

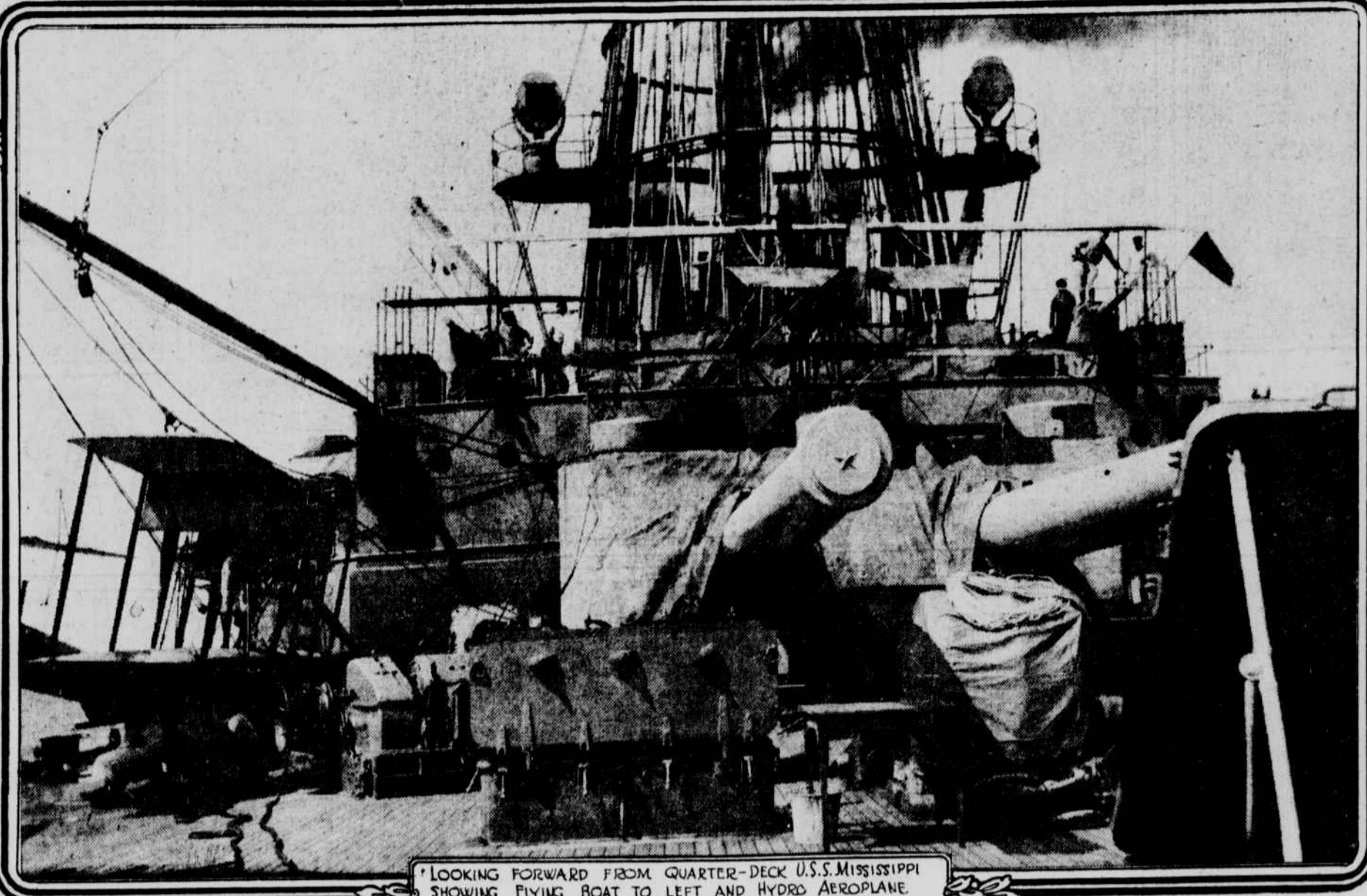
UNITED STATES NAVY FLYING BOATS AT SEA



LIEUT. TOWERS *in charge aviation* *care of Vera Cruz* AND ENSIGN CHEVALIER READY TO LEAVE "MISSISSIPPI" IN FLYING BOAT OF PENSACOLA.

Unusual Photographs by Arthur Ruhl Showing Various Steps.

THE photographs on this page illustrate the method of launching navy "flying boats" and hydro-aeroplanes from the deck of a battleship while at sea and starting the flight. They were taken on the Mississippi upon arrival in Pensacola Harbor on her return from Mexico. The two machines shown here, flying boats "C 4" and "C 5," were in constant use in Vera Cruz for scouting purposes and on arrival at Pensacola they were flown ashore by the more experienced of the navy aviators, Lieutenant Towers and Ensign Chevalier in one and Lieutenant Bellinger and Lieutenant Smith (United States Marine Corps) in the other. Lieutenant Commander H. C. Marlin, in command of the Mississippi and of the aviation squad, has experimented with a machine for shooting the planes off the deck of the ship, so that a flight might be started without disembarking the planes—an impossibility in rough water—but this device (a metal track along which the flying machine is pulled by a compressed air device and released just as it reaches the end) has not yet



LOOKING FORWARD FROM QUARTER-DECK U.S.S. MISSISSIPPI SHOWING FLYING BOAT TO LEFT AND HYDRO AEROPLANE ON TOP OF TURRET



LIEUT. BELLINGER (at right) and LIEUT. SMITH (U.S. Marine Corps) LEAVING "MISSISSIPPI"

The Birdmen and Their Station Ship—A Little World.

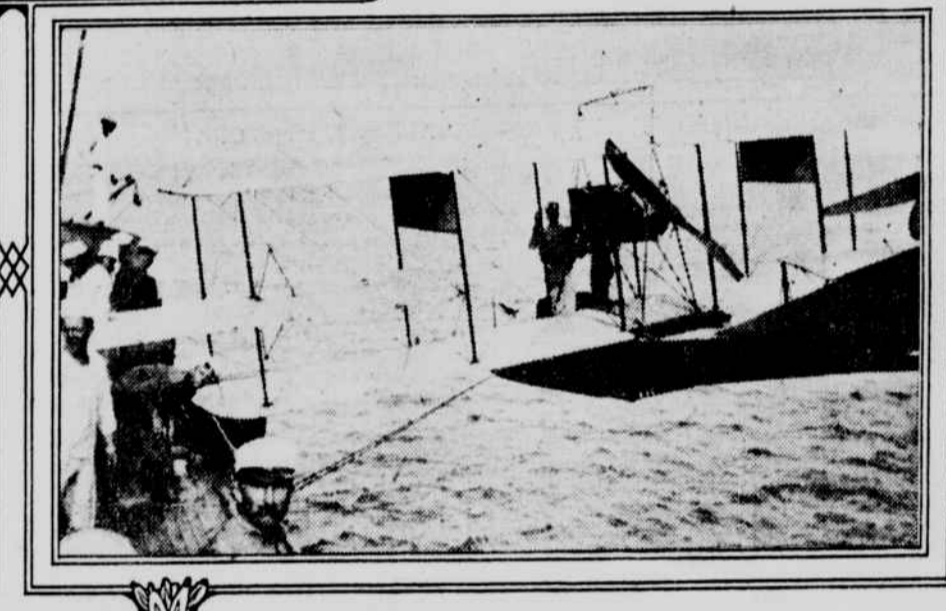
out on paper some new type of machine which will lit more, fly faster and weigh less than anything ever heard of.

They were a picked and interesting lot, these young birdmen—level-headed in the literal sense, physically and temperamentally fit. After the candidates have proved that they are strong enough and that eyes and heart are right, they go through other curious tests to measure their sense of equilibrium—the efficiency of the "inner ear"—hopping in a straight line blindfolded, for instance, or holding arms outstretched and then, with eyes shut, quickly bringing the tips of the forefingers together.

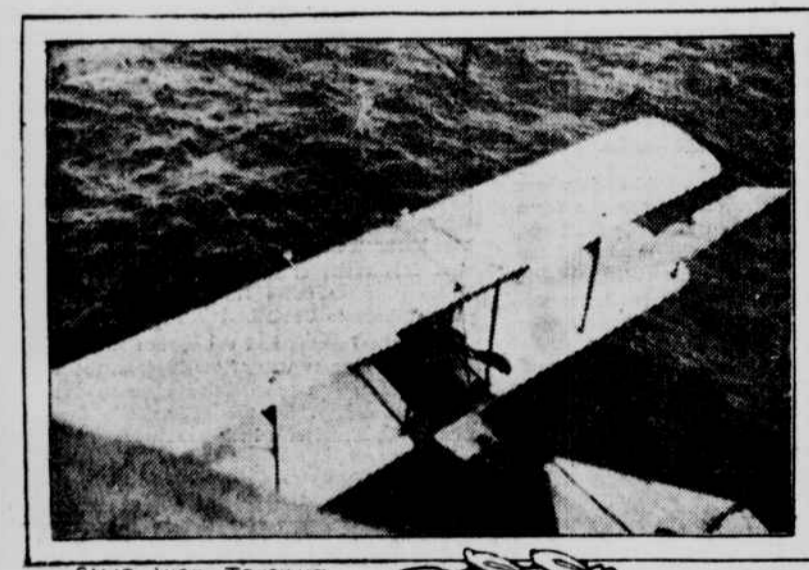
When through their coaching they are better flyers than most professional birdmen. They know the "why" as well as the "how" of what they are doing and understand bending stress, radii of gyration, directional, lateral and longitudinal stability and such mysteries, as well as how to get down from the clouds by "feeling."



SAME LIFTED FROM DECK TOWERS AT LEFT



SAME OUTSIDE AND ABOUT TO DESCEND



SAME JUST TOUCHING WATER.

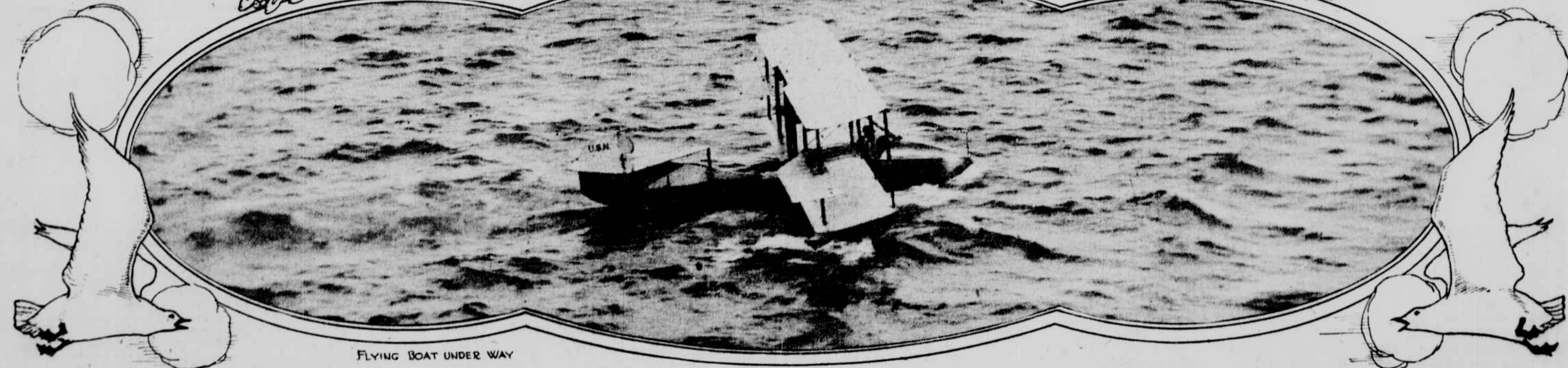


TOWERS AND CHEVALIER

JUST TOUCHING WATER.



SAME CAST OFF



FLYING BOAT UNDER WAY

been set up aboard ship. The difficulty with it is that it is a tremendous strain both on the machine and on the operator, for full speed is acquired in some fifty or sixty feet, instead of several hundred yards.

The Mississippi's duty as an aviation station was her last service in our navy. She and her sister ship, the Idaho, are to be sold to Greece. She and her squad of birdmen made a little world of themselves among the fighting ships proper

at Vera Cruz, always kept ready to steam out at a moment's notice to meet an imaginary or actual enemy. The Mississippi was built just before the first of the dreadnaughts—she would have dreaded nothing herself in Spanish war time

and, though still a formidable fighting machine, she was there with a skeleton crew and rather less like a battleship at the moment than a sort of luxurious barracks and laboratory. Lieutenant Commander Mustin did not fly much

himself, but he is one of those keen, hard working young officers always boring ahead at the science of the game and, while his subordinates were up in the air, likely to be experimenting with toy pontoons in a bathtub or trying to figure

For it must be remembered that before they begin to work with aeroplanes they have already been trained to take charge of an engine room or a gun turret or go up on the bridge and navigate a ship.