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A STUDY OF AIRBORNE ANTI-SUBMARINE WARFARE
PATROLS FLOWN FROM FLORIDA BASES IN WORLD
WAR II



NATIONAL HISTORICAL COMMITTEE

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A STUDY OF AIRBORNE ANTI-SUBMARINE WARFARE
PATROLS FLOWN FROM FLORIDA BASES IN WORLD
WAR II

BY

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WITH FOREWORD BY

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FOREWORD

For a band of "amateurs" at the art of warfare, even belated admiration of the professionals, is indeed a tribute to their ability. Such is the essence of the professional paper on airborne anti-submarine warfare prepared by the author which is republished in this monograph in its entirety.

The author, Lieutenant John R. Hennigan was commissioned from the Naval Reserve Officers Training Corp Program at the University of Notre Dame in 1978. He then entered Naval Flight Officer training and earned his wings in July 1979. He was subsequently assigned to Patrol Squadron Sixteen, based in Jacksonville, FL, where he served as a Tactical Coordinator and Mission Commander in the P-3C aircraft. During this tour, he deployed to Sicily, Bermuda, and the Philippines. Lt. Hennigan reported to his current assignment at NROTC Unit, University of Florida, in December 1982.

As can be seen from the above, Lieutenant Hennigan certainly represents a true professional in the art of airborne anti-submarine warfare. His multi-services review of the operations at hand are well rounded and devoid of the branch of service bias normally encountered. In particular, his treatment of Civil Air Patrol is comprehensive and accurate. The fact that he acknowledges the absolute necessity for

Civil Air Patrol bridging the gap in anti-submarine warfare capability between the beginning of World War II and the rightful assumption of responsibility by the United States Navy is certainly a tribute to those who so willingly dedicated themselves to the defense of their country. Although written specifically about Florida Coastal Patrol Bases this delayed admiration should be shared by all personnel of the 21 such bases of the Civil Air Patrol.

Lester E. Hopper
COLONEL CAP
National Historian
New Orleans, Louisiana
October 1984

PREFACE

As a Naval Flight Officer whose warfare specialty is ASW, it was natural that I chose this subject as the topic for this paper. However, in limiting the topic to missions flown from Florida bases, I acknowledged the fact that resources would be difficult to locate. In fact, only five of the references cited in the bibliography were available locally; the others were made available by the generous support of several individuals, without whom this paper would not have been possible. Gracious thanks are in order for COL Lester E. HOPPER, Chairman, National Historical Committee, Civil Air Patrol, who provided me with much moral and resource support. He opened his historical files to me, which in turn opened my eyes to the valuable contributions made by the Civil Air Patrol to the U.S. war effort. I would also like to thank LCOL Elizabeth SEDITA, Florida CAP Wing Historian, for her generous support. I extend a special thank you to Ms. Gwendolyn J. Rich and the Office of Naval Aviation History and Archives for providing Naval Operational Summaries.

I apologize for any lack of detailed information in the paper. Errors of omission were due primarily to information being unavailable in the relatively short time in which this research was performed.

J.R.H.
Gainesville, Florida

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INTRODUCTION

It was not long after the United States formally entered World War II that the German submarine (U-boat) campaign in the Atlantic expanded to include the coastal waters of the United States. In May 1942, the Gulf Sea Frontier, which extended from Jacksonville, Florida south to Key West, and which included the Gulf of Mexico, had the most severe losses by submarine attack of any area in the Atlantic Ocean; forty-one ships displacing 219,867 gross tons were lost.¹ The Gulf Sea Frontier ranked second in losses in Atlantic areas in June, 1942 and was third in July, 1942 with losses of twenty-one ships (91,277 gross tons) and sixteen ships (65,924 gross tons) respectively.² Other examples of the severity of the U-boat threat were two instances of German submarines landing saboteurs on beaches in the Gulf Sea Frontier. U-584 landed a party on Ponte Vedra Beach, near Jacksonville, on or about 17 June 1942.³ A second party was landed from an unknown U-boat south of Sarasota, Florida during the period May-July 1942.⁴

To help counter the U-boat threat, Naval aviation units, the Army Air Force (AAF), and airborne units of the Coast Guard and the Civil Air Patrol (CAP) were employed during various phases of the war. Even civil airline pilots were asked to maintain a lookout and report any suspicious sightings when their scheduled routes took them over water.

This paper will present the organizations and operations of Florida-based airborne anti-submarine warfare (ASW) units of the Navy, AAF, CAP, and Coast Guard.

Navy Organization - General

As the United States moved closer to the brink of entering World War II, the Navy began to organize its forces to combat the potential threat of the German submarines. The Gulf Sea Frontier was one of four coastal patrol sectors established by the Chief of Naval Operations (CNO), Admiral H. R. Starke, on 1 July 1941.⁵ Under the cognizance of the Seventh Naval District, the Frontier's headquarters were located initially in Key West, Florida; however, they were moved to the DuPont Building in Miami, Florida effective 17 June 1942.⁶ The Frontier extended from Jacksonville to the Yucatan Peninsula of Mexico and worked with the Convoy Control Center, located at Key West, to coordinate airborne patrols.⁷

The Frontier was under the operational command of the Navy's ASW Command (Atlantic), which was initially headed by Admiral R. E. Ingersoll. Later, on 20 May 1943, this command was redesignated as the Tenth Fleet. The Gulf Sea Frontier was commanded by Rear Admiral J. L. Kauffman from its inception until 3 February 1943. He was succeeded by Captain H. H. J. Benson, who was then followed by Vice Admiral W. R. Munroe. Captain Benson again commanded the Frontier from

25 March to 17 July 1944; he was succeeded by Vice Admiral W. S. Anderson, who was the commanding officer until the end of the war.⁸

The Navy's efforts to implement airborne ASW patrols, not only from Florida bases and in the Gulf Sea Frontier but throughout the North Atlantic theater, were hampered by several interservice problems. In 1941, the AAF controlled almost the entire supply of military land-based aircraft. Not expecting to include ASW among their duties, Army pilots were not trained to fly over water, to protect shipping, or to bomb small moving targets such as submarines. The Navy did not operate land-based aircraft because of the 1920 Army Appropriations Act, which designated the AAF as responsible for land-based aviation and the Navy for sea-based aviation.⁹ When British experience demonstrated that large, land-based aircraft worked best for ASW, General Marshall, on 7 July 1942, agreed to modify the Act so as to reallocate land-based assets to the Navy (it was believed that the Navy's PBY aircraft, while having long endurance, were slow and vulnerable to U-boat machine guns).¹⁰

As an interim measure until the Navy's land-based patrol command could become fully operational, the War Department reorganized the AAF's 1st Bomber Command to employ it as an ASW unit in the Eastern and Gulf Sea Frontiers.¹¹ The Navy hoped to use the Command for routine patrols and convoy cover, but the Army wanted to employ "killer tactics" using

intelligence to search out and destroy a known U-boat.¹² Additionally, Army pilots continued to have problems with overwater navigation and with locating convoys. In 1942, as interservice cooperation deteriorated, CNO Admiral E. J. King was determined to end AAF participation in ASW as soon as the Navy had enough aircraft and pilots. The formation of the Tenth Fleet in May, 1943 generated additional controversy between the AAF and the Navy as to how the ASW effort should be coordinated. On 10 June 1943, much to the delight of Admiral King, General Marshall finally decided that the AAF would no longer contribute to the ASW effort.¹³

Navy Organization - Specific

The Navy's land-based airborne ASW efforts had their beginnings in the formation of several Patrol Wings and Fleet Airship Wings in the Eastern and Gulf Sea Frontiers. Located in Florida were Fleet Air Wing Twelve (FAW12) and Fleet Airship Wing Two (FASW2).

FAW12 was commissioned on 16 September 1942 as Patrol Wing Twelve at Naval Air Station, Key West, Florida. Under the operational command of Commander, Gulf Sea Frontier, Patrol Wing Twelve was redesignated FAW12 on 1 November 1942. Administratively, FAW12 was under the cognizance of the following: Commander, Patrol Wings Atlantic from 16 September to 1 November 1942; Commander, Fleet Airwings Atlantic from 1 November to 31 December, 1942; and Commander, Air Force, Atlantic Fleet from 1 January 1943 to 14 July 1945.

FAW12's headquarters were relocated to Miami effective 20 September 1943, but were later returned to Key West on 2 June 1945.¹⁴

FAW12 was commissioned for closer supervision of ASW operations in the Gulf Sea Frontier. Although FAW5 had been assigned this area of responsibility, its headquarters (located in Norfolk, Virginia) were too distant for close supervision. When the submarine menace to Gulf Sea Frontier shipping increased in intensity, in the spring of 1942, the apparent need for a separate patrol wing in the area was made obvious.¹⁵ After commissioning, U-boat activity was relatively light and only three ships were sunk from September 1942 to May 1943, and none were sunk thereafter.¹⁶ FAW12's operational missions included routine patrols over shipping lanes, convoy coverage, individual ship coverage, air-sea rescue services, and message drops. The Wing's Commanding Officers were as follows:¹⁷

16 September 1942	Captain W. G. Tomlinson
12 October 1942	Commander B. C. McCaffree
8 November 1942	Captain A. I. Price
2 January 1943	Commander B. C. McCaffree
12 January 1943	Captain J. J. Michael
27 February 1943	Captain H. T. Stanley
22 February 1944	Captain W. K. Rhodes
21 May 1945	Commander J. H. S. Johnson

Regarding airships, FASW 30 was commissioned on 1 December 1942 as an administrative command to administer all airship units in the Atlantic Fleet. Headquartered at Lakehurst, New Jersey, all fleet airships were under the overall command of Rear Admiral C. E. Rosendahl.¹⁸ Airship Squadron Twenty-one, assigned but stationed in Richmond, Florida (near Miami), was redesignated Fleet Airship Group Two on 1 March 1943, and ultimately became FASW2 on 15 July 1943. Assigned to the Wing were three ZP (blimp) squadrons, one headquarters squadron, and one HEDRON (personnel support and maintenance) detachment.¹⁹ FASW2 was commissioned for operations in the geographical limits of the Gulf Sea Frontier to conduct ASW patrols, air coverages to surface units and convoys, searches, air-sea rescue services, and mine spotting. The Wing was decommissioned on 16 June 1945. Wing Commanding Officers were as follows:²⁰

1 December 1942	Captain G. H. Mills
1 March 1943	Captain W. E. Zimmerman
15 July 1943	Commander A. L. Cope
6 August 1943	Captain M. M. Bradley
1 May 1944	Commander M. F. D. Flaherty
12 February 1945	Commander A. L. Cope

Navy Aircraft Types, Bases and Squadrons

When the United States entered the war in December 1941, there were a total of forty-three aircraft available for ASW patrol in the entire Seventh Naval District.²¹ By February

1942, Florida-based assets included one squadron of twelve Catalina Flying Boats (PBYs) split between Jacksonville and Key West, and small single-engine OS2U-3s and SOC-3s.²² The latter could stay airborne for only three hours when carrying depth bombs. In February 1943, the number of Florida-based aircraft had increased to approximately ninety-six; in September, the Navy received the first ASW-equipped B-24 Liberators from the AAF, some of which may have flown from Florida bases.²³ Appendix 1 details the characteristics of the various Naval aircraft and airships. By the Summer of 1943, many of the patrol aircraft were equipped with 10 cm. S-band, microwave radar sets whose use proved to be difficult to detect or jam. Nevertheless, the primary tactics were based on visual searches.²⁴ The blimps also became radar-equipped, and their slow speeds enabled their aircrews to spot U-boats easier. They also had longer endurance than aircraft and could operate at night and in foul weather. Their main disadvantage was that they were easily detected by U-boat lookouts.²⁵

FAW12 included Florida squadrons that operated from Key West, Boca Chica (near Key West), DeLand and Banana River (near present day Patrick Air Force Base). Table 1 below specifies the FAW12 squadrons that operated from Florida bases and the corresponding dates of assignment. The following is a summary (by location) of Table 1:²⁶

Table 1

UNITS ASSIGNED TO FAW12 OPERATING FROM FLORIDA BASES⁶⁶

<u>Squadron (type aircraft)</u>	<u>Location</u>	<u>Dates</u>
VP-53 (PBY)	Key West	September 1942
VP-81 (PBY)	Key West	Sep 42 - Dec 42
V5-39 (O52U)	Banana River	Sep 42 - Jan 45
V5-62 (O52U)	Key West	Nov 42 - Jan 45
VP-202 (PBM)	Key West	Feb 43 - Nov 43
VP-208 (PBM)	Key West	Feb 43 - Nov 43
VP-208 (PBM)	Key West	Feb 43 - Jul 44
VP-63 (PBY)	Key West	Mar 43
BV-125 (PV)	Boca Chica	Jan 43 - May 44
VP-132 (PV)	DeLand	Mar 43 - Jun 43
	Boca Chica	Jun 43 - Oct 43
VP-213 (PBM)	Key West	Dec 43 - Nov 44
VP-143 (PV)	Boca Chica	Jul 44
VP-201 (PBM)	Key West	Aug 44 - Mar 45
VPB-204 (PBM)	Key West	Dec 44 - May 45
Headquarters Squadron	Key West	Oct 42 - July 45
Banana River Detachment	Banana River	Jan 43 - Jun 45
DeLand Detachment	DeLand	Jan 43 - Jun 43
Boca Chica Detachment	Boca Chica	Mar 43 - Jan 45
VB-127 (PV)	DeLand	Jan 43 - Apr 43
	Boca Chica	Apr 43 - May 43
VB-128 (PV)	DeLand	Feb 43 - May 43
VB-129 (PV)	DeLand	Feb 43 - May 43
	Boca Chica	May 43
VC-130 (PV)	DeLand	Mar 43 - May 43
	Boca Chica	May 43 - Jan 43
VB-131 (PV)	DeLand	Mar 43 - May 43
	Boca Chica	Jun 43
VB-133 (PV)	DeLand	Mar 43 - June 43
	Boca Chica	June 43 - Jul 43
VC-134 (PV)	DeLand	Apr 43 - Jun 43
	Boca Chica	Jul 43
VB-141 (PV)	DeLand	Jun 43 - Jul 43
	Boca Chica	Jul 43 - Aug 43
VB-143 (PV)	DeLand	Jun 43 - Jul 43
	Boca Chica	Jul 43 - Aug 43
VB-145 (PV)	DeLand	Jul 43 - Aug 43
	Boca Chica	Aug 43 - Sep 43

1. Key West had a monthly average of four squadrons assigned between September 1942 and July 1945.
2. Detachments to Boca Chica started in March 1943, and peaked with six squadrons assigned in July 1943. After November 1943, average monthly strength was one or two squadrons.
3. The DeLand detachment began with three squadrons in February 1943, and peaked in April 1943 with eight squadrons assigned. The detachment was discontinued after August 1943.
4. A permanent detachment was maintained at Banana River that averaged two squadrons from September 1942 to July 1945.

FASW2, based at Richmond, Florida, provided detachments to Key West from February 1943 to April 1944, to Banana River from November 1943 to May 1945, as well as to numerous other Caribbean Basin bases. ZP21 was kept intact at Richmond until the end of the war.²⁷ Table 2 details Florida-based airship squadrons and detachments.

Table 2

UNITS ASSIGNED TO FASW2 OPERATING FROM FLORIDA BASES⁶⁷

<u>Squadron</u>	<u>Location</u>	<u>Dates</u>
ZP-21	Richmond	Dec 42 - May 45
ZP-21 (Det.)	Key West	Feb 43 - Apr 44
ZP-21 (Det.)	Banana River	Nov 43 - May 45
Airship Training Det.	Key West	Jan 44 - Feb 44
Headquarters Squadron 2	Richmond	Jul 43 - Jun 45
HEDRON Detachment 21-3	Key West	Jul 43 - Jun 45
HEDRON Detachment 21-2	Banana River	Nov 43 - Jan 45
HEDRON Detachment 21	Richmond	Sep 44 - Jan 45

Naval Operations from Florida Bases

In the Gulf Sea Frontier, there were present approximately two U-boats per month in early 1942, nine-sixteen U-boats in May, four in June and July, two in August and September, 1942, and three or four per month thereafter to the end of the war.²⁸ Table 3 below is a summary of the operations of FAW12 to counter the threat. Noteworthy are the facts that during the entire period, only one U-boat was damaged by FAW12 aircraft, none were sunk, and no aircraft were damaged or lost in combat. Total flight hours flown by all aircraft assigned to FAW12 averaged 6500 per month with peaks of 11966, 11403, and 11900 in April, May and July of 1943 respectively.²⁹ Weather was considered to be excellent throughout the area patrolled. Unrestricted flying conditions prevailed about ninety-nine percent of the time, with the only problems being two or three hurricane evacuations.³⁰ Frontier patrols were highlighted by the account of one pilot flying from Key West who sighted a periscope, circled for the kill, pulled the bomb release, and discovered that he had failed to open the bomb bay doors. As he circled for a re-attack, a second smaller plane dove for the U-boat with .30 caliber guns blazing; the U-boat crash-dived and apparently escaped unharmed.³¹

Total monthly flight hours flown by all units of FASW2 averaged 4000 with a maximum of 6478 flown in July, 1943. Table 4 below details the action of the Wing. During the

Table 3

ACTION SUMMARY OF FAWL2⁶⁸

	Sep 42 - Dec 42	Jan 43 - May 43	June 43 - Nov 43	Dec 43 - May 44	June 44 - Nov 44	Dec 44 - Jul 45
Searches Made	No record	No record	4352 (beginning August)	6092	3740	2507
Enemy Ships Damaged or Sunk	None	None	1 submarine Damaged	None	None	None
Own Planes Lost (Combat)	None	None	None	None	None	None
Own Planes Lost (Operations)	No record	2	15	3	3	1
Own Planes Damaged (Combat)	None	None	None	None	None	None
Own Planes Damaged (Operations)	1	9	7	9	3	None
Personnel Lost	None	10	37	13	1	1

Table 4

ACTION SUMMARY OF FASW2⁶⁹

	Dec 42 - Feb 43	Mar 43 - Jun 43	Jul 43 - Dec 43	Jan 44 - Jun 44	Jul 44 - Nov 44	Dec 44 - Jun 45
Operational Missions	176	157	2315	1799	1381	1022
Enemy Ships Damaged or Sunk	None	None	1 sub dam.	None	None	None
Own Blimps Lost (combat)	None	None	1	None	None	None
Own Blimps Lost (operations)	None	None	None	4	2	None
Own Blimps Damaged (combat)	None	None	None	None	None	None
Own Blimps Damaged (operations)	None	None	5	6	3	5
Personnel Lost	None	None	1	9	1	1

entire period, one submarine was damaged by a FASW2 airship, and no airships were damaged from combat.³² The one airship lost was number K-66 flying from Key West on 7 July 1942. Forty nautical miles southwest from Meacham Field, the crew of K-66 sighted a surfaced U-boat and closed for the kill. As the adversaries exchanged fire with .50 caliber machine guns, and with the blimp's starboard engine shot out, K-66 attempted to drop its depth charges on the target. When the release mechanism failed, the gun dual continued until K-66 was shot down. Eleven of the crew of twelve were rescued, and the U-boat was presumed to have escaped.³³

Army Air Force

The AAF's ASW Command was established in October 1942 with Brigadier General W. T. Larson as Commanding Officer. A subordinate unit of this command was the 26th Air Wing headquartered in the DuPont Building in Miami, Florida. By February 1943, approximately sixty-two AAF B-24 Liberators were assigned to Florida bases at Lantana (West Palm Beach), Banana River, Miami, and Tampa.³⁴ On 10 June 1943, General Marshall finally decided that ASW operations should be the exclusive mission of the Navy; the Army's ASW Command subsequently was disbanded on 1 September 1943. By this time, the Navy had enough trained flight crews and aircraft to effectively perform the ASW mission. The AAF's specially-equipped B-24s were turned over to the Navy.³⁵

The early workhorse of the AAF's ASW patrols was the B-18; this was augmented by the DB-7B, A-20, A-29 and the B-34. Having limited range, it was important that they be replaced by the B-24.³⁶ The following units operated from Florida airfields: 76th Bomber Squadron (Tampa); 78th Bomber Squadron (Miami and Jacksonville); 18th Observation Squadron (Banana River and Jacksonville); 112th Observation Squadron (Lantana); and the 79th and 80th Bomber Squadrons (home airfields unknown to this writer). The Jacksonville airbase and its respective units were under the operational command of the 25th Air Wing which was headquartered in New York.³⁷ Appendix 2 is a chart depicting the daily air area coverage of bomber and observation squadrons operating under the Gulf Task Force. Florida-based squadron operational summaries were generally unavailable to this writer; however, the November 1942 Jacksonville Summary of 125 missions totaling 373 hours may indicate the tempo of operations.³⁸

Early in 1942, statistical analysis and a series of experiments based on the study of US and British ASW attacks provided the basis for significant revision of tactical doctrine. It was found that camouflaging aircraft, conducting searches at higher altitudes, and effectively using cloud cover enhanced the probability of detecting a target on the surface. It was also determined that the elapsed time from the start of a U-boat's crash dive until only a small swirl remained was approximately forty-seven seconds.

This short time allowed little opportunity for accurate and successful reattack of a target. Therefore, air crews were directed to attack strongly on their first attack, dropping all depth charges on the first pass (set shallow at thirty feet instead of fifty feet) before the submarine could dive deep.³⁹

Civil Air Patrol Organization

In late 1941, as it became more likely that the U.S. would enter the global conflict, civilian aviators recognized the potential assistance that they could provide the U.S. government, and they began to lobby Congress for the formation of a civilian aviation auxiliary. Despite the protests of skeptics in Congress and the military, the Civil Air Patrol (CAP) was founded on 1 December 1941 as a division of the Office of Civilian Defense. CAP later became an auxiliary of the AAF in April 1943. CAP, with Wing Commands in each state, was organized into the Southern Liaison Patrol, the Courier Service, the Forest Patrol and--the subject of this paper--the Coastal Patrol.⁴⁰ The Wings were composed of several squadrons with anywhere from 50 to 200 personnel assigned per squadron. There were various sources of CAP funding, including the Government, and oil companies who were losing ships to U-boat sinkings. Not the most insignificant source were the pilots and personnel of each unit, who provided the aircraft and other operating equipment. Pilots were to be compensated with a daily allowance of eight dollars,

and observers were to receive five dollars per day; however, these payments were often grossly in arrears. For the most part, CAP volunteers worked out of dedication to duty and love of aviation.⁴¹

The first Florida airfield, CAP Base Three, located at Lantana (activated 30 March 1942; first patrol on 2 April 1942) was part of the initial ninety-day CAP Coastal Patrol experiment. Base Five at Daytona--Flagler Beach (11 March, 1942; 19 May, 1942), Base Seven at Miami (13 May, 1942; 14 May, 1942), Base Thirteen at Sarasota (9 July, 1942; 7 August, 1942), and Base Fourteen at Panama City (16 July, 1942; 8 August, 1942) followed thereafter.⁴² CAP Coastal Patrol operations terminated on 31 August, 1943, when the Navy was able to assume full responsibility for coastal ASW patrols.⁴³ The Florida Wing Commander from 1 December, 1941, to 6 April, 1943, was Colonel Wright Vermilya; he was succeeded by Major R. P. Robbins.⁴⁴

CAP General Operations

CAP pilots flew an assortment of aircraft that were primarily single-engine and privately-owned. These included Stinson Voyagers, Reliants, Fairchilds, Wacos, Curtis Robins, Monocoaches, Cessnas, Beechcrafts, Gull-Wings, Grumman Widgeons, Rearwing, Taylorcrafts, and Howards.⁴⁵ In general, aircraft assigned for overwater patrol were required to have a rating of greater than ninety horsepower because the patrols

often extended to greater than fifty miles offshore. Aircraft, usually manned by a pilot and observer, flew in pairs on overwater missions. Early CAP ASW patrols were flown unarmed, but the incident of a grounded U-boat that escaped from an unarmed CAP aircraft caused AAF General Arnold to order all CAP aircraft be fitted to carry 100 pound bombs or depth charges.⁴⁶

The CAP was the de facto primary airborne coastal ASW force in the early part of the war. During the high-tempo period of operations, which was from May, 1942 to August, 1943, total missions flown from the five Florida bases averaged 300 per week. The busiest time occurred in the first week of October, 1942 when approximately 600 missions were flown.⁴⁷ There appears to be a direct correlation between Florida CAP missions and the occurrence of ship sinkings in the Gulf Sea Frontier; the obvious inference is that U-boats disappeared in direct proportion to an increase in CAP operations. This observation is supported by the quote of a high-ranking German Naval Officer after the war who, when asked why German U-boats had been withdrawn from US coastal waters early in 1943, replied "It was because of those damned little red and yellow (CAP) planes!"⁴⁸ For their efforts, individuals of the CAP Coastal Patrol were awarded a total of 824 Air Medals, of which 145 went to members flying from Florida bases.⁴⁹ Appendix 3 is a chart depicting daily air area coverage by CAP Coastal Patrol units operating under the Gulf Task Force.

CAP Specific Operations

The need for a coastal patrol base in Northwest Florida was made obvious by the fact that seventy-eight ships were sunk in the Gulf of Mexico in May, June, and July of 1942. With a proposal to build a major shipyard at Panama City under consideration, and when the Empire Mica was torpedoed off Apalachicola, CAP's Base Fourteen was activated at Panama City.⁵⁰ Commanded by Major Robert Dodge, the base was manned mostly by CAP personnel from Ohio, as there were insufficient locals. The runway was nothing more than a grass field with no permanent lighting. Two-plane, three-hour ASW patrols were flown using only those aircraft with greater than 125 horsepower. During the winter, there were three patrols daily, while in summer four patrols were flown. Base Fourteen's sector of operations was from St. George Island to Choctowatchee Bay and up to sixty miles from shore.⁵¹ During its period of operations, one U-boat was sighted by an unarmed crew who radioed the target information to Base Fourteen. Subsequently, a Navy PBV from Pensacola was dispatched and ultimately sank the submarine.⁵² A total of six men from Base Fourteen were killed on operational missions (none of the deaths were combat related). Ironically, these were the only fatalities resulting from operational missions flown from the five Florida CAP bases.⁵³

CAP Base Five was initially located at Daytona Beach Airport under the command of Captain J. L. Gresham. Like

the majority of personnel who manned this base, Gresham was from the local area.⁵⁴ Because of limited funding for this base, Gresham and other volunteers contributed personal funds and secured a loan from the City of Daytona Beach in order to build makeshift facilities. Radio equipment had to be borrowed from local ham operators until funds came later.⁵⁵ Base Five was assigned a patrol sector that extended from Jacksonville to Melbourne. Typically, there were three missions scheduled daily: a dawn patrol to Melbourne; a 1300 (1:00 p.m.) mission to Jacksonville; and a 1500 (3:00 p.m.) mission to Melbourne.⁵⁶ 17000 Hours were flown by the total of thirty-nine aircraft assigned, of which only three were lost at sea (the aircrews were rescued). During the entire period of operations, flight operations were canceled due to poor weather a total of only seven days. Planes from Base Five made twenty-one attacks on submarines and were reasonably certain of two kills.⁵⁷ Base Five flight operations were transferred to Flagler Beach Airport effective 28 October, 1942, and remained there until termination of the Coastal Patrol.⁵⁸

Operations from CAP Base Three at Lantana, the third base activated in the Coastal Patrol, were highlighted by two incidents on 5 May, 1942. The dawn patrol sighted a surfaced U-boat off Cape Canaveral that apparently was waiting for an approaching tanker. After the submarine crash-dived, the aircrew detected and followed an oil slick on a line between

the diving point and the tanker. A Navy plane that was vectored to the area dropped two depth charges which were later reported to have scored possible hits.⁵⁹ The second incident was that of the previously mentioned unarmed CAP patrol that observed a U-boat run aground near the mouth of the Banana River (near Cape Canaveral). The aircrew radioed for assistance, but the U-boat managed to free itself before it could be attacked.⁶⁰

Initially located at Miami's municipal airport, CAP Base Seven was later moved to outlying Chapman Field because of increasing Naval Air activity. Commanded by Major L. Fale, fliers from Base Seven sighted a total of eight U-boats, but were credited with no sinkings.⁶¹

Although always on the lookout for submarines, aviators from CAP Base Thirteen were assigned the primary mission of air-sea rescue coordination. Initially located at Tampa, the base was later moved to Sarasota so as to be more centrally located in the assigned sector of operations.⁶²

United States Coast Guard

Regretfully, detailed information concerning Coast Guard airborne patrols flown from Florida bases was virtually inaccessible. The following is a brief synopsis of activity.

Regular air patrols were first organized in 1940, with missions flown from Florida bases located at Miami and St. Petersburg. These Coast Guard missions, tasked with ASW and

convoy escort patrols, were generally assigned search sectors from 100 to 200 miles off principal ports. Coast Guard patrols were coordinated by the Navy's Area Commander, and were ultimately controlled by the commander of the Gulf Sea Frontier.⁶³ Early in the war, the Coast Guard used the following aircraft for ASW patrols: twin engine amphibians (max. speed 150 kts.; range 700 nm); PH-2 Hall Flying Boats (160 kts; 1000 nm). The Coast Guard later transitioned to the J4F and JRF (both Grumman amphibious aircraft), and versions of the Navy's PBM, PBY, and O52U3. Coast Guard ASW patrols were terminated in October, 1944, when the submarine threat had all but disappeared.⁶⁴

Summary

As has been typical throughout its history, the United States was not fully prepared when it entered World War II. This is exemplified by the general disarray of the ASW organization, and by the length of time required for the Navy to finally assume full responsibility for land-based ASW patrols. Fortunately, the Coast Guard and the CAP, followed by the AAF, were able to perform the mission of coastal airborne ASW until the Navy could muster enough men and aircraft to do the job. It was through the joint effort of these four forces that Florida-based airborne ASW units were able to deter and finally eradicate the U-boat menace in the Gulf Sea Frontier.

APPENDIX 1

NAVAL AIRCRAFT AND AIRSHIPS USED FOR ASW PATROL⁶⁵

VP PATROL PLANES

Lockheed-Vega PV-1 "Ventura." Six place; span 65'6"; length 51'9"; height 14'3"; two 2000 h.p. Pratt & Whitney R-2800 engines; speed 313 m.p.h.; armament 5-.5ocal. fixed machine guns, 4-.5ocal flexible machine guns, 5000 lb. bombs.

VPB PATROL BOMBERS

Boeing (Canada) PB2B-2 "Catalina." Duplicates Consolidated PBY-6A.

Consolidated PBY-1 "Catalina." Eight place; span 104'; length 65'2"; height 18'6"; two 900 h.p. Pratt & Whitney R-1830 engines; speed 191 m.p.h.; armament 2-.3ocal. and 2-5ocal. flexible machine guns, 4000 lb. bombs or 2 torpedoes.

PBY-5 "Catalina." Nine place; span 104'; length 64'; height 19'; two 1200 h.p. Pratt & Whitney R-1830 engines; speed 195 m.p.h.; armament 2-.3ocal. and 2-.5ocal. flexible machine guns, 4000 lb. bombs or 2 torpedoes.

PBY-5A "Catalina." Amphibian version of PBY-5.

PBY-6A "Catalina." Nine place; span 104'; length 65'; height 17'11"; two 1200 h.s. Pratt & Whitney R-1830 engines; speed 195 m.p.h.; armament 10.3ocal. and 3-.5ocal. flexible machine guns, 4000 lb. bombs or 2 torpedoes.

PB2Y-3 "Coronado." Ten place; span 115'; length 79'3"; height 24'8"; four 1200 h.p. Pratt & Whitney R-1830 engines; speed 230 m.p.h.; armament 8-.5ocal. flexible machine guns 12,000 lb. bombs or 2 torpedoes.

PB2Y-5 "Coronado." Ten place; span 115'; length 79'3"; height 27'6"; four 1200 h.s. Pratt & Whitney R-1830 engines; speed 230 m.p.h.; armament 8-.5ocal. flexible machine guns, 12,000 lb. bombs or 2 torpedoes.

PB4Y-1 "Liberator." Eleven place; span 110'; length 66'4"; height 17'11"; four 1200 h.s. Pratt & Whitney R-1830 engines; speed 270 m.p.h.; armament 13-.5ocal. flexible machine guns, 8000 lb. bombs.

PB4Y-2 "Privateer." Eleven place; span 110'; length 74'7"; height 30'1"; four 1350 h.s. Pratt & Whitney R-1830 engines; speed 237 m.p.h.; armament 12-.5ocal. flexible machine guns, 12,800 lb. bombs.

Lockheed PBO-1 "Hudson." Five place; span 65'5"; length 44'5"; height 11'10"; two 1200 h.p. Wright R-1820 engines; speed 275 m.p.h.; armament 7-.3ocal. flexible machine guns, 1150 lb. bombs.

Martin PBM-3 "Mariner." Six place; span 118'; length 80'1"; height 24'5"; two 1900 h.s. Wright R-2600 engines; speed 211 m.p.h.; armament 1-.3ocal. and 5-.5ocal. flexible machine guns, 12,800 lb. bombs or 2 torpedoes. PBM-5 "Mariner." Nine place; span 118'; length 79'10"; height 27'6"; two 2100 h.p. Pratt & Whitney R-2800 engines; speed 200 m.p.h.; armament 8-.5ocal. flexible machine guns, 12,800 lb. bombs or 2 torpedoes.

Naval Aircraft Factory PBN-1 "Nomad." Duplicates Consolidated PBX-6A.

SO, VOS, OR VS OBSERVATION PLANES

Curtiss SOC-3 "Seagull." Two place; span 36'; length 31'9"; height 14'10"; one 550 h.p. Pratt & Whitney R-1340 engine; speed 164 m.p.h.; armament 1 fixed and 1 flexible .3ocal. machine gun, 470 lb. bombs.

SC-1 "Seahawk." One place; span 41'; length 37'8"; height 16"; one 1350 h.p. Wright R-1820 engine; speed 313 m.p.h.; armament 20.5ocal. fixed machine guns, 1300 lb. bombs.

Naval Aircraft Factory SON-1 "Seagull." Duplicates Curtiss SOC-3.

OS₂N-1 "Kingfisher." Duplicates Vought-Sikorsky OS₂-U-3.

Vought-Sikorsky OS₂-U-3 "Kingfisher." Two place; span 35'11"; length 33'7"; height 15'1"; one 450 h.s. Pratt & Whitney R-985 engine; speed 177 m.p.h.; armament 1 fixed and 1 flesible .3ocal. machine gun, 650 lb. bombs.

ZNP PATROL AIRSHIPS (BLIMPS)

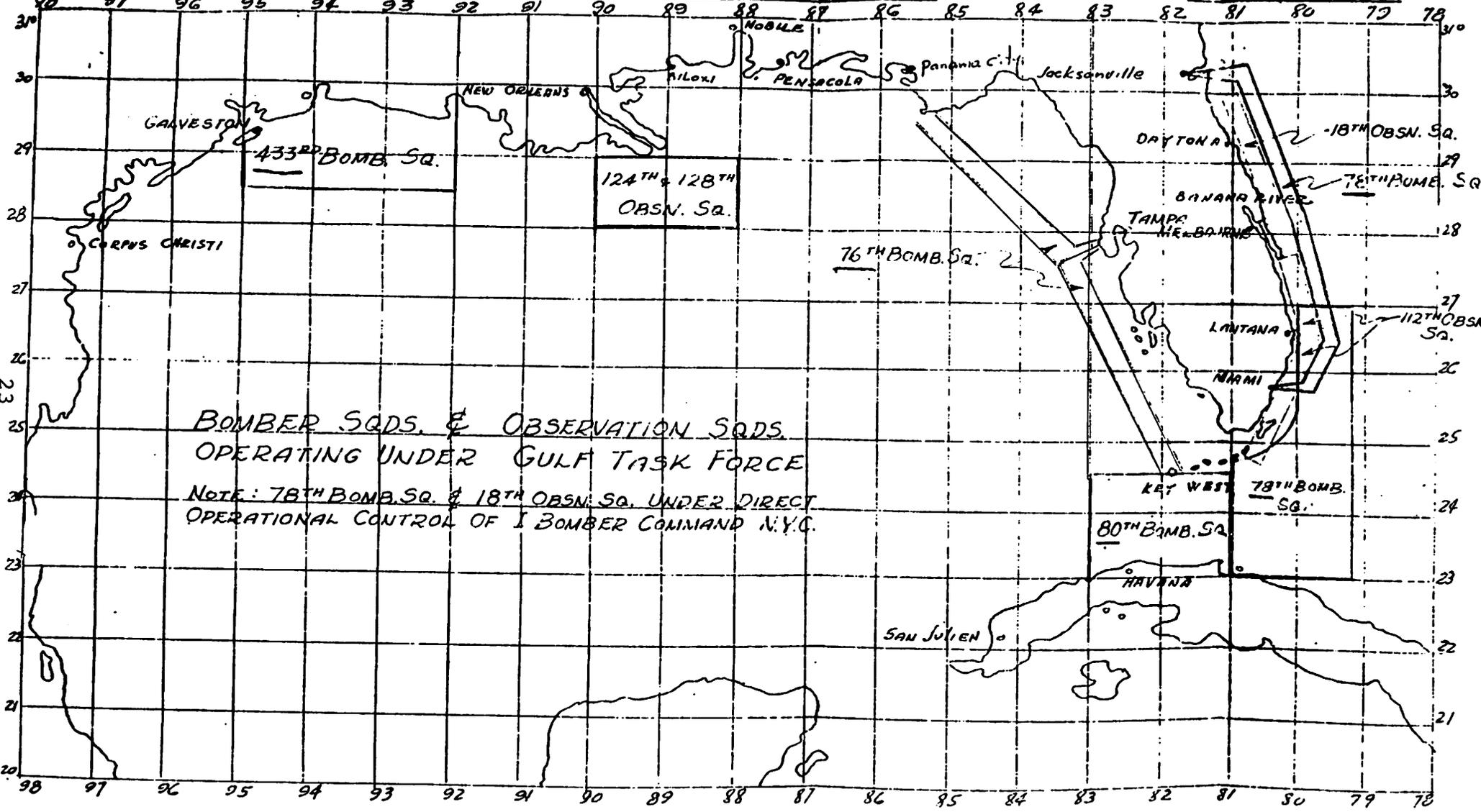
K-3 class (K 3-13). Eight place; length 250'; volume 415,000 cubic feet; two 400 h.p. Wright R-975 engines; speed 65 m.p.h.; armament 1-.5ocal. machine gun, 1200 lb. bombs or depth charges.

K-14 class (K-14-135). Nine place; length 251'; volume 425,000 cubic feet; two 600 h.p. Pratt & Whitney R-1340 engines; speed 65 m.p.h.; armament 1-.5ocal. machine gun, 1200 lb. bombs or depth charges, K74 and 94 lost.

M-1 class (1-4). Twelve place; length 294'; volume 725,000 cubic feet; two 600 h.p. Pratt & Whitney R-1340 engines; speed 65 m.p.h.; armament 1-.5ocal. machine gun, 2000 lb. bombs or depth charges.

DAILY AIR AREA COVERAGE

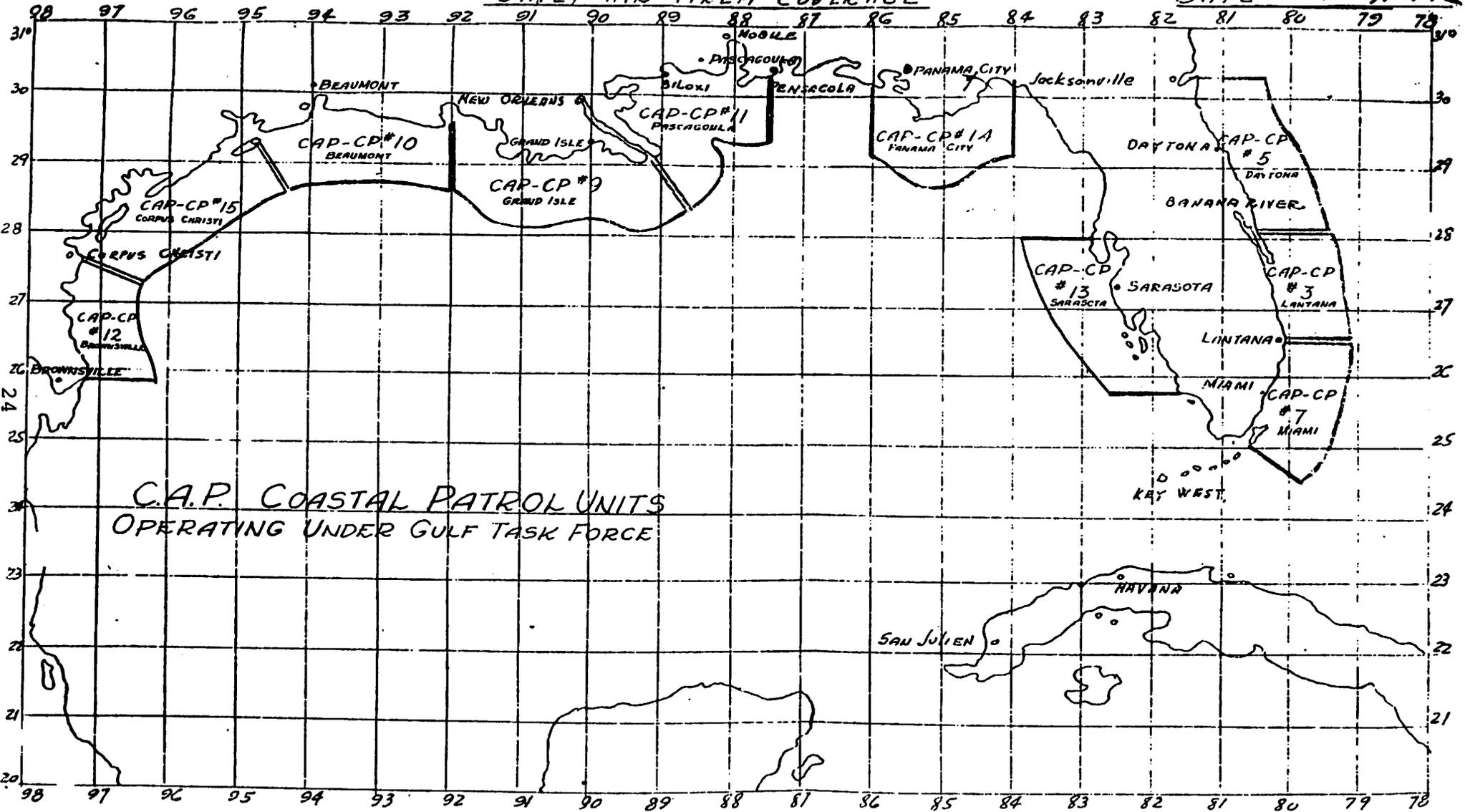
DATE OCT. 17, 1942



BOMBER SQDS. & OBSERVATION SQDS.
 OPERATING UNDER GULF TASK FORCE
 NOTE: 76TH BOMB. SQ. & 18TH OBSN. SQ. UNDER DIRECT
 OPERATIONAL CONTROL OF I BOMBER COMMAND N.Y.C.

DAILY AIR AREA COVERAGE

DATE OCT. 17, 1942



Footnotes

¹Samuel Eliot Morison, History of United States Naval Operations in World War II (Boston, 1947), I, 413.

²Ibid.

³Ibid., p. 200.

⁴Barbara G. Green, The History of Coastal Patrol Base Fourteen (1979), p. 6 (from the files of COL. L. E. Hopper, CAP).

⁵Morison, p. 207.

⁶J. R. Mickler (LCDR, USNR), Key West in World War II (1945), p. 86.

⁷Ibid.

⁸Morison, pp. 206-207.

⁹Ibid., p. 237-240.

¹⁰Ernest J. King (ADM, USN) and Walter M. Whitehill (CDR, USNR), Fleet Admiral King (New York, 1952), pp. 452-459.

¹¹Morison, p. 242.

¹²Ibid., p. 243.

¹³King, pp. 464-468.

¹⁴CINCLANTFLT Files (Fleet Air Wing 12), Office of the Chief of Naval Operations, Naval Aviation History and Archives (OP-05D2).

¹⁵Ibid.

¹⁶Ibid.

¹⁷Ibid.

¹⁸Morison, I, 250.

¹⁹CINCLANTFLT Files (Fleet Air Ship Wing 2).

²⁰Ibid.

²¹Mickle, p. 87.

²²Morison, I, 240.

²³Ibid., p. 242.

²⁴Ibid., p. 226.

²⁵Ibid., p. 250.

²⁶CINCLANTFLT Files, Fleet Air Wing, 2.

²⁷Ibid., Fleet Airship Wing 2.

- ²⁸Mickler, p. 88.
- ²⁹CINCLANTFLT Files, Fleet Air Wing 12.
- ³⁰Ibid.
- ³¹Mickler, p. 87.
- ³²CINCLANTFLT Files. Fleet Airship Wing 2.
- ³³Mickler, p. 87.
- ³⁴Morison, I, p. 242.
- ³⁵Ibid., p. 245
- ³⁶L. E. Hopper (COL, CAP). Coastal Patrol Study Files, Vol. II, No. 15, p. 12.
- ³⁷Ibid., No. 17.
- ³⁸Ibid., No. 16.
- ³⁹Ibid., p. 14.
- ⁴⁰Elizabeth W. King, "Heroes of Wartime Science and Mercy," The National Geographic Magazine, Vol. 84, No. 6, Dec. 1943, p. 720.
- ⁴¹Robert E. Neprud. Flying Minute Men (New York, 1948), p. 10, 23.
- ⁴²Ibid., p. 34.
- ⁴³Ibid., p. 45.
- ⁴⁴Ibid., p. 123.
- ⁴⁵Author's note: Compiled from Jeeps in the Sky, Flying Minute Men, and CAP Coastal Patrol Base Twenty-One.
- ⁴⁶Robert L. Ten Eyck (LCOL, AAF), Jeeps in the Sky (New York, 1946), pp. 27-28.
- ⁴⁷Author's note: Exact Florida figures were unavailable; the author interpolated these figures from the Coastal Patrol Operational Summary in COL Hopper's A Review of Civil Air Patrol Coastal Patrol Operations Reports, assuming that Florida's five bases accounted for approximately one-fourth of the total missions of the twenty-one Coastal Patrol Bases.
- ⁴⁸Neprud, p. 46.
- ⁴⁹Phone conversation with COL Hopper.
- ⁵⁰Barbara G. Green, The History of Coastal Patrol Base Fourteen (1979; from the CAP Files of COL. L. E. Hopper), p. 6.
- ⁵¹Ibid., p. 7.
- ⁵²Ibid.
- ⁵³Neprud, p. 120.

⁵⁴C. Y. Nanney, Jr., C.A.P. Coastal Patrol Base No. 5 History (1943; from the files of LCOL Elizabeth Sedita).

⁵⁵Ibid.

⁵⁶Ibid.

⁵⁷Neprud, p. 38.

⁵⁸Nanney.

⁵⁹Neprud, p. 18.

⁶⁰Ibid.

⁶¹Ibid., p. 39.

⁶²Ibid., p. 43.

⁶³Malcolm F. Willoughby. The U.S. Coast Guard in World War II (Annapolis, Maryland, 1957), p. 38.

⁶⁴Ibid.

⁶⁵Morison, XV, 113-114.

⁶⁶CINCLANTFLT Files.

⁶⁷Ibid.

⁶⁸Ibid.

⁶⁹Ibid.

⁷⁰Reproduced from: L. E. Hopper (COL, CAP), Coastal Patrol Study Files, Vol. II, No. 17.

⁷¹Ibid.

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