

NAVY DEPARTMENT
OFFICE OF NAVAL OPERATIONS
WASHINGTON

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Sept. 3, 1918



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

SUBJECT: Weekly Report - September 2, 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 September 2, 1918.

P A T R O L S .

<u>Stations</u>	<u>Flights</u>	<u>Hours</u>	<u>Min.</u>	<u>Aircraft in Commission</u>	<u>Complement at Station</u>
Cape May	38	81 -	47	9 Seaplanes	12 Seaplanes
Chatham	28	77 -	50	13 Seaplanes	12 Seaplanes
Coco Solo	14	51 ÷		2 Seaplanes	12 Seaplanes
Hampton Roads	62	235 ÷	8	18 Seaplanes	18 Seaplanes
Key West	113	132 ÷	42	10 Seaplanes	18 Seaplanes
Miami	37	126 -	34	4 Seaplanes	12 Seaplanes
Montauk	35	99 -	15	9 Seaplanes	12 Seaplanes
"	2	9 -	50	1 Lighter-than aircraft	* 1 Dirigible
Rockaway	69	253 -	20	17 Seaplanes	24 Seaplanes
"	14	56 -	23	2 Lighter-than aircraft	* 2 Dirigibles
	<u>412</u>	<u>1123</u>	<u>49</u>		
Lighter-than-aircraft total	16	66	13		
Seaplanes total	396	1057	36		

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 the station.

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

<u>Stations</u>	<u>Flights other than patrol</u>	<u>Hours</u>	<u>Min</u>	<u>Aircraft in Commission</u>	<u>Complement at Station</u>
Akron	31	23	16	Dirigibles	
"	17	13	1	Kite Balloons	
"	22	43	45	Free Balloons	
Bay Shore	573	458	50	27 seaplanes	36 seaplanes
Chatham	24	9	2	10 "	
Cape May	37	11	28	9 "	
Coco Solo	20	4		2 "	
Hampton Roads	41	41	15	22 "	m 24 seaplanes
"	4	5	45	4 Kite Bal.	# 15 Kite Bal.
Key West	1,087	862	34	29 Seaplanes	36 Seaplanes
"	5	6	19	1 Dirigible	# 2 Dirigible
Miami	1,597	1,209	20	36 Seaplanes	72 Seaplanes
Miami Marines	471	374	50	19 Airplanes	
Montauk	16	9	15	10 Seaplanes	
"	3	4	20	1 Dirigible	# 1 Dirigible
"	2	1	30	1 Kite Bal.	# 1 Kite Bal.
Pensacola	1,251	757	45	53 Seaplanes	108 Seaplanes
"	59	47	20	1 Dirigible	3 Dirigibles
"	2	2	30	10 Free Pal.	# 10 Free Bal.
San Diego	327	237	54	10 Seaplanes	36 Seaplanes
Rockaway	38	16	5	17 Seaplanes	
"	5	7	13	2 Dirigibles	2 Dirigibles
"	8	376	25	5 Kite Balloons	14 Kite Bal.
	<u>5,640</u>	<u>4,513</u>	<u>42</u>		

	<u>Flights</u>	<u>Hours</u>	<u>Min.</u>
Seaplanes	5,011	3,607	28
Dirigibles	103	88	28
Lighter-than-air craft	158	531	24
Airplanes	471	374	50

GRAND TOTAL FOR FLYING TIME

Patrol	412	1,123	49
Other than Patrol	5,640	4,513	42
	<u>6,052</u>	<u>5,637</u>	<u>31</u>

Number at Station.
m 18 Experimental.

3. The following Officers have been ordered abroad:

Abrams, H. R.	Lieut., USNRF	Horner, W. W., Ensign, USNRF
Brush, Graham M.	" "	McClure, H. T. " "
Sard, R. E.	" "	Mendoza, D. " "
Drum, G. R.	Ensign, "	Dollard, Russell, " "
		Whitney, Paul L. " "

4. The following men have been commissioned as Ensign, U.S.N.R.F. :

Androus, P. A.	Desonier, L. A.	Hunnewell, C. E.
Arthur, R. W.	Durant, W. L.	Hunter, R. L.
Atherton, H. G.	Edgerton, G. I.	Inglis, J.
Auerswald, R. R.	Elliott, H. A.	Jackson, C. I.
Barie, W. L.	Ely, M. L.	Jaegle, W.C.(killed)
Barr, S. D.	Fisher, O. W., Jr.	Kelsey, C.
Bates, D. H.	Flanigan, H. C.	Kaye, L.G.
Bennett, H. D.	Gallagher, V. L.	Kloor, L. A.
Blanchard, D.D.	Galvin, A.	Kobbe, F. W.
Bournique, J. C.	Gardner, R. E.	Kolpien, A. L.
Bourquin, M. M.	Gillespie, P.E.	Laine, H. N.
Bowers, A.	Godbe, N. F.	Lampher, H. C.
Boyd, S. Mc M.	Goldsmith, H. F.	Lewis, E. D.
Brady, C. B.	Could, R. Mc D.	Loshier, H.
Bristol, L. H.	Guild, H. H.	Martin, H. C.
Burleigh, L. A., Jt.	Gray, H. E.	Madigan, J. W.
Carnochan, G. M.	Hahn, W. R.	Mc Kenzie, W. C.
Carpenter, P. J.	Hallum, O.T.	Mc Murrian, S. B.
Carroll, M. B.	Hammond, B. H.	Mc Chesney, M.M.
Carson, J. F.	Hardendorff, F.M.	Messinger, C.S. 2nd
Chilton, W. E. Jr.	Harrell, R.H.	Melville, G. S.
Churchell, H.C.	Hardy, O.T.	Midwood, G. A. Jr.
Clark, C. D.	Harrigan, M. J.	Miller, T. W.
Cline, J. C.	Harris, H. L.	Moore, A.K.P.
Conley, D. L.	Harris, J. W. Jr.	Mosser, B. D.
Conolly, J. F.	Harris, W. S.	Murphy, J. D.
Curtiss, P. W.	Hartshorne, R.D.	Nielson, H. E.
Dalen, S. H.	Hemphill, R.	Notley, H. E.
Danly, P.	Hillyer, D.	O'Brien, J. H.
Davis, T. P.	Hill, R. A.	O'Connell, D. J.
Davy, W. M.	Hipple, J. P.	O'Laughlin, L. T.
Delling, T.	Hoisington, H. W.	Parlett, R. C.
Dimpsey, R. A.	Huddlestone, W.D.	Parsons, L. M.
Dent, T. A.	Hulse, J. H.	Parker, E. H.

Patterson, W. K.	Scott, W. B Jr.	Talcott, C. H.
Pfeiffer, A. E.	Schenck, I. B.	Taylor, R. S.
Piers, E. F.	Shone, C. G.	Thweatt, T. N.
Post, G. B.	Smith, B. L.	Traver, C. H.
Pride, A. M.	Smith, J. P.	Tyner, G. K.
Punnett, T. R.	Smith, A. I.	Wallace, R. B.
Rees, F. E.	Smith, W.R.L. Jr.	Waller, R. E.
Rice, N. W.	Speare, H. R.	Wardwell, D. E.
Richardson, B. M.	Southworth, A. P.	Welles, R.
Rhodes, R. R.	Stege, G. H. Jr.	Wilcox, B. R.
Rogers, G. E.	Stoker, H. C.	Wilcox, D. G.
Rust, E. H.	Stewart, C. P.	Wilson, L. S.
Sams, B. S.	Sullivan, P. R.	Widmer, W. E.
Satterfield, D. E.	Sweetser, G.T.	Young, F.

5. On August 27, 1918, General Order No. 418 was signed by the Secretary of the Navy, and reads as follows:

"Applicable alike to regulars and reservists, the uniform of any given rank or rating in the Navy shall hereafter be identical in every respect throughout except for the necessary distinguishing corps devices, and every officer of the Navy shall be designated and addressed by the title of his rank without discrimination whatever."

NOTE: As Class Five has no distinguishing corps device, a star should be the insignia worn, instead of wings.

HAMPTON ROADS - August 21, 1918.

Patrol Squadron - The patrol squadron flew 235 hours and 20 minutes on patrol during the week and covered 11,630 nautical miles. Routine patrols covered an area 112 miles north and 125 miles south of Cape Henry, at varying distances off shore, up to 115 miles.

On August 16th Seaplane H-12 No. A-783 made a patrol lasting six hours and twenty six minutes, the longest patrol that has been made at this station.

An instruction course has been started for the benefit of patrol pilots, in order to increase their proficiency. On one day out of every six every pilot is given ground instruction and aerial practice with lectures covering local geography, ordnance, patrol information, silhouettes and radio; and aerial practice consisting of runs over the Batchelor Mirror, dummy

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bomb and Lewis Gun practice. The instruction is conducted in one seaplane with the actual patrol crew operating it, the pilot and second pilot attached to the flight working in pairs and practicing the necessary signals and cooperation. A submarine silhouette is being constructed in the vicinity of the Station, and the pilots attack it under actual patrol conditions. On every Tuesday evening an Officers' meeting is held in which patrol subjects are discussed. On last Tuesday evening, the Commanding Officer of one of the United States submarines operating in the vicinity of the station, spoke to the pilots on cooperation between submarines and aircraft and upon submarine information.

EXPERIMENTAL SQUADRON.

A Guardian Angel Parachute has been successfully tested on a Boeing Seaplane. The parachute was hung on the bottom of the fuselage, directly under the pilot's seat, and a sand bag dummy, weighing 150 pounds, carried on the lower right wing, was released at an altitude of 3,000 feet. The parachute opened after falling approximately 75 feet, and supported the weight in a gradual descent, lasting two minutes and forty five seconds. The seaplane landed before the parachute.

A pusher type H-16 has arrived on the station and is being put through a series of competitive tests with an H-16 tractor. From preliminary trial it is thought that its performance will be somewhat better than that of the tractor.

HAMPTON ROADS - August 27, 1918.

On August 22nd, H-12 No. A-783 flew continuously on patrol six hours and thirty minutes, covering a distance of 360 nautical miles.

Aldis lamps have been installed on patrol seaplanes, and have been used very effectively while returning from a late patrol, as it affords an easy communication between planes and is exceptionally useful in detecting logs and driftwood in the water while landing in the dark. Objects on the shore were plainly visible at a distance of 800 feet ahead from an altitude of 200 feet.

The establishment of a radio station at Fisherman's Island, Va., a few miles from the Air Station, has been of invaluable assistance in determining the charted position of patrol seaplanes equipped with radio.

The patrol squadron is at present operating on a day and night schedule, and one watch is on duty all night, preparing the seaplanes for next day's patrol. As a direct result the number of seaplanes available for patrol has increased in a marked manner.

Ground strips are being placed at Cape Henry as a means of signalling to patrol seaplanes in order that the Station may exert control over them and change their orders in case of necessity fifteen minutes after their departure.

Tests have been conducted to determine the sending and receiving radius of radio apparatus between two seaplanes, while in flight, to establish intercommunication between planes. An H-16 and HS-2 were used for the purpose, and messages were sent and clearly received at a distance of 20 miles from each other. It is anticipated that in the near future a longer range will be possible and further tests are now in progress.

A series of night flying tests were made to determine the value of searchlight on a plane for landing purposes. The light, which was run from a separate battery, was attached at the bow cockpit of an HS-1 in a Scarff-ring with a universal mounting, allowing the rays to be projected in any direction. Objects on the land and water could be clearly distinguished from an altitude of over 1,000 feet but the light proved to be of little assistance in landing.

A Sopwith Speed Scout was put through various stunts, including loops, Immelman turns and spins. A careful examination of the structure after flight failed to reveal any signs of stress.

PENSACOLA - August 21, 1918.

On Thursday, August 15th, 1918, three H-16's were ordered to be ready for patrol at 8:00 a.m. Friday, with four guns and two live Mark IV bombs mounted on each. It was suggested that Scarff-ring mount be put in the bow cockpit, and the gooseneck mount be moved aft to the Engineer's cockpit, but as this change would have required approximately four days, an improvised mount was erected of one inch tubing bolted to the deck, to which a Scarff-ring was secured, and a circular flooring was installed for the gunner to stand on while firing.

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This was cut in half and each flap hinged to the sides of the cockpit. The whole structure was then braced by wires and made amply strong for practical use. It is believed that by mounting the gun in this fashion the combat efficiency of the H-16's has been greatly increased, as previous to this change no field of fire was afforded above or astern of the Engineer's cockpit. The gun as now mounted is three feet above the deck over the Engineer's cockpit, and the gunner stands on a level with the deck, and has, therefore, a wide arc of fire above, abeam and astern, and although he can not fire dead astern in a straight line, by raising the mount about 30 degrees, which is entirely practical with the Scarff mount, he can fire directly astern. The H-16's armed as described and carrying a crew of four men with full Navigation equipment and full tanks, experienced difficulty in leaving the water in a 6 knot breeze.

GUNNERY SCHOOL

Squadron I - It has been found that by moving Scarff-ring on Plane No. A-2396 back about six inches the machine gun was made more accessible and a wider range of fire offered to the gunner. This in no way interfered with the handling of the machine, and altogether proved very satisfactory.

In Seaplane No. A-2328, a folding stool has been installed for the gunner and has proven very satisfactory, giving the gunner much more room. A brace has been placed on the floor in the back of the rear cockpit, and in addition to acting as a brace for the gunner, it also serves as a check against the gunner's feet going through the canvas. This brace extends across the floor of the cockpit and is two inches high and one inch wide.

Squadron V - Although Matthews Brothers propellers have to date proven unsuccessful on the HS-1 seaplanes, the Engineer Officer of Squadron V recommends that they be retipped at this Station and used as emergency propellers for long trips. This suggestion was made in view of the fact that it is possible to take these propellers apart and pack them in the seaplanes, so that should propeller trouble occur, these parts can be assembled and used for that occasion.

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On a recent trip of 270 miles, each of the four HS-1 Seaplanes composing the flight carried a half propeller in the forward hull, and the advantages of this scheme were well proven when three changes of propellers were required before the home Station was reached.

It is interesting to note that from statistics given out by Squadron V, from June 17, 1918 to August 16, 1918 inclusive, the HS-1 seaplanes at this Station have put in 1,157 hours, 15 minutes of flying time. During this time 214 students have qualified as HS-1 pilots. Considering the fact that during the months of June and July average of HS-1 seaplanes serviceable was only two or three and also that considerable hull trouble was experienced, together with many poor flying days, this record appears to be very favorable.

Squadron VI - A very ingenious method of demonstrating the ignition system of Liberty Motors has been devised by one of the men at this Station. It is known as the "Ignition Instruction Board", and consists of a complete Delco System on which the different parts, such as the generator, distributor, switch board, etc., are opened up so that the pupils can see how the different parts work. After giving a demonstration of the working of the whole system, and explaining the wiring of the primary and secondary circuits, the instructor explains what each individual part has to do when the set is in perfect working order. By having a practical demonstration such as this, the men are able to grasp more clearly just what the Delco System is and how it works.

NIGHT FLYING -

The night flying course has qualified twelve men during the past week and has given instruction to six others, five of whom failed and were returned to Flying Boats. At present only one student is on the Night Flying list, due to the high standard demanded for this work; this standard has caused quite a high percentage of students detailed to Night Flying to be rejected.

PENSACOLA - August 21, 1918.

DIRIGIBLE SECTION - The Meteorological Officer has made several free balloon flights for the study of air currents, making round trips by free balloon from the Station at one altitude, and back to the Station in a different altitude, where on-shore breezes exist. On August 14th he made such a trip, but owing to failure of altimeter

and various incidents, he was out over the Gulf when darkness fell. Night Flying planes searched, and one, under the Senior Night Pilot, located him at 9:30 p.m. He was not again seen or heard from until he telephoned the next forenoon of his safe landing at midnight on the sand dunes of Choctawhatchee Bay. Efforts to locate the balloon had been continued but our anxiety may be indicated from the fact that from our only wind records during the night (those from 250 feet from top of tower) we placed the balloon, at 7:00 a.m., about one hundred miles south-east of our whistling buoy if still in flight. Excellent piloting and a thorough knowledge of air currents saved the flight from disaster.

BAY SHORE - August 17, 1918.

A Hall Scott was installed in a single float type of Aeromarine. The plane took off very easily and seemed to climb better than when installed in the double float type. On one round of the Bay, about half an hour's flying, 4,000 feet altitude was obtained by the pilot, with a passenger in the plane.

August 24th - A Davis 6 pounder was arranged with an Aircraft Lewis Gun as spotter, and the whole mounted on an HS-2 seaplane. It was tested and proved a satisfactory arrangement. There was practically no vibration and the Seaplane handled well with the equipment.

KEY WEST - August 27, 1918

An HS-2L was forced to land in a sea so rough that it could not be taken off the water. The boat was taxied 30 miles to shore. The trip took about four hours. This disproves the theory that a Liberty Motor can not be used for taxi-ing without harming the motor, for the motor in this boat is still in use and is giving excellent results.

MIAMI, FLA - August 17, 1918.

During the week three speed runs were made with the HS-1 and three with the HS-2 type Seaplanes with the following results:

HS-1 Type:

1st Run	87.32 miles per hour
2nd Run	87.28 " " "
3rd Run	87.42 " " "

HS-2 Type:

1st Run	88.42 miles per hour
2nd Run	88.63 " " "
3rd Run	88.68 " " "

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These tests were made under full load conditions, two Mark IV bombs, three passengers, full fuel tanks.

An HS-2 type seaplane climbed 1750 feet in ten minutes under full load conditions.

KEY WEST, FLA - August 20, 1918.

Ensigns Oakes and Cuthrell in an HS-2L made a trip from Key West to Tampa and return - a distance of 260 miles each way. The round trip was made without trouble of any kind in six hours and thirty minutes.

An OXX-6 motor (#5393) was installed in an N9 seaplane on July 22nd and ran 200 hours and 31 minutes before being removed for overhauling on August 19th. During the last 6 days the seaplane was credited with 65 hours and 57 minutes flying time. This motor was equipped with short studs and sent to this station as an experiment by the Bureau of Steam Engineering. The motor had been overhauled twice before this installation.

Actual patrols at this station for the week ending August 18th were out a total of 110 hours and nine minutes covering a track of 5308 miles approximately. If the visibility is figured at (an average) 10 miles the total area covered would be 106,160 square miles. Patrol time per day averaged 15 hours and 44 minutes. Area covered per day 15,166 square miles.

/s/ N. E. IRWIN.
By direction.