

File

ly refer to Initials
and No.

NAVY DEPARTMENT

OFFICE OF NAVAL OPERATIONS

Op-Air
0155-50

DECLASSIFIED + DOD DIR 3200.5
27 Sep 1958

I-32-GB

Aug 26, 1918

From: Chief of Naval Operations (Aviation)
To : All Naval Air Stations, Aviation Detachments and Bureaus.

SUBJECT: Weekly Report - August 26, 1918.

1. Hours of patrol obtained during the past week at Naval Air Stations, together with the number of flights and seaplanes used for patrol, for week ending August 26, 1918.

P A T R O L S .

<u>Stations.</u>	<u>Flights</u>	<u>Hours</u>	<u>Min.</u>	<u>No. of Aircraft.</u>
Cape May	50	128 +	13	8 Seaplanes
Chatham	87	<u>277</u> +	53	14 Seaplanes
Coco Solo	10	<u>41</u> -		2 Seaplanes
Hampton Roads	49	149 -	48	18 Seaplanes
Key West	110	131 +	28	10 Seaplanes
Miami	44	128 +	58	4 Seaplanes
Montauk	55	136 +	40	7 Seaplanes
"	5	<u>48</u> +	13	1 Lighter-than-aircraft
Pensacola	13	61 -	3	8 Seaplanes
Rockaway	79	339 +	55	9 Seaplanes
"	15	<u>89</u> +	3	2 Lighter-than-aircraft
San Diego	1	5 +	12	2 Seaplanes
	<u>518</u>	<u>1537</u> +	26	
Lighter-than-air-craft total	20	137 +	16	
Seaplanes total	498	1400 +	10	

NOTE: The sign + indicates that the record for the week is greater, the sign - indicates that the record for the week is less than for the week preceding. Underscoring denotes the best record for station.

0155-50
2017
ASH

2. Hours of flying other than patrol obtained during the past week at Naval Air Station, together with the number of flights and seaplanes in commission and at each station, for week ending Aug. 26, 1918

<u>Stations</u>	<u>Flights other than patrol</u>	<u>Hours Min.</u>		<u>Aircraft in Commission</u>	<u>Complement at Station</u>
Akron	18	17	4	Dirigibles	
"	35	23	5	Kite Balloons	
"	19	15	20	Free Balloons	
Bay Shore	946	786	25	28 Seaplanes	42 Seaplanes
Cape May	24	13	21	8 Seaplanes	12 Seaplanes
Chatham	14	6	58	14 Seaplanes	12 Seaplanes
Coco Solo	24	5	30	2 Seaplanes	12 Seaplanes
Hampton Roads	39	33	26	18 Seaplanes	m 42 Seaplanes
"	2		34	2 Kite Balloons	13 Kite Balloons
Key West	1116	819	34	26 Seaplanes	54 Seaplanes
"	11	18	36	1 Dirigible	x 2 Dirigibles
Miami	1327	953	45	32 Seaplanes	72 Seaplanes
Miami Marines	455	430	30	13 Airplanes	40 Airplanes
Montauk	20	14	50	7 Seaplanes	12 Seaplanes
"	2	4	40	1 Dirigible	2 Dirigibles
Pensacola	1153	620	22	57 Seaplanes	108 Seaplanes
"	2	3	15	10 Free Balloons	x 10 Free Balloons
Rockaway	37	33	35	9 Seaplanes	24 Seaplanes
"	16	5		2 Dirigibles	x 2 Dirigibles
"	35	379	7	6 Kite Balloons	17 Kite Balloons
San Diego	383	289	24	10 Seaplanes	48 Seaplanes
	<u>5678</u>	<u>4474</u>	<u>21</u>		

	<u>Flights</u>	<u>Hours</u>	<u>Min.</u>
Seaplanes			
Total	5083	3577	10
Dirigibles	47	45	20
Lighter-than-aircraft	140	466	41
Airplanes	455	430	30

GRAND TOTAL FOR FLYING TIME

Patrol	518	137	16
Other-than-patrol	<u>5678</u>	<u>4474</u>	<u>21</u>
	<u>6196</u>	<u>4611</u>	<u>37</u>

x Number at Station
m 18 Experimental

0155-50

The following men have been commissioned Ensign, USNRF:

Atherton, H.G.	Harris, J.W.Jr.	O'Connell, D.J.
Auerswald, R.R.	Hartshorne, R.D.	Patterson, W.K.
Barnes, D.D.	Herfurth, W.R.	Piers, E.F.
Bates, D.H.	Hulse, J.H.	Pride, A.M.
Bournique, J.C.	Jaques, H.	Richardson, B.M.
Bourquin, M.M.	Johnson, L., Jr.	Rogers, G.E.
Bowers, A.	Knight, D.B.	Rust, B.H.
Brady, C.V.	Kolpien, A.L.	Shone, C.G.
Bristol, L.H.	Lampher, H.C.	Smith, A.I.
Burleigh, L.A.Jr.	McChesney, M.M.	Smith, J.P.
Churchell, H.C.	McKensie, W.C.	Smith, W.R.L., Jr.
Conolly, J.F.	Madigan, J.W.	Spears, H.R.
Curtiss, P.W.	Martin, H.C.	Stewart, O.P.
Durant, W.L.	Messinger, C.S.	Traver, C.H.
Edgerton, G.	Midwood, G.H., Jr.	Welles, R.
Guild, H.H.	Miller, T.W.	Widner, W.E.
Hammond, B.H.	Mosser, B.D.	Wilcox, D.G.
Harris, H.L.	Murphy, J.D.	Wilson, L.S.

The following Officers have been ordered abroad:

More, C.C.	Capt. R.A.F.
Quinn, J.J.	Lieut. (j.g.) USNRF.
Lynn, David E.	Ens. USNRF.
Mush, David A.	" "
Welch, Everet F.	" "

0155-50

News
4
PANAMA - August 14, 1918.

Further experiments in regard to towed targets were tried out during the past week but proved unsuccessful due to the fact that the fittings on the side of the fuselage, holding the towing wire, gave way.

The first trouble experienced with an H-16 bottom was caused by damage due to a series of fairly poor landings in rough weather. A small hole was knocked in the bottom, necessitating the removal of practically all of the entire starboard side of the forward step. Repair was effected by riveting the step ribs to the main ribs and securing a lamination of 3/16 inch juniper and 3/16 inch Oak, over a layer of cloth and marine glue, to the step ribs by means of screws. It is believed that this will be more satisfactory than the original bottom as it is stouter and easier to repair and only a trifle heavier. In this connection, it is considered advisable to allow students more leeway in handling H-16's than is allowed them in H-12's.

A reorganization of the Advanced Training Section is now being carried out. Advanced training, in fact, will be divided into three schools, Bombing, Gunnery and Navigation. There will be a Commanding Officer of each school, and he will be responsible for the instruction carried on in same, for the operation of all squadrons assigned to work in that school and for all material assigned to the school. Heads of these three schools will, in turn, be responsible to the Superintendent. ~~Lieutenant Rodman has been placed in charge of the Navigation School, Lieutenant (j.g.) Valdes in charge of the Gunnery School and Ensign Hahn, Acting in charge of Bombing School.~~

During the past week patrol flights were possible on five days. The total time for the week was 178 hours. Thirty seven students completed the course, making a total of 311 to date.

It is planned at present to give on Navigation Flights, instruction in Gunnery and Bombing, the preliminary outline of this course is as follows: Use HS-1's, H-16's and H-12's; each student will fire three full magazines and drop one 150# cement bomb until such time as the 18# cement bomb carriers can be installed. Permission has also been requested to place a light buoy 5 miles off the number 3 navigation course, which will serve for mooring targets for bombing and gunnery. This will be valuable experience for navigation students, giving them practice in changing their courses, and will also give them valuable bombing and gunnery practice.

6155-50

5
PENSACOLA - August 14, 1918.

The bombing course for the past week had 95 student officers attached and 40 of same were qualified. 180 hours and 5 minutes flying was done. The average number of machines in operation were nine.

COCO SOLO - CANAL ZONE - August 3, 1918.

On Saturday, August 3, at 9:30 a. m. the Commanding Officer was informed by Captain of Port that Naval Tug had towed out a sailing ship the day previous and was 19 hours overdue, and requested that planes be sent to this tug.

At 9:50 two seaplanes were dispatched, returning at 12:10 p.m. without locating the missing tug, although they picked up the sailing vessel about 60 miles from Colon, which this tug had towed out.

At 1:40 p.m. four seaplanes were dispatched - and flew continuously for 4 hours and 15 minutes without landing - almost all the flight being out of sight of land; an area of over 5000 square miles being covered in this patrol by these two machines.

Location of the sailing vessel was accurately plotted and a destroyer sent to overtake her - the destroyer found the sailing vessel near the position indicated and ascertained that the Tug had foundered and such members of the crew as had been saved were on board.

MIAMI - August 10, 1918.

Commander Towers, Civil Engineer Kirby Smith, Lieutenant Hobbs and Ensign Cahill inspected station. Three HS-1s & 1 HS-2 boats flew to Key West and return with above inspection board. Three returned same day. One made forced landing on way back with broken rocker arm. This machine was flown back next day.

The Aeromarine sea-lane is not considered a good type instruction machine at this station. Due to lack of power they make poor dual machine and with solo students are not at all satisfactory.

A communication was received from the Commanding Officer, Moutchic, France, enclosing blue print of breast plate used on the Lewis machine gun instead of the spade grip. This plate was made and tried out in the air. Its operation was very satisfactory, reducing the vibration of gun considerably.

0155-50

HAMPTON ROADS - August 22, 1918.

This station is trying to equip a model pilots' room, and we intend to put in it all of your confidential stencils in a file cabinet and all charts, maps and photographs that could possibly assist them in knowing local geography and their patrol area. We would very much like to put on the walls any silhouettes, photographs, posters or anything of that type which you may have on hand, and which would either be of assistance to the pilots or lend color to the room.

ROCKAWAY - August 15, 1918.

On August 7, 1918, Flying Boat H-16 A-830, left this station at 11:50 a.m. for the Naval Air Station, Hampton Roads, Va. A landing was made at the Naval Air Station, Cape May, N.J., for one hour, then continuing the flight, arriving at Hampton Roads at 5:03 p.m. An altitude of about 1800 feet was maintained during the flight. The total time in the air was 4 hours, 13 minutes.

During the past month 3 Kite Balloons have been struck by lightning, two of which have been completely destroyed. In all cases balloons were at an altitude of 300 to 600 feet. None of the baskets were destroyed or even burned.

FIRST MARINE AVIATION FORCE, MIAMI, FLA. - August 13, 1918.

Bombing. In the use of sub-calibre bombs at this station, the following difficulties were encountered:

First. The Bomber could follow the trajectory of the bomb but a short distance. This difficulty was overcome to a large extent by painting these bombs white, increasing the range of vision from the air over 100% - the Bomber now being able to follow the trajectory.

The second difficulty was with the Very lights with which the bombs were loaded. The wad in the shells would catch in the tail, smothering the charge and closing the channel of escape for the smoke and lighting charge. In all cases of recovered bombs, the lighting charge had never been ignited. This difficulty was overcome by using shotgun shells loaded with black powder. The shot in these shells blow off the tails, allowing a cloud of smoke to escape, which is not only plain to the observer on the ground, but also very clear to the Bomber himself at altitudes up to 4,000 feet.

0155-50

7

FIRST MARINE AVIATION FORCE, MIAMI, FLA. (continued)

Gunnery

Free balloons were tried out at this station and found to be impracticable, because of the danger of machine gun fire to the people in the immediate vicinity. They were then attached by means of thread, and allowed to ascend to about 800 feet, thereby enabling pilots to fire at them with both fixed and flexible guns, taking care to aim always toward the Everglades. This will be included in the present course.

Marlin Guns Synchronized

Web belts have been tried, and found to be impracticable because on becoming damp or wet, they will not hold their shape, consequently causing stoppages in the feeding system. Metallic links are the only ones it is considered advisable to use with the gun.



0155-50

8

News

SAN DIEGO, Cal. - August 10, 1918.

On Friday, August 9th, 1918, at the request of the Commander, Division Two, U.S. Pacific Fleet, the Patrol Division of this Station, consisting of three (3) R-6 Curtiss Seaplanes, made a patrol flight to San Pedro, California, a distance of approximately ninety (90) nautical miles, to participate in the Naval Fete of the Allied War Exposition, which was being held in the harbor.

A signalling system was devised for the Flagship, making it possible to give directions to the other aircraft in the patrol. This consisted of a six-foot flag pole mounted on the fuselage to the rear of the rear cockpit, on which was hoisted a set of signal flags of the International Code.

After arrival at San Pedro Exhibition, flights were made over the harbor. Return trip was made and seaplanes arrived at this station at 7:38 P.M.

KEY WEST, Fla. - August 14, 1918.

A trial rescue of two men from a seaplane by means of a rope ladder lowered from a dirigible was effected with great success. A seaplane was landed in the water about a mile off shore. Dirigible A-236 was taken out with a 75 foot rope ladder weighing 26 pounds attached to the landing gear. The dirigible was maneuvered to a position a little aft and over the plane and was slowly brought upwind and the ladder dropped to the two men who grasped it. At the same time enough water ballast was released from the dirigible to lift both men clear of the water. They experienced no difficulty in climbing the ladder and getting aboard.

This test was made in a twenty mile wind and rough sea. The air was also very bad. We believe that this will be a very satisfactory means of rescuing patrol pilots who have to make forced landings in a rough sea. Care should be taken not to release too much ballast from the dirigible as the natural tendency is to try to pull the men on the ladder clear of the water at once.

U.S. NAVAL AVIATION FORCES, FOREIGN SERVICE - Confidential Bulletin #13

August 3, 1918.

Head of Division of I & P reported that the Livingston Muffler has been tried with the Liberty Engine, and that the loss of power due to its use is approximately 3%, although, the muffling effect is very satisfactory. A Brief report of this test appears in this issue.

Note No. 50.

Present Status of the Art of Doping Airplane Fabrics.
Varnish and Paint. A pigmented varnish such as Low

Visibility Gray is applied over the doped wing surfaces of

185-50

all Naval Aircraft, in order to prevent the admission of light rays which would cause the rapid destruction of airplane fabrics. For hot climates such as Pensacola, there should preferably be used colors which are not subject to rapid increase of temperature, in order to prevent the air in the internal chambers of the wings from heating to such an extent as to cause warping or distortion of the wood parts, thus lowering the efficiency of a plane. In order to determine the color having the lowest heat absorption value, some tests were made at The Institute of Industrial Research. Small model wing surfaces, in the form of Frames, were made and treated with five coats of dope. The frames were then painted with wing enamels of different colors and placed in the sun for a period of 50 minutes. Temperature readings were made every 5 minutes with thermometers inserted in the central wing chamber. The outside temperature at the start of the tests was 85 degrees. Within 5 minutes, rises of temperature of from eight to seventeen degrees were noted. Further gradual rises took place, the temperature remaining practically constant after 50 minutes' exposure. The actual rises in the above period of time for several of the wing surfaces are given below:

Effect of Color on Heat Absorption.

				Temperature	Temperature
				at end of	at end of
				5 minutes.	50 minutes.
5	coats	dope	-----	93	98
5	"	"	/ 1 coat Black Enamel -----	102	118
5	"	"	/ 1 coat Khaki " -----	102	116
5	"	"	/ 1 coat Light Pearl Enamel-	96	100
5	"	"	(/ 1 " Naval Gray ")		
			(/ 1 " Aluminum Enamel)--	100	107

5	"	"	(/ 1 " Black Enamel) ----		
			(/ 1 " Aluminum Enamel)---	96	107

By direction.

0153-50