caused the Army to equip these civilian planes with depth charges occurred when a Coastal Patrol observer took the picture of a submarine which escaped. This observer happened to be a photographer and took along his camera. One day his plane came suddenly upon a submarine idling in the sunlight. Men were on deck taking sunbaths. Laundry was spread across the deck. The scene indicated that the crew was lounging at this spot not far

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2. Interview with Capt. H. A. Hawgood, Office of CAP, AC/AS, O0&R, 1 Apr. 1944.
from the American shore without feeling itself at all in danger of at-
tack. When the crew spotted the plane, however, there was immediate
panic. The picture taken just after the enemy realized that a plane
was near, caught the individual expressions on faces. Before help
came, the submarine escaped.  

In May 1942 bomb racks were added to aircraft. In one descrip-
tion of how they came to be added, the following account was given:  

Frantic at seeing subs get away before the big bombers
could come, the CAP flyers began to plead for something
to drop on the enemy. Like the Coastal Patrol itself,
it seemed like a screwball idea. But it worked.

Specially designed bomb racks were fitted to the lower
longerons. Bomb sights were improvised out of scrap ma-
terials... bombs... [were dropped]... from the
little planes, staggering over the water with loads far
beyond anything they were designed to carry.

Although the public was not officially made aware of the situation
regarding the carrying of ammunition, there were always rumors. Nat-
urally such an organization could not remain anonymous, especially when
all the people back home knew that their local CAP members had been
chosen for patrol duty against the submarine. "After several months
of close-mouthed secrecy," Flying magazine reported, "the Army Air
Forces have lifted the lid enough to afford a peep at the most
spectacular and directly war-useful function private flyers are con-
tributing to victory... [and] the Army let it be known that CAP

3. Ibid.
4. Maj. George Haddaway, "Patrolling with the CAP," in Plane Talk, I,
   No. 4 (Nov. 1943), 10.
planes on submarine patrol were not defenseless."\(^5\)

Officially in the initial planning it was decided by CAP National Headquarters that Coastal Patrol units would be organized in the following manner: \(^6\)

\[\ldots\] all CAP Coastal Patrols will operate directly under the command of National Headquarters and all directives, orders, and instructions issued to said Coastal Patrols, except instructions issued thereto by the First Air Force to meet any special tactical situations that may arise, will be issued by this Headquarters. Coastal Patrol Commanders will receive instructions from no other sources. Commanders of all Coastal Patrols will be appointed by the National Commander.

Although CAP National Headquarters, working in cooperation with the Army, determined the scope of operations for Coastal Patrol units of the Civil Air Patrol, it was the Navy which decided where bases for these operations would be established. There its responsibility ended, however, and the members of Coastal Patrol were responsible for the building and maintenance of these bases.

When, for example, the Navy decided that a Coastal Patrol base should be established in Parksley, Va., Coastal Patrol members set about that task immediately. The crew, moving from another base, took its own equipment. It had a small sum of money given by owners of the tankers; otherwise it was on its own. There had to be first of all a flat field for landing. But the only field which could be used at all had a house in the middle of it. The solution seemed to be to buy or

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lease the field and tear down the house. But the farmer who lived
there said he could not rent or sell the place because he did not
own it, and even if he owned it he would not dispose of it because
he liked living there. The crew set about persuading him that there
were other places he would like just as well. Finally he agreed that if
they would find him another place to live, he would move. Members of
the Coastal Patrol then approached the lady who owned the place. She
did not mind renting but only on condition that the tenant be moved
into another house which would be satisfactory to him. When such a
place had been found, they had to move all his belongings to the new
place. This included chickens and livestock as well as his household
belongings. But the business transaction was not yet finished. The
farmer had planted a potato patch. It could not be moved, so he had
to be paid for it. He also had a strawberry patch planted. Straw-
berries would bring a good price on the market. They brought a good
price from Coastal Patrol members. When the farmer had moved, the men
were able to tear down the house. They now had a field. But they also
had to have flight strips on either side. There were potato patches
and strawberry patches planted on either side. These also brought a
good price from the Coastal Patrol members. The field and the strips
were bumpy and unsatisfactory, but the men appreciated only the fact
that they had "bucked up against stone walls" and they had removed
them. They had a field. The next step was to build living quarters.
Crude and uncomfortable, they were located at the very edge of the field.
But the men found no fault with them. They had contrived a base from
nothing. 7

7. Interview with Capt. Hawgood, 1 Apr. 1944.
It was because these men realized the importance of their mission that they were willing to make such sacrifices. Yet seemingly the degree of their importance was not always recognized by Army and Navy officials. This was indicated by the fact that military personnel questioned whether or not operations warranted priority being given on replacement parts to keep Coastal Patrol planes from wearing themselves out and the activity thus being terminated. Because operations had been undertaken on a definitely experimental basis and then extended, it was felt that before priority was given, the effectiveness of these operations should be determined. Accordingly, investigation was made by Army and Navy officials late in 1942. On 12 December 1942 the following recommendation was made by the Navy:

Pending a further increase in the number of Army and Navy aircraft available to the Sea Frontiers, it does not appear advisable to discontinue the Civil Air Patrol. However, the difficulties of maintenance and supply for these aircraft which you mentioned are such that it appears necessary to curtail their operations inasmuch as practicable. Instructions to this end are being issued to the Commanders Eastern and Gulf Sea Frontiers.

I believe that the increase of aircraft in the Sea Frontiers will permit further curtailment of Civil Air Patrol operations during the second quarter and possibly discontinuance of their operations in Sea Frontiers about 1 July, 1943.

Announcement of this intention could not be made by Army and Navy officials. The effect of the discontinuance of Coastal Patrol activities upon morale throughout the entire Civil Air Patrol was incalculable since this was a volunteer organization performing important services, the continuance of which depended upon the enthusiasm and the willingness of its members to make sacrifices. In addition,

S. Memo for AAF Liaison Officer by P. N. L. Bellinger, 12 Dec. 1942, in AAG 324.5A, Independent Organizations.
it was discovered that the Navy would require some time to establish its own patrol, and consequently the Coastal Patrol operations would have to be continued and gradually tapered off as the Navy completed its arrangements for protection of the coast. Nevertheless Coastal Patrol members were aware that their activities were being curtailed. No satisfactory explanation of the Army's plans or intentions was given, with the result that morale declined.

When in September members learned they were to be officially relieved of duty, this knowledge was still a secret matter. Still dubious over possible effects, Army and Navy officials withheld public announcement. It was decided to withhold it until such time as the announcement of the termination of the Antisubmarine Command was made. This announcement was not forthcoming, however, until 10 December 1943.

In retrospect the impact of total Coastal Patrol operations is tremendous. Within the period of a year and a half it had flown 86,685 missions which consumed 244,600 hours. Activities had ranged from the reporting of vessels in distress or the presence of enemy mines to the actual dropping of bombs on enemy submarines. Specifically, it reported 91 vessels in distress and the presence of 17 floating mines. It had spotted 173 submarines and was credited with sinking or damaging at least two submarines in addition to those sunk by Army or Navy planes called by CAP. In rescue missions it was responsible for 363 survivors and for recovering 36 bodies. During that year and a half it reported 836 irregularities at sea and made 1,046 special investigations at sea and along the coast line. The Coastal Patrol, at the request of the Navy, had performed 5,684 special convoy missions. On these missions 26 CAP members lost their lives and 7 were seriously injured. Also, 90
planes were destroyed.

Yet no catalogue of statistics, no matter how complete, can recapture the color and the overtones of these activities. It must be remembered that each of 241,660 hours was flown by some civilian pilot who went willingly to his task in a fragile plane which had against it all the odds of both nature and the enemy.

The Navy as well as the Army naturally was not unaware of the gargantuan undertaking on the part of these civilians or of the probable resulting disaster had they not been willing to volunteer their services. In appreciation of these missions Admiral King stated:

I request you to express to them a 'well done' for their enthusiastic, loyal and constant cooperation in combating the submarine menace, patrolling our coastline and assisting in the locating of survivors and ships in distress.

Southern Liaison Patrol

It was the mission of the Southern Liaison Patrol unit of the Civil Air Patrol constantly to guard the international boundary line between Mexico and the United States, watching for signs of enemy installations, for suspicious activities, or for the presence of suspicious persons near the border. It stood ready if necessary to cooperate with army ground troops. Operations, begun 3 October 1942, extended at first from the Gulf of Mexico to Douglas, Ariz. The bases and their sub-bases were established in Texas. One was at Laredo with its sub-base at Del Rio, the other at El Paso with its sub-base at formerly.

In contrast with the Coastal Patrol, Southern Liaison Patrol could use small planes to better advantage than those in excess of 90 horsepower. The smaller planes were safe for the type of mission they performed as was indicated by the fact that at the end of 1943 there had been no fatalities and no personnel seriously injured, as contrasted with the 26 fatalities in Coastal Patrol. Also in contrast with Coastal Patrol, Southern Liaison operations were performed with a minimum of friction with Army officials. It was, in fact, at the suggestion of the Commanding General of the Southern Defense Command that operations were first undertaken. With the request of the Southern Defense Command that it be given operational control of a patrol to be organized as a unit of the CAP by the Office of Civilian Defense, there was fostered a very close relationship between the Southern Defense Command of the Army and the Southern Liaison Patrol. Operating under such favorable circumstances the southern CAP unit was able to maintain a high degree of efficiency. As of July 1943, for example, it had since its inception reported more than 1,200 suspicious aircraft, signals, markings, or unusual activities. It had flown 1,927 routine patrols and 520 special missions. Nearly 100,000 miles had been flown by a staff of 130 men flying 32 planes.

The major defect of this patrol was that operations were limited to that area which came under the jurisdiction of the Southern Defense Command. The Fourth Fighter Command, that part of the Western Defense

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Command to which was assigned the duty of border defense in the West, did not want civilian patrol aid. It felt that civilian planes would confuse ground observers who would be unable to identify them. Although the CAP had no desire to duplicate services, it felt nevertheless that this was a type of mission which it could undertake advantageously and thus relieve Army personnel and material for other duty. The Civil Air Patrol suggested, therefore, that if this were the chief objection, that it assume responsibility for training ground observers within the patrolled areas to recognize CAP planes. In this way observers would withhold all reports of the CAP aircraft and thus avoid swamping information centers with needless reports. It suggested further that its flight plans could always be filed through the Civil Aeronautics Administration at the time of each flight and that a CAP liaison officer could be maintained at the San Diego Information Center to identify flights of CAP planes if ground observers were unable to do so.

After discussions in which these suggestions had been offered, the IV Fighter Command issued the following statement:

This Command has no objection to operation of the Civil Air Patrol along the Mexican Border within the Western Air Defense Zone if its operations will be beneficial to the Southern Land Frontier Sector and if the operations will not interfere with the proper functioning of the Aircraft Warning Service.

Accordingly, patrol was extended from Douglas, Ariz., to the Pacific in September 1943, almost a year after patrol of that portion of the border extending from the Gulf of Mexico to Douglas had been undertaken. By that time the mission of the Fourth Air Force had changed since it was believed that the threat of air attack had passed. There could be, consequently, no overlapping of duty if CAP operations were extended to the Pacific Coast. With the extension of the Southern Liaison Patrol to the West Coast, it was necessary to establish two more bases. Located in Arizona, one was at Nogales with its sub-base at Douglas and the other at Jacumba with its sub-base in Yuma. That made a total of four bases and four sub-bases for the Southern Liaison Patrol.\textsuperscript{13}

While it was true that the Southern Liaison Patrol was performing a most necessary mission, which relieved Army personnel for other duties, it was nevertheless a routine patrol. Yet operations were not monotonous. Possibly one reason was that there was not a pre-arranged method by which the observer could always spot an out-of-the-ordinary situation. Although it was obvious that he could detect an activity such as that of a signal being given from an isolated spot, it took more than observation to know if the occupants of a certain car on a highway were engaged in fifth-column activity. But once the pilot and observer had been assigned the task of following a specific car, the matter became merely one of routine.

13. Historical Reports, CAP, 1943, in AFIHI files.
Not being always forewarned, however, the patrol personnel had constantly to be on the alert for any telling detail. In one instance a CAP observer spotted two suspicious looking men, apparently Japanese, on the Mexican side of the border. They were obviously heading toward the border line. The only distinguishing detail of their appearance was that one of them wore a black necktie. The pilot radioed the nearest Army base and soldiers were immediately dispatched to the border line to be on the watch for two suspicious characters who might try to enter the United States. In due time the men reached the boundary and tried to enter the country. Records do not indicate that these men were actually fifth columnists, but the important aspect so far as the Civil Air Patrol was concerned, was that the illegal entry had been checked.

That there was little variation in type of operations did not mean, however, that there was little actual accomplishment. Illustrative of activities was the operational report submitted for the week of 18 September 1943. Performing operations that week were 137 persons and 39 aircraft. There were accomplished 11 special missions and 76 routine missions. These operations consumed 502 hours of flying time. As a result of these activities the positions and movements of three suspicious aircraft had been reported, 11 suspicious signals or markings had been observed, and 109 unusual activities were reported.

Because operations were so unvaried, it is sometimes easy to lose sight of the piling up of hours and missions performed. From the beginning of its operations until the end of 1943 Southern Liaison had flown 24,197 hours. It had flown 3,751 routine patrols and performed 185 special missions. There had been reported as a result of these operations the presence of 143 suspicious aircraft. Three hundred eighty-two suspicious signals or markings had been observed and reported. Reports on unusual or out-of-the-ordinary activities totalled 4,973. Yet during all these operations there had been only 49 forced landings and 12 planes lost. There had been no fatalities and no personnel seriously injured.\(^{16}\) It is, of course, impossible from a military point of view to evaluate the importance of these "suspicious signals or markings" or to determine exactly what constituted an "unusual incident." Nevertheless it was necessary that border patrol be maintained in wartime, and the CAP had, accordingly, released military personnel and materiel for other wartime needs.

**Other Patrols**

There were certain other patrols the functions of which were so localized that there was no need for directive authority to be extended beyond the local wings. By the end of 1943 the potential value of such local patrols had not been fully utilized throughout the country although activities had been established to meet the needs peculiar

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to certain areas. Although full utilization had not been effected, it was realized that once patrols were established they would be useful in peacetime as well as in time of war. The levee patrol, for example, established to function in floodtime on the lower Mississippi would be important whether the country were at war or not. Since the need was local there was no reason why CAP National Headquarters should be involved in this patrol. Arrangements were made accordingly between the states involved and the local wings of the CAP. An ice patrol flown along the Great Lakes area during the spring of 1942-1943 was likewise seasonal and localized geographically. The Michigan wing maintained for the Coast Guard a patrol throughout the navigation season.

Forest Patrol, established in areas throughout the country by local wings, is again representative of patrol missions undertaken by local directive authority of the Civil Air Patrol. Since the need for forest patrol, like that of the levee patrol, was not nation-wide, there was no reason for its directive authority going beyond its local wing. In the first place, there were only certain areas in the country where this type of patrol was needed. In the second place it was a seasonal need only. Furthermore, it was a need arising initially from a natural danger rather than from war. Because of war, however, need of forest patrol was more acute than ever because of the ease with which saboteurs could operate. If fires spread, soldiers in training at nearby Army bases would be summoned to help fight them, and this would interfere with their training. Furthermore, the civilian population would be confused, and in this confusion the enemy could proceed with other plans of sabotage. This was, of course, in addition to the actual loss involved should fires break out.
While in peacetime there had been local personnel to meet these
needs, a severe manpower shortage developed as a result of the war.
Typical of the resulting situation was that of New York State. At the
official inaugural ceremony of a Forest Patrol in the State of New York,
Commissioner John A. White stated: 17

... The manpower shortage has affected us. Men have left
our service. We have been unable to find adequate replace-
ments. There are critical areas in some of the forest regions
of our State. Because of the vast lumbering operations and
the manpower shortage, they are real danger areas.

Although there was no standardized method of forest patrol, in
all areas operations followed substantially the same general pattern.
The procedure used in Ohio was to have regular patrol above the danger
areas. When a fire was spotted, the plane flew to the nearest fire
warden post which was identified by a number on the roof. The pilot
dropped his message in a cardboard container to the ground. The
warden signalled his reply with flags. If the warden could not go to
the fire, the pilot would fly to the next post and drop another mes-
sage. Indicative of the success of these patrols was the fact that in
1942 Ohio had the lowest number of forest fires in years and has since
maintained a good record. The same procedure was used in the State of
New York. Here the local Civil Air Patrol wing working in cooperation
with the State Conservation Commission was able to maintain direct con-
tact by radio between planes and fire towers.

After a forest patrol was organized in a state, its operations proceeded along routine lines, but the initiation was usually an elaborate one with an inaugural ceremony. In New York State, for example, the first flight was made by CAP Pilot Johnson Stewart and Observer Phyllis K. Ingram. It was made without mishap. Afterward an elaborate ceremony took place at the Massena, N.Y. airport. At this time the peacetime possibilities for forest patrol by Civil Air Patrol pilots were discussed.

The inaugural marked the beginning of what may well be a National postwar undertaking for CAP. ... National Headquarters and New York State authorities are watching this experimental patrol with great interest since its success will undoubtedly influence future developments of this type of state assistance throughout the country.

Similar ceremonies were usually conducted at the inauguration of local wing patrols.

Each wing and each unit of these local wing patrols was individualized by its own peculiar differences. Of all Civil Air Patrol wings, however, probably the most unusual was that in Nevada. The pilots had few planes to fly, but they organized large cavalry and motorized units, both of which were very effective on searches for lost planes in the mountains.

18. Ibid.
19. This information supplied by Major Kendall Hoyt, CAP.
Chapter V

SERVICES

Army Courier Service

Civil Air Patrol services extended themselves across the entire land. A vast arterial network, they sprang from no central source, served no central cause beyond the ultimate one of national defense. It is impossible to categorize these services either organizationally, operationally, or geographically. CAP members served both Army and industry; they served with and without remuneration. Running the gamut of emotional experience, they rushed blood plasma to scenes of disaster; they became skilled promoters for the recruiting of Army aviation cadets at state fairs. In California they were called upon to clear a rice field of ducks. In North Carolina they tracked a wife slayer across the entire state. They rushed a baby with an upside-down stomach from Des Moines to Buffalo for an operation. For the Army there was developed a network of courier services "maintained to carry emergency shipments and mail between Army posts."

Discussions for the development of this service were begun as early as the spring of 1942. There were, it was realized, various types of courier services which could be performed for the Army. Minor objections raised were applicable to utilization of the CAP rather than to

the establishment of courier service as such. For instance, it was pointed out that it was inadvisable for civilian planes to fly over actual danger areas such as the proving ground atdyn Field. Also it was inadvisable to interfere with the aircraft warning system, and interference would be unavoidable if civilian planes were flying all over the country. When the CAP volunteered its services to the Air Service Command and the Ferrying Command, the Chief of the Air Staff felt that "the present level of Civilian Air Patrol Organization" was unfavorable for duty with the Ferrying Command and concurred with the Ferrying Command which recommended that "no effort should be made to secure units from the Civilian Air Patrol, but that individuals meeting specifications should be employed on civilian status for ferry work." One reason for this recommendation was that many members could serve the CAP on a part-time basis only, and duty for the Ferrying Command and the Air Service Command would require full-time service. Yet these were actually minor considerations, and by the autumn of 1942 the Commanding General, Second Air Force requested that an experimental Army courier service be inaugurated for the state of Washington. This service, established in September of that year with the approval of the Commanding General, AAF, was for the purpose of carrying articles and personnel between sub-depots and dispersed airfields. Missions were so successful that operations were extended to 15 states in which the Second Air Force had depots. By the beginning of 1943 there were approximately 150 planes being used, an average personnel of 190, and

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an average of 7,500 miles being flown each month. 3

Some such service was badly needed for connecting the widely disper-
sed Army establishments in the West. Operations expanded rapidly
and by September 1943, National Commander Earle Johnson reported that
CAP planes had flown 5,500,000 miles for the Second Air Force, had
carried 1,722,722 pounds of cargo and 114,703 pouches of mail. 4

Less spectacular, but just as significant in this pioneering stage,
was the CAP service rendered to the First Air Force. In the fall of
1942 it was requested by the Commanding General of the First Air Force
that the Civil Air Patrol "station one plane at each of seven Eastern
Army depots to be used for the carrying of miscellaneous small cargoes
of critical materials at the direction of these various bases." 5 Acti-
vated by the CAF on 1 December 1942, this service also proved to be
successful, and by the beginning of 1943 there was an average of seven
planes and seven personnel flying about 400 miles per month. By 15
October 1943, the Civil Air Patrol, working in direct cooperation with
the Headquarters of the I Air Service Command, had "furnished personnel
and aircraft for the carrying out of Courier Missions and provided air
transportation to the six Sub-Depot Commanders for the purpose of pick-
ing up and delivering aircraft parts to place airplanes in service, and
such other material pertinent to the Sub-Depot operations." 6 CAP planes
had flown, as of that date, 2,298 hours and performed 2,051 missions.

3. Statement for the Bureau of the Budget, through Col. Robert Harper,
by Col. Earle Johnson, 1 Feb. 1943, in ibid.
4. Report for Col. Iarge by Col. Johnson, cited in Historical Report,
CAP, week ending 2 Oct. 1943, in AFHRC files.
5. Statement for the Bureau of the Budget from Col. Earle Johnson,
1 Feb. 1943, in AG 324, Civil Air Patrol.
They had carried between the depot and its six sub-depots 430 passengers and 49,911 pounds of cargo. During that time there had been one plane lost and two fatalities.  

During 1942-1943 while these activities were progressing, there were sporadic discussions as to possible utilization of CAP units for a military express line to speed "rush" supplies wherever needed. The initial objection to CAP courier service which had been offered by military officials—that CAP personnel lacked experience—had been overcome. 

Serious discussions were resumed in the spring of 1943, at which time it was known that the Coastal Patrol was to be terminated. Commander Earle Johnson believed that CAP courier service could well be utilized throughout the country. He was confident that CAP units were adequately prepared to function as a feeder line for the Air Service Command and the Air Transport Command. Pointing to the records of the courier service for the Second Air Force, he contrasted its figures with those of the All American Aviation Company. Quoting the record, he stated that, as of September 1943, CAP planes had flown 5,500,000 miles for the Second Air Force, and had carried 1,722,722 pounds of cargo, and it had flown 114,703 packages of mail. All American Aviation for the same period of time had flown only 943,627 miles, had carried only 394,369 pounds of mail and 122,135 pounds of express, and Commander Johnson said, "All American is considered throughout the aviation industry as a very large company." In conclusion he added: "This shows  

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7. Ibid. 
8. Ibid. 
9. Ibid.
what could be done with Civil Air Patrol were it extended all over the country. I believe our organization could be of tremendous value in hastening the delivery of many things to speed up the war effort were it put on a nation-wide basis."

By the end of 1943 Civil Air Patrol courier service for the Army was still in the process of expansion. It had not yet been extended to the Fourth Air Force. But it was apparent that courier service on a nation-wide basis had accelerated the war effort.

**Aviation Cadet Recruiting**

The Civil Air Patrol service which attracted the greatest amount of public attention was the recruiting of aviation cadets for the Army. Whereas publicity for the Coastal Patrol was, because of military necessity, on a limited scale, that of the aviation cadet procurement program was extensive and nation-wide. Working in conjunction with local wings, the Army was able to adapt its appeal to the needs of the community. Begun as a minor activity on the part of the CAP, the aviation cadet procurement program developed rapidly. In addition to the procurement of aviation cadets from the age level 17-27, the Civil Air Patrol also undertook the recruiting of CAP cadets from the age level 15-17 to serve as a "pool" for future aviation cadet recruits. It also served another purpose. Army officials already knew at the time of CAP militarization in April 1943 that the Coastal Patrol would soon be terminated and members of that unit would be idle. Anticipating a psychological problem if CAP members remained inactive these Army officials sought channels into which their energies might be beneficially directed. Aiding the AAF in its aviation cadet procurement...
program seemed to offer a partial solution.

CAP members, however, were not thinking in terms of themselves as problem children who had to be regimented into some job for the sake of their own morale; they were thinking instead of how they could be of the most service. It seemed to them that if the Army had taken them over, then the Army must have large-scale assignments for them, but the first assignment which assumed any large-scale importance was that of recruiting aviation cadets for the AAF. The Army program of recruitment was lagging during the summer of 1943 until CAP participation began, but immediately it assumed new verve. Although it was believed that the participation of the Civil Air Patrol would reach its height during the summer months and that the schools would take over in the fall, the whole program had by that time gained so much momentum that activities continued on an even larger scale when schools and CAP units cooperated. There was no standardized nation-wide method for recruiting cadets. Each community worked out its own system of promotion except in Indiana where there was state-wide standardization. The local CAP units performed whatever service the recruiting officers desired. In many places, they aided in the processing of aviation cadet applicants, particularly in conducting mental screening tests.

The procurement program involved two age groups: 15-17 years and 18-27 years. The Civil Air Patrol undertook the specific task of recruiting aviation cadets from this latter group for the Army Air Forces.

11. See AAF Historical Studies: No. 15, Procurement of Aircrew Trainees.
In the 15-17-year age group there were, it was realized, potential cadets too young to enlist in any branch of the service, but who would want to do so as soon as they were eligible. In the meantime, however, there was no reason why they should not be recruited and given general training for service pending the time they would be eligible. This training, CAP officials believed, would be beneficial although it was a supposition open to question by military officials. Personnel fitting into this category were to be called CAP cadets. Responsibility for their training rested on the Civil Air Patrol which developed a program with the advice and assistance of the Army. If by the time he were 17 a CAP cadet had decided to become an aviation cadet, he was, of course, eligible for membership in the aviation cadet reserve. Until he was 18, therefore, he could be both a CAP cadet and a member in the reserve of the Army Air Corps.

Although the Army worked closely with the local wings and depended upon local means of advertisement, it also undertook nation-wide advertisement. The firm of Ceyer, Cornwell and Newall, Inc. of New York City was retained to produce advertising on a nation-wide basis. Full-page advertisements in popular magazines which had national circulation made the public more keenly aware of the program (Sample on following page).

It was with local methods of stimulation, however, that the Civil Air Patrol was concerned. Sometimes these activities were directed by National Headquarters although for the most part local wings were directly responsible for methods employed and for the operations. One method used successfully in many communities was to
give 15-minute free airplane rides to prospective cadets. Another less successful method was to drop leaflets entitled "This might have been a bomb," followed by a statement about aviation cadets. But this practice was discontinued because it was felt that civilians should not become too familiar with seeing leaflets dropped from the air, as such a method might need to be employed in an emergency some time. Yet, no matter what method of promotion was employed, it was vigorously supported by CAP members. CAP Headquarters reported: "It seems that when a CAP Cadet program reaches a certain stage in an area, after months of slow and sound development, there is a surge of expansion as the idea spreads with almost explosive rapidity,"

While CAP members gave unstintingly of their time and enthusiasm, there were also certain financial responsibilities involved, and as the program expanded these expenditures naturally mounted. "Such missions" it was reported, were "reaching a scale beyond what might reasonably be expected from volunteer effort" but were "still paid for out of the pockets of CAP members who . . . had] made arrangements with insurance companies for appropriate coverage at their own expense." Yet this sacrifice was made willingly by CAP leaders who were in a position to do so, in addition to the sacrifice of time and energy the service demanded.

Results were highly satisfactory. In Houston, Tex., for instance, the St. Thomas High School enrolled 100 per cent for the Civil Air Patrol Cadet Corps, with 560 boys. Iona called mass meetings to be

held in every high school in the state. During the first day in
Des Moines 300 prospects signed up. In Springfield, Ill., applicants
were kept informed of their situation through daily broadcasts over
Radio Station WITI. In Philadelphia wounded veterans from the
battle front talked regularly to groups. The Seventh Service Command
Unit Headquarters in Omaha reported: "On the basis of incomplete
returns for August, Major Davis credited 652 applications directly to
CAP not counting the effort of sponsored ads and publicity placed by
units of the Patrol. Nebraska, he said, secured 156 applications by
flying caravan trips in CAP planes."15 Governor Earl Warren of Cali-
ifornia proclaimed that there be designated an Aviation Cadet Week.
"The basic plan covered material for newspapers and radio releases,
cooperative advertising, club, theatre and school appearances, window
displays, parades, reviews, proclamations, by prominent civic leaders
and distribution of Army-supplied recruiting material." In North
Carolina, one method of promotion was to parade jeeps through business
streets and residential areas and to give prospective candidates free
rides. In the Kentucky "Ring, CAP cadets spent week ends at Kewan
Field where one entire barracks was given over to them. Wherever
the location, whatever the program, the CAP procurement of aviation
cadets became second only to the Coastal Patrol in its appeal to
the public.

While these Civil Air Patrol efforts continued throughout the
country, members waited for some tangible sign of cooperation from

the Army. Although, as of April 1943, CAP became officially a part of the army and was soon assigned the job of procuring aviation cadet equipment, it was not until November of 1943 that the War Department contributed any kind of equipment to be used. At that time it assigned 233 Army aircraft of the liaison type to be distributed among the 48 wings and used for aviation cadet recruiting. Coming at a psychological time, these planes boosted morale of members who were beginning to feel that they had been taken over by the Army only to be forgotten. Thus, just as CAP efforts in the spring of 1943 had helped to boost interest in the Army program of aviation recruiting, so the news of the allocation of these planes boosted the CAP program of aviation recruiting. It was impossible for any program which involved the giving out of so much enthusiasm to sustain itself indefinitely without some external stimulus. These planes, 110 Taylorcraft L-3's, were "tangible evidence of the interest of the Army Air Forces in CAP," Headquarters reported. Because Army planes had not been assigned to CAP units before, the organization was "on its mettle to protect this new privilege with the greatest care." By the end of 1943 CAP activities for the recruiting program were still gaining momentum.

Other Army Services

The Civil Air Patrol performed for the Army certain other services, the most important of which was towing targets for training missions.

17. Historical Report, CAP, week ending 27 Nov. 1943, in AFIKI files.
Major J. B. Morris, in a description of target-towing technique, wrote: "Tow target work is an exciting and highly specialized function. . . . So great is the need for moving aerial targets . . . that the Air Forces now maintain full squadrons . . . to serve themselves as a target in the night for Army ground units. . . . This is no dull, drab, boresome work. . . ." In a vivid account of typical missions performed with the 5th Tow Squadron at Ellington Field, Tex., he wrote:

Tracking missions are performed in small ships which fly at a pre-determined altitude and over pre-determined courses. Antiaircraft fledglings on the ground learn to follow the ships with sound locators, and later, with guns. Searchlight flying is about the same, done at night. On one of these searchlight missions . . . you approach the searchlight battery from various angles and from a blackness that cannot be described. The pilot, crouched in the cockpit, lies by instruments or, as he terms it 'riding the gauges'. . . . Daylight towing for firing purposes demands the utmost in skilled precision of a crew. The . . . bomber is loaded with an assortment of targets called 'sleeves' or 'flags'. They are of various sizes and styles, to be used according to the type of guns being fired, altitude, sky conditions and other factors. The firing point and radio contact have been established with the antiaircraft batteries on the ground. Then come the instructions.

'You will launch a B-17, target, red, and fly a clockwise course at 2,000 feet and tow with 1,800 feet of cable.'

At this point the pilot slows down his ship to lower speed. Then, at the moment it nears the stall point, he gives orders to launch the target. He closes the throttle and noses down sharply. "This maneuver is to get up tail, thus giving better clearance for the target, and to regain speed without blasting the sleeve with propeller wash."

19. Ibid.
the target has been folded and wrapped with light yarn.

Attached to a cable, which is wound on a windlass, the bundle catches in the slip stream and opens into a red cylinder. Then the windlass operator has played out the required footage you are ready to start the actual towing for fire. You fly in a continuous circle, passing the firing point about 200 yards from the anti-aircraft batteries. As they open up from a scant 2,000 feet below, it is a vivid experience to realize that they are firing at you.

Civil Air Patrol participation in this activity was begun 1 December 1942 at the request of two target squadrons under the jurisdiction of the Eastern Defense Command. For a year, until late in 1943, targets were attached to CAF planes and released as previously described.

By December 1943, however, tests had been made to prove the towing capabilities of CAF aircraft when installed with electrically driven windlasses. These tests, made with a 225 h. p. Stinson Reliant, and fired upon by .50-caliber guns and 40-mm. antiaircraft guns, proved satisfactory up to 10,000 feet, at about 100 miles per hour. It was proved further that targets could be released without an appreciable jerk on the plane. Accordingly plans were made for installation of this equipment in CAF aircraft, although by the end of the year, naturally, little had been accomplished.

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Tracking missions undertaken by the Civil Air Patrol operating under Army supervision, proved to be highly successful. Had civilians not been available, military personnel would have had to be taken from other assignments and utilized in this connection. National

20. Ibid.
Corrander Corrie Johnson reported that military officials under whose
direction the planes were flown had expressed enthusiasm over the
cimmer in which the work had been undertaken, and hoped it would be
continued indefinitely. Corranderroperation corroborates Corrander Johnson's
statement. In a letter to Corrander Johnson, Col. Rodney H. Smith
wrote:

Reports from all our Antiaircraft Commands emphasize the
reliance placed upon the Civil Air Patrol for tracking
missions, high altitude, low altitude, day and night, and
often under weather conditions which precluded missions
from other sources. CAP records show that
during August 1943 ... our Regions totaled 2760
flying hours ... from Civil Air Patrol planes, four
times as much as we received from all other sources for
all purposes.

In a letter from the office of the Commanding General, First Air Force,
it was reported that "During 4 months ending 1 October 1943, Civil
airplanes have averaged ... approximately 73 per cent of the total
tracking missions flown. ... reports received from the CAP units
served by CAP planes indicate that the missions have been highly
satisfactory from their standpoint." It was because of this excel-
 lent record that the Western Defense Command requested, in November
1943, that CAP units be dispatched to its area for tracking missions,
at a time when Coast patrol units were ready for other assignments.
Within a week it was reported that "Civil Air patrol units, consisting
of a total of 75 planes, ... [were] being established in the Seattle,

San Francisco, Los Angeles, and San Diego areas. By December 1943 operations were under way, under the supervision of the Fourth Air Force. The speed with which Coastal Patrol personnel readjusted themselves to a different type of mission was well illustrated in this particular instance.

At that time the performance of tracking missions still constituted a major service performed for the Army by the Civil Air Patrol. There had been little variation in procedures throughout the period of activities. In fact, the only modification had been a technical one brought about as a result of the installation of the electrically driven windlasses. On 30 December 1943, the Civil Air Patrol, since it undertook activities in December 1942 for the First Air Force and 23 December 1943 for the Fourth Air Force, had performed a total of 7,919 tracking missions, and had flown a total of 17,426 hours. Of this total, 7,526 had been day missions consuming 16,561 hours, and 393 night missions, consuming 865 hours. Performance of these operations had cost three lives and three planes. However, there had been no personnel seriously injured, otherwise.

Another service undertaken for the Army by the Civil Air Patrol was to conduct searches for lost Army aircraft. "Flying more slowly and at lower altitudes than is possible in Army planes, knowing the terrain, and expert in methods of precision reconnaissance," CAF

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Headquarters reported, "CAF pilots have been highly effective in this work."

Frequently, too, they located and helped to rescue Army and Navy flyers who were lost both on sea and land. These searches, naturally, could not be standardized. But, wherever an emergency arose, there were local wings to organize the search party and begin operations. Such emergencies had to be anticipated, however, and as the winter of 1943 approached, CAF Headquarters advised, through its bulletin:

"...with many days of dangerous flying weather ahead, it is timely for all units to review their training on search and precision reconnaissance, fly practice missions, develop and equip their first aid and crash units, and rehearse their plans for quick mobilization. Thus they will be ready when an Army or civilian plane is reported lost."

Since by the end of 1943 these searches had been undertaken largely in the West, it was the western wings which undertook the most intensive training. It was pointed out by the CAF Headquarters Bulletin, however, that like emergencies might confront any wing, and it would be well if adequate training had been undertaken.

Although training was necessary, knowledge of local terrain was equally as important, and a search could never be entirely disassociated from the individuality of the wing through which it was conducted. In each instance the emotional quality of the tragedy was heightened by local participation in the rescue. One search undertaken by the

Oklahoma Wing was described in the following manner:

Within an hour after official sanction to conduct the search had been received, CAP pilots and observers were winging their way to the temporary operations nest at the Delafield airport. Pilots were furnished special maps. A car was held and in 15 minutes the force turned out on a detailed and systematic search. The planes flew at 1,000 feet, following an exact course over the rugged terrain. Flying over that portion of the state is something that will make the best airmen check his safety belt to see that it is buckled tight. It takes a sort of special kind of bird to do that for expenses and only 75 cents per day.

Out of this search came the story about Lt. Tom Mitchell, CAP pilot, who flew this terrain frequently. He was carrying only 3-1/2 gallons of gas. He did not come back for five hours. But finally he came in for a three-point landing. His commander, Capt. David Jay Ferry, wanted to know where he had been. He answered, "Well, I know most of the folks in these hills so I just sat down among the trees in their yards and told them to be on the look-out for an Army plane that was down. Then I started running out of gas so I landed by a filling station by the side of the road on the side of a mountain and got 5 gallons of car gas to put in my tanks. You see, I was just doing my job." Not all situations could be met with such humor, but they were invariably performed with willingness to sacrifice.

Still another service performed for the Army by the Civil Air Patrol was undertaken for the Southern Signal Corps School, Camp Murphy, Fla. In November 1943 the OA unit at Lantana, Fla., was assigned the task of testing radar equipment to be used for training.

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29. Ibid.
purposes and also of making the flights necessary for training military personnel in the use of this equipment. The Signal Corps was responsible for any costs involved. Although operations had barely begun by the end of 1943, by that time eight flights had been flown consuming 44 hours. There had been no forced landings, no airplanes lost, no fatalities, and no personnel seriously injured.

Still another mission was the Washington-St. Louis Cargo passenger service undertaken for the Aeronautical Chart Services, Technical Services Division, CGS, 4 December 1943. Indicative of the scope of its operations was the report of its total operations from the time of its activation on that date through 22 January 1944. During that time it had flown nine round trips which consumed a total of 130 hours. There had been carried 2,185 pounds of cargo, but no passengers. Although there was a forced landing, there had been no airplane lost, no personnel seriously injured, and no fatalities. The versatility of CAF pilots was proved by the scope of their operations. Even aside from the importance of actual service rendered, it was important that the Army have at its disposal potential resources which could be directed instantly into new channels.

**Industries and Other Services**

Besides performing services directly for the Army, there were other operations undertaken by the Civil Air Patrol which greatly expedited national defense. One such mission was that of industrial courier service for certain war plants. Performed in the same manner as Army Courier Service, these missions made it possible for many assembly lines in war production plants to be kept active. These industrial
missions were first undertaken in the Middle West where there was comparatively little Army flying, but soon the idea was taken up in other regions. If it were necessary that flights be made to out-of-the-way places where there were no landing fields, supplies were dropped in paper parachutes from planes.

Each mission undertaken by the Civil Air Patrol, although following a general pattern was, nevertheless, completely individual. A war plant in Kalamazoo, Mich., was shut down because it lacked a shipment of only 100 pounds of vital material from Oil City, Pa. The CAP courier station at Detroit received the phone call at noon, a CAP pilot started immediately for the supplies, and by five o'clock that afternoon the plant was working again. In Texas, an important coastal refinery was threatened with a strike, but a mediator was flown from Houston in time to settle the differences before the men walked out. In Mississippi, the drilling of an oil well was suddenly halted because a part of the drilling rig broke. A CAP plane flew to Dallas and the part was delivered in less than a day.

None of these flights was routine. Each was made under different circumstances. Not all of them were equally safe, either. For example, a pilot in Iowa took off for Chicago to bring back 43 condensers so that the Collins Radio Company in Cedar Rapids might meet a war production schedule. In Chicago he took off immediately although he knew the darkness would force him down soon. In Fulton, Ill., he ran into bad weather. A farmer heard him circling in the dark, jumped into his car and drove into a field, then beamed his headlights in the direction he thought safe for the plane to land. "Lt. Edwards
came in directly in the lights' beam, setting the plane down and pulling it to a stop just before it reached a grove of trees. CAP planes have no lights," the Cedar Rapids Gazette reported. To which the CAP Bulletin added, "Evidently they have no flares and many have no brakes."

Although the newspaper content was that "CAP Delivers the Goods," it was thought in CAP Headquarters nevertheless, that the attention of Lieutenant Edwards should be called to the Headquarters discussion on "Safety."

Such flights as this were the exception, fortunately, and for the most part pilots were not so careless with their own safety. Although they were willing to undertake any risk necessary, they did not wastefully expend their energies or their lives. That was why the Civil Air Patrol was able to operate with comparative safety.

Operations, however, were not confined to the limits of the continental United States after November 1943. At that time CAP planes were dispatched to Alaska to track down and exterminate wolves. The mission in itself was not a large-scale assignment, but it was indicative of CAP adjustability and perhaps anticipatory of CAP expansion outside the limits of the continental United States. For, as its history proved, the strength of the Civil Air Patrol lay in its flexibility, and obviously when one mission was finished there would always be others in which civilian pilots could serve.

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of potential strength at its disposal, the AAF had as one function the responsibility of deciding how best, under changing circumstances, to utilize these resources.
CONCLUSION

The Army Air Forces in its role as coordinator of air defense activities had, by the end of 1943, successfully utilized the resources at its disposal. Although these defense activities in themselves varied, their primary mission was the same: to aid theAAF in the protection of the continental United States from attack by the enemy. To that degree this mission was successful cannot be measured finally and irrevocably by the historian; there were too many variables in the problem as it presented itself.

First of all, the threat of invasion never matured. Unlike the Maginot Line, defense measures were never put to the test in the continental United States by an invading enemy. It was in only one type of civilian activity—that of coastal patrol—that the civilian directly encountered the enemy. In this particular activity C.P pilots were responsible for having destroyed two submarines and crippling an undetermined number of others.

In the second place, it is not always possible for the historian to determine objectively the validity of certain civilian defense activities in terms of usefulness to the Army Air Forces. Then, for example, the Southern Liaison Patrol reported that it had spotted a certain number of "out-of-the-ordinary signals" during a week, it is possible that the military significance of these signals was valueless; but on the other hand, one signal could have meant the threat of invasion.
These records, therefore, have to be taken at face value on the assumption of "what might have been."

Furthermore, statistics were not always available or accurate for certain other defense activities. In the Ground Observer Corps it was known that there were about 700,000 volunteers, but it could not be accurately determined how many were on active status once they volunteered, or the amount of time each of those volunteers gave to his assignment. He could be giving almost all his time or he could be giving an hour a week to the service; the figure of 700,000, therefore, could be meaningless.

In spite of these variables, however, it is quite obvious that had not civilians been available for these services, responsibility for their performance would have fallen to theAAF which, at the beginning of the war, certainly, could not have spared adequate military personnel. Furthermore, it obviously was conducive to a better state of morale among civilians to be allowed to participate in defense activities at a time when, in other countries, the civilian population was suffering from aerial attack; thus they could believe that they were helping to defend themselves against invasion. The effect of this civilian participation upon civilian morale, although intangible, was nevertheless an important factor in national defense.

Partial statistics, however, reveal the enormity of the scope of civilian activities in AAF defense activities, it being assumed that any mission undertaken which relieved military personnel from other duty was indirectly aiding defense. Spanning a two-year period, these volunteer missions had been fulfilled during the time when the danger
of invasion reached its peak and subsided. They were performed during the time when theAAF was expanding to undertake the offensive against the enemy, although at the same time it had to stand ready to meet any thrust from the enemy. By the end of this two-year period—1941-1943—the AAF had achieved its goal; besides being capable of protecting itself against the remote possibility of sporadic attack by an inferior enemy, it now had taken the offensive to the territory of the enemy. Thus, civilian importance in defense plans lessened in proportion to the growth of the AAF. Consequently, by the end of 1943, the need for civilian participation in AAF defense activities had dwindled almost completely, although the Civil Air Patrol, having assumed new duties, continued to expand.
GLOSSARY of ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>AAF</td>
<td>Army Air Forces</td>
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<tr>
<td>AG</td>
<td>Air Adjutant General (used to indicate AG Control File)</td>
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<tr>
<td>AC/AS</td>
<td>Assistant Chief of Staff</td>
</tr>
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<td>HII</td>
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</tr>
<tr>
<td>ASD</td>
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</tr>
<tr>
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<td>AS Budget Officer</td>
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<td>AG</td>
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<td>Aircraft Warning Service</td>
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<td>CAA</td>
<td>Civil Aeronautics Administration</td>
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<td>CAP</td>
<td>Civil Air Patrol</td>
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<td>C/AS</td>
<td>Chief of the Air Staff</td>
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<tr>
<td>CG</td>
<td>Commanding General</td>
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<td>Deputy Chief of the Air Staff</td>
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<td>EDC</td>
<td>Eastern Defense Command</td>
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<td>OOD</td>
<td>Office of Civilian Defense</td>
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<td>OCCS</td>
<td>Operations, Commitments, and Requirements</td>
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<td>OES</td>
<td>Office for Emergency Support</td>
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<td>Order and Record Sheet</td>
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<td>Ordnance Department</td>
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<td>OPE</td>
<td>Ordnance Planning Division</td>
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AF Headquarters
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Air Raid Control, States (a.d.).
Air Force (a.d.).
Civil Air Patrol. 1941
Descriptive List of Principal Publications, Pamphlets, Posters, and Maps (a.d.).

Office Files

Assistant Chief of Air Staff, Intelligence, Historical Division

Historical Report, 1941-1945

C&F Historical Reports, May 1943 - June 1944, inclusive

These reports constituted the most important single source for
Civil Air Patrol activities. Submitted weekly to the Historical Division, the reports include a summary of operations reports, and summaries of publications.
Daily Diary, Assistant Chief of Air Staff, Operations, Commitments, and Requirements, June 1943 - June 1944, Inclusive

These diaries submitted regularly to the Historical Division, include reports of the divisions of this staff office. They were invaluable in the preparation of this study.

Special Report on the Civil Air Patrol, Prepared by Intelligence Officer, Civil Air Patrol, April 1943

This report is a summary of Civil Air Patrol activities from 1 December 1942 to 30 April 1943, during which time the organization was under the control of the Office of Civilian Defense.

Assistant Chief of Air Staff, Operations, Commitments, and Requirements, Requirements Division, Fighter and Air Defense Branch

Discussions of the Objections to the Use of P-38

This file contains the following instructions from the Secretary of War to the Ground Observer Corps:

CC-20, Instructions
CC-23, Coordination, Ground Observer Corps
CC-49, Detachment of Aircraft to Main Service
Ground Observer Corps, Basic and Authoritative Material

In case of observation, policy, operations, training, ground control, and coordination, priorities, command and control of aircraft detachments. Service rules, reimbursement of civilian observers' expenses, and other matters.

Military Ground Observers

Record of action taken by Major Hill (W.T.B.) with Respect to Partial Reactivation of Ground Observer Corps

In these various files of the Fighter and Air Defense Branch is the basic story of the part civilians played in the Aircraft Training Service. Much of the information is duplicated in the LDF Central Files, but the above files are more complete and more complete than the Central Files.
Adjutant General

222.2 (2-9-1) (2) Aircraft Training Service and Air Defense
222.3.1.1 (2-11-46) Antiaircraft Defense of the United States

Army Air Forces

328 Ground Observer Corps
328.2 Aircraft Warning Service
328.5 Civil Air Patrol
328.5.5 Independent Organizations

These files, classified and unclassified, contain almost all the source materials available in the Army Air Forces Central Files. This statement is based upon the fact that all cross references were checked, as well as other files which were obviously related to the subject. Although there are little formalized lists of files, it is believed advisable to include the following listing of them for reference:

000 Miscellaneous
000 Officer of Civilian Defense
010.1 Liaison
033.5 Miscellaneous
031.91 OC Organization, Signal Corps
032 Aircraft Service (Units, Service, Stations, etc.)
033 Civil Air Patrol Units
50.4 Aircraft Establishment and Discontinuance
50.1 Miscellaneous
031.91.1 Air Plan, Action, Orders, etc.
031 National Defense, Production, Air Armies, etc.
031.2 Antiaircraft Defense
031.6 Miscellaneous: Control of Air, etc.
033.7 Miscellaneous
50.1 Civilian Defense, Air Control, Air Raid Protection, etc.
12.53 Certain materials

Special Service

Formal and Informal Support to the United States Air Forces, 1917-1945. AD Historical Studies No. 3

Procurement of Aircraft, 1917. AD Historical Studies No. 1

THIS PAGE Declassified IAW EO12958
Interviews

Holtz, Lt. Col. A. F., Director and Air Force Branch, Requirements Division, Assistant Chief of Air Staff, Operations, Communications, and Requirements

Colonel Fletcher was most cooperative in the matter of making available the files of his branch, in which were included the Ground Observer Corps records. Although he has not been directly connected with the Ground Observer Corps and the Aircraft Warning Service, both parts of the Aircraft Warning Service, he contributed useful information about the operation of these units.

Hepburn, Gen. H. L., Civil Air Patrol, Assistant Chief of Air Staff, Operations, Communications, and Requirements

Certain letters were available for consultation whenever his service was needed, and his contribution to the Civil Air Patrol story was significant.

Hollander, Lt. Col. John, Director and Air Force Branch, Requirements Division, Assistant Chief of Air Staff, Operations, Communications, and Requirements

Since Colonel Hollander had been one of the few backgrounds of officers directly connected with the Ground Observer Corps, he contributed substantially to the section of this study dealing with that organization and was available for consultation whenever his services were needed.

Hassel, chief, Chief Directives Officer, Office of Civilian Defense, 10 March 1943

In this interview Mr. Hassel describes the part of the Office of Civilian Defense as it related to the Army Air Forces.

Struble, Col. James Z., Director, Air Forces, 10 April 1944

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Appendix I

OAR 98-20
The Adjutant General's Office
Washington, D. C.

No. 99-22-3
20 September 1945

AIRCRAFT SPOTTING SERVICE

1. Effective immediately, observation posts and observer filter centers of the Aircraft Warning Service manned by civilian volunteers will be placed on an alert status and operated at intervals rather than on a 24-hour basis as heretofore.

2. Observation posts operated by the U. S. Forest Service with Army funds will be fully inactivated unless tactical considerations make it necessary to maintain certain of these posts in operation on a full-time basis.

3. Volunteer observation posts should henceforth be operated at intervals adequate to maintain a trained organization that can be fully activated upon short notice or for test periods for development of new technique. Military personnel assigned to filter areas will be a minimum consistent with this directive and with the maintenance of an effective civilian organization of observers and filter center workers.

4. The above action should be taken in a manner which will assure the continued support and cooperation of volunteers under the newly approved part-time operation, and future relationships with volunteers should be such that their continued membership in the Ground Observer Corps and the Aircraft Warning Corps can their continuing responsibilities.

(DAF 322 (18 Sep 43) 02-0-12-A)

By order of the Secretary of War:

(signed) J. A. Ulio

J. A. Ulio,
Major General,
The Adjutant General.
Appendix 2

WAR DEPARTMENT
HEADQUARTERS OF THE ARMED FORCES
Washington, D.C.

21 September 1943

TO ALL VOLUNTEERS OF THE AIR-RAID WARNING SERVICE:

The War Department has directed that certain elements of the aircraft warning service be placed on an alert status and that henceforth observation posts and filter centers be manned at intervals rather than on a 24-hour basis.

The considerations which have led to this decision are not based upon any belief that the war's end is yet in sight. On the contrary, between us and final victory lie many months of bitter fighting. We have made the transition, however, to the offensive. We are pressing the attack home upon our enemies, and we must at once bring to bear every ounce of offensive power of which this nation is capable.

The War Department is assuming the calculated risk that the small-scale air attack of which the enemy is now strategically capable may meet with some measure of success. This course is justified because manpower and facilities are thereby released that will contribute directly or indirectly to offensive action—manpower and facilities that may bring the war's end months closer.

Ever since Pearl Harbor, the volunteers of the aircraft warning service have done a magnificent job in the finest tradition of the Army Air Forces, and that job is by no means finished. The War Department proposes that the Army Air Forces shall maintain the Ground Observer Corps and the Aircraft Warning Corps as trained organizations which can be fully alerted in the event of imminent attack. Meanwhile, the part-time operation of observation posts and filter centers will release additional military personnel, ease the burden on vital communications facilities, and permit hundreds of thousands of members of the Corps to undertake other important wartime responsibilities in addition to their duties as members of the aircraft warning service.

I want to express my personal appreciation to all of you for the work you are doing, and my conviction that the Army Air Forces can count on you to carry out your duties under the new plan of operations directed by the War Department with the same devotion you have demonstrated in the past. You have helped us to take the offensive. Now let us set on with this war and get it over with.

(Signed) H. H. Arnold

H. H. Arnold
General, U. S. Army

Commanding General, Army Air Forces
September 29, 1941

Following the studies and conversations which have taken place on the question of mobilization of civilian aviation potentiality for joint benefit of national defense and civilian aviation, it has been decided that this office will immediately undertake the formation of a Volunteer National Organization of pilots, mechanics, and other aviation personnel to be known as the "Civil Air Patrol." The Civil Air Patrol will be a part of this office and its activities financed by us, as far as necessary.

In general, it is planned to have in the General Policy Coordination body of Civil Air Patrol a group known as the "General Staff, Civil Air Patrol," appointed by the Director of the Office of Civilian Defense with two members representing the Army Air Corps, the Naval Air Service, the Civil Aeronautics Authority, the Civil Aviation Activities of the Department of Commerce, the Office of Civilian Defense and five citizens appointed at large from among interested and active civilian aviation personalities.

The essential administration of CAP will be in the hands of a National Commander, appointed by the Director of the Office of Civilian Defense. He will probably be a former high ranking retired officer from the Army Air Corps. He will be provided general headquarters and the necessary executive and clerical staff in this office.

It is requested that the Army Air Corps and the Naval Air Service each name one experienced civilian officer, either regular or reserve, who need not necessarily be on active strength at the moment, to act as Deputy to the National Commander of the CAP, with full the availability for the work. It is intended that these officers shall act only coordinate their efforts toward the successful organization and operation of the CAP, but that they will maintain an intimate contact with their particular branch of service for the CAP, in order that the civilian activities may include all possible potential value for defense.

It is planned that in each Regional Office of Civilian Defense which have been fixed to be located in the cities where the Army Corps Area Headquarters are situated, there will be a Regional Commander of the CAP. It is believed that best results can be secured in these Regional Commanders are Air Corps or Naval Air Service Officers, and...
probably they should be either noncommissioned officers, familiar with civilian aviation activities in their region.

Generally speaking, each State will have a wing of the C.A.A. In certain States there are not enough civilian pilots and aircraft to justify a wing organization, and in such cases one wing will be a volunteer civilian pilot.

The subordinate units immediately below wing level will be groups, and below groups will be squadrons, comprised of flights. It is contemplated that the crew personnel will be very largely assigned to the groups, with a smaller number assigned to the squadron headquarters, particularly in cases where one or more of the squadron flights are located at points other than squadron headquarters.

All of the officers of the C.A.A. from the rank of air controller down will serve on a voluntary basis. They will, of course, in their application for membership in the C.A.A. assume certain obligations in the certain representations as to their citizenship, etc.

The objective of this plan is to make available as efficiently as possible the existing civilian aviation potential for national defense and by means of self-conducted and voluntary participation in training programs raise the level of skill of the civilian aviation structure to improve the potential value of national defense.

It is expected that the Army Air Corps, the Naval Air Service, and the Civil Aeronautics Administration will substantially contribute in this training work by making available advice and counsel, training courses and material and personnel aid, without reducing the defense program effort. In case the armed services or other governmental agencies desire to utilize civilian aviation personnel or equipment it is planned that they will contact C.A.A. for lists of persons qualified to do the specific job involved, and then contract with such persons from that list as they may care to.

The Army and Naval aides to the National C.A.A. will provide the channel by means of which the Army and Naval Air Service may at all times keep intimately in touch with the progress and potential values of the interests of national defense is concerned.

It is contemplated that as the training program progresses then will be organized a Corps utility, probably known as the 'Civil Air Reserve,' which will have a higher-than-average qualification in flying and technical matters. It is believed that as this passes the civil air reserve will be of rather unusual value to the national defense effort.
It is, of course, understood that membership in the Civil Air Patrol in no way will form a basis for an exception or deferment from military service, but it is the intention that the program shall aid rather than interfere with the defense program.

One of the most valuable qualities available in the formation and operation of the CAP is the field personal of the Civil Aeronautics Administration. These men serve in an advisory capacity for all of the civilian flyers and would personnel. It is planned to use these men as instruction points for both the dissemination and collection of data, and in the event that the organizational period is cut short, it will probably be desirable to have certain of that field force act as acting executive officers for Division Commanders and Group Commanders, and perform for the Regional Commanders. It is certain that it is going to be desirable to secure the advice of these men in connection with suggestions of persons to serve as Division and Group Commanders.

Such time has already been spent in the preparation of the program. It is highly important that it be put into operation immediately. It has been decided that there shall be no concurrent or any sort thereof until the initial plans have all been completed and the preliminary organizations established, and the necessary printed matter distributed through the field, easily available to prospective cadet officers. Under the circumstances, it is requested that you take such action as the above outline indicates necessary at the earliest possible moment to effect the completion of the necessary work.

Yours very truly,

(Signed) H. E. McGuire

U. S. Director Civilian Defense
**AZTEC AIRWAYS, CIVIL AIR PATROL (17 December 1941)**

**Alabama:**
E. Clyde Wood, Ford Chevrolet Co., 19th St. and Ave. C, Birmingham

**Arizona:**
Carl C. Kizer, President, Sky Harbor Air Service, Box 679, Phoenix. Home, 1425 E. Calver, Phoenix

**Arkansas:**
Gilbert L. M., 310 Louisiana St., Little Rock

**California:**
Edward A. Harter, 732 Citicorp Blvd. Inglewood, Los Angeles

**Colorado:**
Major J. J. Lann, National Guard Annex, Lunacy Field, Denver

**Connecticut:**

**Delaware:**
Ford of Delaware, All American Aviation, Inc., 310 S. 9th St., Wilmington

**Florida:**
Major W. H. Myrick, Jr., Palm Beach Aero Corp., Milton Field, West Palm Beach. Hq, West Palm Beach

**Georgia:**
Vincent Howard, P. O. Box 106, Atlanta. Home, 201 Valley Rd., Atlanta

**Hawaii:**
L. L. Bennett, State Director of Aeronautics, Hilo

**Illinois:**
Jack Wilke, Sr., 100 S. North Lorimer Ave., Chicago. Home, Evanston, Ill.

**Indiana:**
William J. Windlow, 203 W. Washington St., Indianapolis

**Iowa:**

**Kentucky:**
J. Rowland Villa, Governor State Aviation Association, Lexington. Home, Anthony

**Louisiana:**
Albert K. Nor, Kentucky Aeronautics Commission, Green Field, Louisville

125
Louisiana: Byron Armstrong, New Orleans Airport, New Orleans

Maine: Gay P. Coanett, Coanett Publishing Co., Inc., Portland

Minnesota: Arthur G. Haus, Congregational School of Aviation, Inc., Congregational Airport, St. Paul

Massachusetts: Gordon Kichna, President, P.O. Box 223, South Hamilton

Michigan: S. E. Steers, Dept. of Aviation, Capital City Airport, Lansing

Mississippi: Leslie E. Schroeder, Minneapolis

Missouri: Mitchell Robinson, General Hill, Joplin

Nebraska: H. A. Meckeen, Robertson Aircraft Corp., Lincoln, St. Louis Municipal Airport, 500 Main Street, St. Louis

New Mexico: Harriett Landrith, Shell Oil Co., 3601 First Ave., South, Billings

New Hampshire: J. V. Folley, Director of Aviation, Concord, First National Bank, Concord


New York: Horace Korn, Jr., New Mexico Aviation Commission, State Po

New York: Lt. Col. B. J. Bronson, 2nd Bn, Roosevelt Field, Garden City, L.I., N.Y.

North Carolina: Junius M. Norber, Asheville, N.C.

North Dakota: Arthur M. Swenson, St. John School of Science, Alexander

Ohio: Harry D. Johnson, Director of Aviation, State of Ohio, 301 Graduate Ave., Columbus, Ohio, 43204

Ohio: Ross Patterson, Liberty Aviation Club, Columbus

Oregon: Capt. E. C. DeVaney, Oregon State Board of Aviation, Eugene's Bowl, Portland
Pennsylvania: W. E. Anderson, State Director of Aviation, Harrisburg, Pa., Harrisburg, Pa., Harrisburg Airport, Harrisburg

Maine: Willard S. Litchfield, Aeronautics Division, Bangor, Me.

North Dakota: D. J. Martin, S. C. Aeronautics Commission, Bismarck, N. D., N. D.


Kansas: Lt. Col. Herbert Fox, Kansas Bureau of Aeronautics, 1013 Kansas State House, Topeka

Nebraska: D. E. H. Anderson, 1110 South Petroleum Ave., Lincoln

Ohio: Joseph Zingel, Utah State Aeronautics Commission, 230 State Office Building, Salt Lake City, Utah


Vermont: Allan J. Felton, Director, Division of Aeronautics, Vermont State House, Montpelier, Montpelier

Washington: Philip B. Halsey, P. O. Box 5073, Spokane, Wash.

West Virginia: David S. Giltinan, State Board of Aeronautics, Charleston, W. Va.

West Virginia: Seth H. Fornoff, Charleston

Wyoming: W. Billard Miller, Flights Airmen, Inc., Cheyenne
Appendix B

ARMYIntel 6939

MISC AIR PATROL BILL: MIL. CIVILIAN
DEFENSE AND SECURITY.

By virtue of the authority vested in me by the Constitution and statutes of the United States, particularly by title I of the First Air Power Act, 1941 (approved December 15, 1941), as President of the United States, and in order to provide for the nation's air defense and to expedite the prosecution of the war, it is hereby ordered as follows:

1. The Civil Air Patrol, established in the Office of Civilian Defense, pursuant to Executive Order No. 9037 of May 20, 1941, as amended by Executive Order No. 9037 of April 10, 1942, and all of its functions, duties and powers of the Office of Civilian Defense and of the Director thereof which relate to the Civil Air Patrol (including those relating to the office of the National Commander) are transferred to the Department of War, and shall be administered under the direction and supervision of the Secretary of War by such officers, civilians, agencies, or persons under his jurisdiction as he may designate.

2. All property (including records, files, documents, furniture, and equipment) and all civilian and military personnel of the Office of Civilian Defense primarily used in the administration of the functions transferred by this order are transferred to the Department of War for use in the administration of such functions.

3. So much of the unexpended balances of appropriations, allocations, or other funds available, or to be made available, for the use of the Office of Civilian Defense in the performance of the functions transferred by this order to the Director of the Bureau of the Budget shall determine, shall be transferred to the Department of War for use in connection with the administration of the functions so transferred. In determining the amount to be transferred, the Director of the Bureau of the Budget may include in an amount to provide for the limitation of obligations incurred a direct such appropriations, allocations, or other funds prior to the transfer.

4. This order shall become effective immediately and shall continue in force until the termination of title I of the First Air Power Act, 1941.

/ / Franklin D. Roosevelt

April 29, 1943,

INCLUSION TO: TREASURY NO. 130–12–3,
May 4, 1943.
Appendix 6

LEED-6 GSAM For ADMIN Tasks

Bar Harbor, Maine
Portland, Maine
Atlantic, Massachusetts
Schenectady, Suffolk, Long Island
Atlantic City, N.J, Jersey
Sohoboth, Delaware
Pensacola, Virginia
Beaufort, North Carolina
Narrows, North Carolina
Charleston, South Carolina
Bermuda, Bermuda
Daytona Beach, Florida
Jacksonville, Florida
Miami, Florida
Sarasota, Florida
Panama City, Florida
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- 1st Air Force, 1, 1919-1920
- 2nd Air Force, 1, 1919-1920
- 4th Air Force, 1, 1919-1920

**Air Corps:**
- 1st Aero Squadron, 1919-1920
- 2nd Aero Squadron, 1919-1920
- 3rd Aero Squadron, 1919-1920
- 4th Aero Squadron, 1919-1920
- 5th Aero Squadron, 1919-1920

**Air Armament:**
- 1st Armament Section, 1919-1920
- 2nd Armament Section, 1919-1920

**Communications:**
- 1st Air Depot, 1919-1920
- 2nd Air Depot, 1919-1920

**Aircraft:**
- 1919-1920

**Personnel:**
- 1919-1920

**Location:**
- Collins Air Co., Ill., 1919-1920
- Collins Air Co., Ill., 1919-1920

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**Door:**
- 1919-1920

**Squadrons:**
- 1919-1920

**Units:**
- 1919-1920

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- 1919-1920

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