

NAVY DEPARTMENT

Op-Air
0155-62

OFFICE OF NAVAL OPERATIONS

I-32-L

October 28, 1918.

DECLASSIFIED - DOD DIR 5200.9,
27 Sep 1958

From: Director of Naval Aviation,
To: All Naval Air Stations, Aviation Detachments,
Bureaus and Naval Districts.

SUBJECT: Weekly Report - October 28, 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 October 28, 1918:

PATROLS

<u>Stations</u>	<u>Flights</u>	<u>Hours</u>	<u>Mins.</u>	<u>Aircraft in commission</u>	<u>Complement at station</u>
Cape May	49	151 ÷	53	11 seaplanes	12 seaplanes
" "	2	1 -	13	1 dirigible	# 1 dirigible
Chatham	64	134 ÷	39	14 seaplanes	12 seaplanes
Coco Solo	16	51 ÷		2 "	12 "
Halifax	12	38 ÷	5	2 "	4 "
Hampton Roads	96	346 ÷	44	30 "	24 "
Key West	82	124 -	37	8 "	18 "
Miami	52	77 -	42	3 "	
Montauk	72	210 ÷	10	11 "	12 "
"	9	34 ÷	45	1 dirigible	# 2 dirigibles
North Sydney	3	9 -	20	5 seaplanes	4 seaplanes
Rockaway	87	294 -	25	9 "	24 "
"	7	23 ÷		1 dirigible	2 dirigibles
"	25	267 -	15	4 kite balloons	20 kite balloons
	576	1,764 ÷	38		

Lighter-than-
air craft total 43 326 - 13
Seaplanes total 533 1,438 ÷ 25

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 preceding week. Underscoring denotes best record for station.

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 the week ending October 28, 1918:

Stations	Flights other than patrol	Hours	Mins.	Aircraft in commission	Complement at station
Akron	15	5	37	1 dirigible	
"	26	15	15	1 kite bal.	
"	26	37	20	19 free bal.	
Bay Shore	622	509	35	24 seaplanes	48 seaplanes
Cape May	5	1	5	11 "	
"	4	18	43	1 dirigible #	1 dirigible
Chatham	37	13	58	11 seaplanes	
Coco Solo	24	13		4 "	
Great Lakes	1		35	2 "	
Halifax	20	63	55	5 "	
Hampton Roads	52	45	35	23 "	# 18 seaplanes
"	44	15	10	4 kite bal. #	# 23 kite bal.
Key West	957	915	13	30 seaplanes	36 seaplanes
"	18	18	46	1 dirigible #	2 dirigibles
Miami	1,528	1,191	30	30 seaplanes	114 seaplanes
Miami Marines	360	333	35		
Montauk	10	10		11 seaplanes	
"	13	38	10	1 kite bal. #	2 kite bal.
North Sydney	15	16	22	5 seaplanes	
Pensacola	1,210	791	15	70 "	108 seaplanes
"	75	44	40	1 dirigible #	3 dirigibles
Rockaway	22	17	40	9 seaplanes	
"	3	4	9	1 dirigible #	2 dirigibles
"	2	3		4 kite bal. #	20 kite bal.
San Diego	606	508	35	15 seaplanes	36 seaplanes
Anacostia	40	12	35	4 "	
	<u>5,735</u>	<u>4,645</u>	<u>18</u>		

	Flights	Hours	Mins.
Seaplanes	5,149	4,110	53
Dirigibles	115	91	55
Lighter-than-air craft	226	200	50
Airplanes	360	333	35

GRAND TOTAL FOR FLYING TIME:

Patrol	576	1,764	38
Other than patrol ...	<u>5,735</u>	<u>4,645</u>	<u>18</u>
	6,311	6,409	56

Number at stations.

3. The following officers have been ordered abroad:

Ingraham, K.C., Lieut. USNRF.

Abeles, F.	Ensign, USNRF.	Kerr, S. L.	Ensign USNRF.
Anderson, C. W.	" "	Kirk, R. E.	" "
Andrews, L. L.	" "	Klager, W.H.	" "
Anewalt, H.P.	" "	Kohler, W.W.	" "
Atha, K.	" "	Laird, J.E.	" "
Badger, J.H.	" "	Lavery, L.F.	" "
Barnes, A.K.	" "	McConnell, R.P.	" "
Barnes, D.A.	" "	McIntosh, W. C.	" "
Blount, J.G., Jr.	" "	Mackie, J.J.	" "
Bond, N.A.	" "	Mann, W.	" "
Brennan, R. K.	" "	Manson, J.J.	" "
Brooks, E.L.	" "	Marshall, M. Mc	" "
Brown, A. M.	" "	Maxom, S.R.	" "
Bullock, J.D.	" "	Melville, G.S.	" "
Carle, D.	" "	Hiller, H.	" "
Carr, J. E.	" "	Newbarn, P.A.	" "
Cline, J. T.	" "	Newhouse, R.W.	" "
Corcoran, L. H.	" "	Nudd, T. L.	" "
Cromwell, A.C.	" "	Oettinger, H. W.	" "
Cullity, E.F.	" "	O'Neil, N. Jr.	" "
Cushman, R. J.	" "	Patillo, T.B.	" "
Davis, F. D.	" "	Pearson, P. C.	" "
Donnelly, D. J.	" "	Peterson, E.E.	" "
Ellicott, W.W.H.	" "	Porter, W. L.	" "
Elsas, H. E.	" "	Rice, H. E.	" "
Floyd, G. F.	" "	Ridgway, T. N.	" "
Fowle, W. F.	" "	Schenck, I.P.	" "
Geddes, W. J.	" "	Shafer, C. G.	" "
Gifford, J. S.	" "	Shafer, J. H.	" "
Goebel, W. J.	" "	Shaw, W. L.	" "
Gormley, J. N.	" "	Sheppard, L. B.	" "
Guidlian, J.N.	" "	Sonnabend, A.M.	" "
Hanchette, H. W.	" "	Stephens, R.G.	" "
Hardenburgh, W.G.	" "	Stinson, H. H.	" "
Harlan, J. L. Jr.	" "	Strobel, C. E.	" "
Haskew, R. K.	" "	Strong, W.L. Jr.	" "
Henderson, R. H.	" "	Sweeney, J. F.	" "
Higbie, N. B.	" "	Taylor, R. L.	" "
Hildebrandt, G.H.	" "	Van de Water, D.G.	" "
Holt, B.D.	" "	Vrooman, F. E.	" "
Hunter, R.L.	" "	Waggoner, N. E.	" "
Hutchinson, H.deB.	" "	Waller, H. E.	" "
Jacques, B. P.	" "	Wallingford, J.K.	" "
Johns, H.V.D.	" "	Waterman, F.B.	" "
Jones, K.D.	" "	Watts, W.B.	" "
Jones, W.F.	" "	Webster, H.S.	" "
Jordan, R.D.	" "	Wentz, W.W.	" "
Julian, D.	" "	Wheeler, S.S.	" "
Keene, C.	" "	Wilkins, E. B.	" "
Kerr, R.C.	" "		

4. Ensign commissions have been requested for the following men:

Carscallen, John Hulmege	McDonald, Harold Howland
Chase, Wheeler Forrester	McKay, Earle Douglas
Clark, Robert H.	McMaster, John D.
Clement, James Keith	Mall, Ivor Orin
Collins, John	Mann, William
Cossitt, Harry Rene	Miner, Sperry Wadsworth
De Sonier, Lawrence A.	O'Brien, James H.
Duncan, Chas. Gilbert	Paine, Stephen
Elsas, Gorman Emerson	Peacock, Edward Lester
Epis, Branch Pegram	Phelps, William Sydney
Farley, Eliot	Pierrepont, Seth Low
Fortna, David Edward	Ross, John W.
Gobbe, Curtiss Griffith	Smith, Clarence William
Greef, Chas. Alfred	Trippe, Juan Terry
Harrison, Summery Denby	Watkins, George Le Grande
Heffelfinger, Totten Peavey	Whyal, Thomas Mathias
Hickley, Wellington Edward	Williams, Marcus E.
Hill, Henry W.	Wintersteen, John
Lasher, Herbert	Woodside, Lawrence Rodgers
Lee, Horace James	Wright, Robert Fulton

The Office of Naval Operations subscribed \$65,650.00 to the Fourth Liberty Loan.

Massachusetts Institute of Technology subscribed \$687,000.00.

Chatham, Mass. - October 21, 1918.

RADIO. Long wave messages continue to be received from Lisbon, Spain, Mauen, Germany, and other countries. Also spark signals from Demarra, British Guiana. The average daily messages received from three planes is thirty-five. The new quarters will be available next week.

Montauk, L.I., October 23, 1918.

Under the present organization plan, meetings are held once each week for discussions. All Officers are required to attend these meetings and besides ordinary operating business discussions, two emergency problems are submitted. It is thought that through the discussion of these problems the flyers will be enabled to make quicker and more accurate decisions when emergencies arise.

The Cleveland tractor has worked itself more closely into the lighter-than-air operations and it is now used for taking the kite and the dirigible from the hangar to the field and vice versa, as well as for hauling down the kite. Two nose lines are fastened to the rear of the tractor and it fills the places of ten to fifteen men.

A system is being inaugurated by which a ratio can be drawn, showing the flying time per aviator per day and also the ratio between the total flying time and the hours of favorable weather available. A summary of results will be submitted in a later report and in the mean time similar information from other stations is requested.

Anacostia, D.C. October 25th, 1918.

On the morning of October 22, 1918, a message was received at this station that dirigible 770, A-4118 in charge of Major B. L. Smith U.S.M.C. would arrive here around 9:00 a.m. to take aboard fuel and gas. She was on a ferry trip from Akron, Ohio to Far Rock-

away, N. Y. via Washington, D.C. She left Akron at 2:30 a.m. central time and arrived at this station at 10:50 a.m. after circling over Washington several times. A beautiful landing was made in view of the fact that it was the first dirigible the station crew had ever handled. The landing crews were in charge of Lieutenant Coil and Lieutenant (j.g.) Talbot of Operations, who both said the landing field here was the best and longest of any Naval dirigible Field in the country. The dirigible crew consisted of Major B. L. Smith, U.S.M.C. Officer-in-charge, Pilot Lieutenant R.A.D. Preston, U.S.N.R.F. and Lieutenant (j.g.) W. L. Hamlin U.S.N.R.F. and Lieutenant (j.g.) D. T. Hood, U.S.N.R.F. radio operator, Ensign M.E. Easterly, U.S.N.R.F. and Mechanics Roulette and Royal. No difficulty was experienced in keeping the compass course except that the moon was so bright that the radial compass did not show very plainly, otherwise the trip was uneventful. The motors were tested at 1:17 p.m. and then the dirigible shoved off to complete the last leg of her journey to Far Rockaway where she arrived at 6:50 p.m. completing a very successful trip.

TEST FLIGHT TO HAMPTON ROADS - HS-2 No.1907.

A flight of at least two hours duration was made to test the effect on the pilots ears using overhead exhaust pipes. Two standard exhaust manifolds were used facing forward, to these were attached two four foot lengths of pliable tubing bent thru 180° bringing the outlet facing aft and about one foot above the upper wing. One pipe was light brass and the other steel. On arrival at Hampton Roads both the pilot and assistant pilot agreed that there was a marked decrease in the usual after effects of ringing in the ears. During the flight several glides were made in order to test the conditions of the occupants ears and all cases the condition was such that conversation could be carried on without difficulty. In addition to the above tests this boat was equipped with an experimental back pressure feed system in combination with the new lubrication system. In this system the vacuum is created by the intake manifold and the pressure is maintained by the oil pressure in the supply tank. The oil supply tank was equipped with a water filtering system by which all

ANACOSTIA, D.C. - October 25, 1918

the oil is cooled and filtered through water before returning to the engine. The above system functioned perfectly during the entire flight.

The following is a summary statement of report made of trip with 4 type R-9 seaplanes from Chatham, Mass. to Philadelphia, Pa., on October 4, 1918.

At 6:27 all seaplanes were in the air at Chatham. At 8:03 a.m. the formation circled over the Naval Air Station at Montauk. At 8:07 a.m. one plane was seen to land in a small pond, and one other plane flew back to it. At 9:25 a.m. a landing was made at the Naval Air Station at Bay Shore, and the two other planes which had landed at Montauk were seen to come in; the first plane had been landed in order to enable the pilot to oil the hand pressure pump. While at Bay Shore it was discovered that one magneto on plane No. 955 had burned out and could not be repaired, but it was decided to take a chance and after certain delay at Bay Shore, at 12:19 all planes were in the air and headed for Barnegat. At 2:44 p.m. we landed at Naval Air Station, Cape May, N.J., and while there it was discovered that plane No. 944 had four broken valve springs. After being informed that only two planes could be beached at a time at the Naval Aircraft Factory, we left two planes at Cape May and the remaining two took the air at 4:25 p.m. At 4:37 we had turned around the Cape and were flying up the Delaware River. We landed at the Naval Aircraft Factory at 5:41 p.m. At 6:23 the other two planes arrived.

Bay Shore, October 31, 1918.

On Saturday, October 12, 1918, at 1:45 p.m. upon receipt of word from the office of Chief of Staff, New York City, an emergency patrol consisting of two HS-2 boats was dispatched from this station. They took only 20 minutes from the time the message was received before they left the beach, which is a considerable improvement over previous patrols, and which is good time, in consideration of the fact that a permanent secure had been ordered. Both planes executed a search plan of over 100 miles and returned without mishap, having encountered nothing of interest in the area designated to be searched. It might be stated in passing that the effects of the recent stimulation in navigation instruction were clearly manifest on this occasion, and little difficulty experienced along these lines. The other two machines held in readiness to follow the first two were not called upon to go out.

Halifax, N.S. - October 19, 1918.

At 2:25 p.m. October 17, the Admiral Superintendent 'phoned me that a U.S.S. vessel had reported a submarine 6-1/2 miles, 353 degrees from Sambro buoy. In ten minutes we were in the air with two planes, equipped with bombs, and a little later two more planes left the station, also equipped with bombs. With the four planes we searched ten thousand square miles and put in sixteen hours of flying. I am sorry, to say, however, that no submarine was sighted. We covered the water about Halifax harbor and Sambro buoy very thoroughly.

Hampton Roads - October 23, 1918.

On Monday October 21st, the three H-16 seaplanes flying from Philadelphia, Pa., to Pensacola, Fla., led by Lieutenant (jg) H. Hutchins, USNRF formerly of this station, stopped at Hampton Roads to refuel. The three planes landed at 12:20 P.M. A twenty five knot northeast wind was blowing and a heavy sea was running in the Roads, and as in this wind the Air Station is the weather beach, it was impossible to refuel the

Hampton Roads - October 23, 1918.

seaplanes at the runway. A fifty foot motor sailor, a thirty five foot motor sailor and an S.P. boat were standing by when the planes landed, picked them up and brought them in near the beach where the three boats cast their anchors and swung into the wind with the seaplanes lying to leeward. Then the towing lines of the seaplanes were slacked away until they were within fifteen feet of the runway. Wing lines were made fast to the seaplanes to steady them in this position. The gasoline hose was passed aboard each plane in turn, the pilots were carried ashore to lunch by watermen and refueling began. In twenty minutes after the first plane had landed, it was refueled. In one hour and ten minutes after the first plane had landed, all three planes were refueled, refilled with oil and completely ready to start again. At 2:20 P.M. the pilots went aboard once more and took off for Morehead City, N.C.

On October 18th an H-16 flying boat was tested with Martin Aerodynamic Control. No ailerons were used on this plane and owing to a mechanical error in the device, the pilot and crew had a very exciting experience. The seaplane was first taxied on the water at various speeds to familiarize the pilot with the action of the device. At one time while traveling at high speed and when just about to leave the water, the right wing dragged and spun the machine completely around. The plane was then taken from the water and reached a maximum altitude of about 150 feet. It was in the air not more than two minutes but in that time side slipped five times with first one wing down and then the other. The automatic controls did not act at all until after decided side slipping took place. Fortunately, just previous to and while actually landing, the plane was practically on a level keel, and by closing one throttle and leaving the other open, a landing was effected without damage to plane or occupants. It seems apparent that this stabilizer was overbalanced and worked exactly in the opposite direction from which it was intended to work.

Miami, Florida - October 21, 1918.

Two (2) Alexandria Boats, equipped with Hispano-Suiz Motors, have arrived on this Station. Boat No. 5247 has

Miami, Florida - October 21, 1918.

been set up and flown. This boat was found to be very speedy and very sensitive on the fore and aft controls.

An HS-2L Flying Boat, equipped with running lights, was flown here on Sunday night. The boat could be seen very easily on account of these running lights. An N-9 Seaplane flying at the same time reported that the "H" Boat could be distinguished at a great distance.

Key West, Florida - October 22, 1918.

During the week further experiments were made with Clark Mark IV bombs. One bomb, with decomposed granulated TNT in the secondary booster was dropped and exploded satisfactorily. The decomposition had reached a state resembling brown sugar. The space which resulted in the secondary booster from the settling of the TNT due to decomposition was filled with fresh granulated TNT. A tetryl head was used. Similar experiments with like results indicate that when the booster charge is decomposed to a state resembling brown sugar, the bomb will explode providing the space resulting from the settling of the TNT has been eliminated by the addition of fresh TNT.

Cape May, N. J. October 23, 1918.

During the past week, deep sea patrols have been made with a wind in some cases, as high as thirty-five miles an hour. In forced landings at sea, carrier pigeons have proved to be very efficient in bringing messages to the Station from planes on the water. On October 21, two seaplanes made a forced landing off Ocean City, Md., in a twenty-five mile wind and a very rough sea. The crews of these planes were picked up by a passing steamer, and taken to Hampton Roads, but due to the inability of small craft to tow planes in the heavy sea, both planes were totally wrecked.

Pensacola - October 19, 1918.

BOMBING SCHOOL -

We believe strongly in Tallier Type of boat for bombing. Pending Tallier, HS-1 should be used, but requires not only additional hangar space but increase in every part of the Station establishment to care for 350 horse power craft with their increased size and personnel.

NAVIGATION SCHOOL -

The angle of incidence of H-16 flying boat #A-4051 was raised from 20° to 30°. A test was made and the machine was found to be very well balanced, although she was previously tail heavy. It was also noticed that the speed of the machine was somewhat decreased.

No difficulty has been experienced in towing H-16's on the water. Light flexible cables have been spliced to the loop of the tow line, and the other end to the fitting carrying the load wire. By making these wires some two feet in length, towing in a straight line is greatly facilitated.

On several occasions H-12's and H-16's have had holes knocked in the bottom, on or forward of the step. A tarpaulin long enough to run well up on the nose and aft the step, and wide enough to extend half way up on either side was spread over the bottom as a "Collision Mat". This tarpaulin adjusts itself to the hole and stops the water from coming through. Boats have been towed several miles this way.

RADIO -

The Bombing F Boats for mirror work are now equipped with fixed antenna on upper wing. This type of antenna has proved excellent for use with small spark coil transmitter for short range work at short wave length. Signals are not heard at other stations even in the near vicinity and interference is saved.

WEEKLY OFFICERS' MEETING

Total subscriptions to the Fourth Liberty Loan made by the officers of this Station were \$73,850.00. This total applies to officers on Aero duty only and does not include officers in Yard Department.

Anacostia, D.C. - October 18, 1918.

Sperry automatic machine gun sight was mounted on a Lewis gun and taken up on the HS-1 plane to an altitude of 500 feet, sight was trained on buoy of target horizontally, only, as no vertical motion was used. A hundred shots were fired and all shots hit or bunched around target; the gun vibrated considerably, but not enough to interfere seriously with sighting the gun. Then a Lewis gun with a regular circular sight was mounted on the plane so as to observe the comparison between the automatic and regular sights; two and one half magazines were fired and the shots did not bunch and automatic sight was declared to be easier to hold on target and operate satisfactorily.

Hampton Roads - October 16, 1918.

During the week ending October 11, 1918, patrol work was possible on only five days, due to bad weather conditions, but in spite of this handicap 254 hours and 52 minutes patrol time was made and a distance of approximately 13,208 nautical miles covered.

Patrol Squadron -

The policy of this Squadron with regard to overhauling Liberty motors has been to change motors at such a time that the maximum hours run, commensurate with the minimum replacement of parts in overhaul, would be obtained. At the same time constant experiments have been made with the idea of gradually raising the average time at which it is necessary to overhaul the motor. It is interesting to note that, following this policy, motor BUSE No. 01511, was taken out of HS-2 A-1271, at the completion of 102 hours flying time, and this motor was found to be in practically perfect condition. The bearings, which were just beginning to show crystallization, were the only parts that needed replacing.

On October 13th, an HS-2 flying boat, while on patrol, sent in a radio message stating that they were running short of gasoline and giving their approximate position. As no further messages were received from this plane and it was overdue, it was decided that it had gone down. A seaplane was immediately dispatched in search. Fifty three minutes after the plane left

Hampton Roads - October 16th Cont'd.

the beach it had located the lost plane twenty miles off shore and proceeded to the vicinity of Cape Henry in search of a patrol boat, after having reported the position of the plane by radio. Having located a patrol boat, bearing and distance of lost plane was signalled by means of an Aldis lamp. The patrol boat immediately proceeded on course and rendered assistance to plane. During the entire time the Communication Officer of the Air Station was kept fully informed by radio of the proceedings of the rescuing plane.

Experimental Squadron -

During the week numerous tests have been carried on with the F-5-L flying boat. One of these boats was equipped with vent tubes in steps and tests were made with tubes sealed and with them open. The get-away tests were made in very smooth water and the results show from ten to fifteen seconds better time with the vents open. Trials were made on the following day in fairly choppy water and there seemed to be no appreciable difference with or without vents.

A flight was made for preliminary test of Western Electric 'phone test set CW-1058 on an HS-2 flying boat. Communication was maintained between plane and shore up to a distance of ten miles. Voice signals from the plane were heard a distance of thirty miles. On a second test reliable transmission by voice was heard on the shore when plane was forty three miles away.

Halifax, N.S. - October 19, 1918.

Under the direction of Ensign H.S. Murphy, a Davis non-recoil Gun was mounted on one of our Flying Boats this week, and given a test, which proved successful. A target, 9 feet by 15 feet was placed in the harbor, and a hit 4 feet from the center was scored from a thousand foot altitude. The ammunition for the Davis Gun, consigned to this Station, has not yet arrived.

CONFIDENTIAL AVIATION BULLETIN NO.17, U.S.NAVAL FORCES
OPERATING IN EUROPEAN WATERS, - 14 September, 1918.

FRENCH OPERATIONS.

During the month of July 1918, French Naval Aviation made 4,248 anti-submarine patrols, covering a distance of 485,330 knots.

432,890 knots covered by aeroplanes and seaplanes.
52,440 " " " dirigibles.

Submarines were sighted on nineteen occasions and 14 attacks took place.

Twelve mine groups were discovered.

SOURCE O.N.I.

"A prisoner stated that the ex-Hamburg South American liner Santa Elena was the only seaplane-carrier which he knew to be employed in the North Sea. He was flying from her in the mouth of the Ems some two months ago. She was then carrying only two seaplanes, but had two very large hangars, one forward and one aft, which would appear to be capable of accommodating more. To launch them she simply lowers them into the water by means of a derrick, when they "taxi" away on their own floats. He had never heard of the floating hangars and rafts which have been described. Asked whether any German seaplane-carriers were fitted with a flying deck for launching aeroplanes, informant stated that he had never seen or heard of one and did not believe that they existed, as all the Naval Air Service men with whom he had spoken had been astonished at the appearance of our scouting aeroplanes on the German coast. Apparently the German Intelligence Service had given no warning of the possibility of such a thing."

J. H. Towers,

By direction.
