

PEOPLE WHO BELIEVE THAT A CERTAIN NUMBER OF SHIPS CONSTITUTES A FLEET SHOULD STUDY THIS DIAGRAM AND THE ONE ON THE FOLLOWING PAGE. TO SWING FROM ONE COMPLICATED FORMATION—

NAVAL STRATEGY AS AFFECTED BY AIRCRAFT AND BATTLESHIPS

BY CAPTAIN L. M. OVERSTREET, U. S. NAVY

IN preparing for any contest, whether between individuals or between nations, it is wise to make a thorough study of the whole situation. One should consider all possible moves that our opponent might make and from logical reasoning deduce his most probable move. Similarly, we should outline all courses open to us, and then accept the one which is most to our advantage.

It is revealing no secret to say that there is only one Power in Europe and one Power in Asia which have sufficiently strong fleets to threaten our coasts. A brief study of the naval strategy of campaigns in the Atlantic and in the Pacific will show us where to expect the enemy's battleships, in order that we may bomb them.

BOMBING ENEMY BATTLESHIPS IN THE ATLANTIC

If, unfortunately, we be drawn into a war with a European Power, we would

either take the offensive and send our fleet out to meet the enemy, or wait at home for enemy ships to come to our coasts. If we sent our fleet across, it would be necessary to base in an Allied port in order that we might operate against the enemy. In this event, we could expect to meet the enemy's battleships off the European coast, and would have to bomb them in that locality. On the other hand, if the enemy's fleet came into the western Atlantic, it would be necessary for him to base his fleet to the northward of our New England coast or in the West Indies. Our fleet would be sent out to intercept the enemy and encounter his battleships well off the New England coast or to the eastward of the West Indies.

Obviously, we could not to-day bomb the enemy's battleships in these three locations from our shore landing-fields, even though we had hundreds of big bombing planes to defend the coast. We should be compelled to send up bombing

planes from plane carriers. Let us, therefore, expedite the construction of all the plane carriers allowed us by the recent naval treaty. Bombing planes with 4,000 or even 2,000 pound bombs cannot operate from carriers. While it is well to look to the future, it is of vital necessity to be ready for a sudden and immediate war. We must not base our war plans upon visions of possible future aviation developments.

BOMBING BATTLESHIPS IN THE PACIFIC

No Asiatic Power would dare send battleships across the Pacific to bombard our California coast. Our battle fleet in the Hawaiian Islands would cut it off from home and destroy it. If, therefore, we ever bomb these enemy ships, it would be good strategy to take the offensive and cross the Pacific. In this event, we might expect to encounter enemy battleships in the western Pacific some 5,000 to 6,000 miles from San Francisco. Aviation enthusiasts tell us that

thirty-six hours after the declaration of war our bombing planes can be assembled along the California coast. Of what use would they be with the enemy's battleships 5,000 miles away?

During the Parliamentary debates in the House of Commons on Tuesday, July 18, 1922, a member of the British Parliament made this interesting statement: "I have said that we are misled by the experiments which take place round our coast, and that is most dangerous, because such experiments within a radius of 100 miles around the coast are so misleading. I would ask the Committee to look at the map of the Pacific Ocean. If we were at war in the Pacific, the probability is that we should be working our capital ships, supposing they were out there, from a base somewhere in the neighborhood of Admiralty Island, northeast of New Guinea, 2,000 miles from Sydney, 2,100 miles from Yokohama, 3,000 miles from Singapore, and 3,000 miles from Honolulu—right in the middle of the trade routes. Think of these distances. Of course there is no aircraft that could cover them "on their own," although I hope there will be some day. They will till then have to be conveyed in carriers which are part of the Admiral's Fleet, and any one in them should be immediately under the Admiral's control, and not under the control of any other department. It is a

ridiculous system to have branches of two different services on board a ship used by the navy for purely maritime warfare."

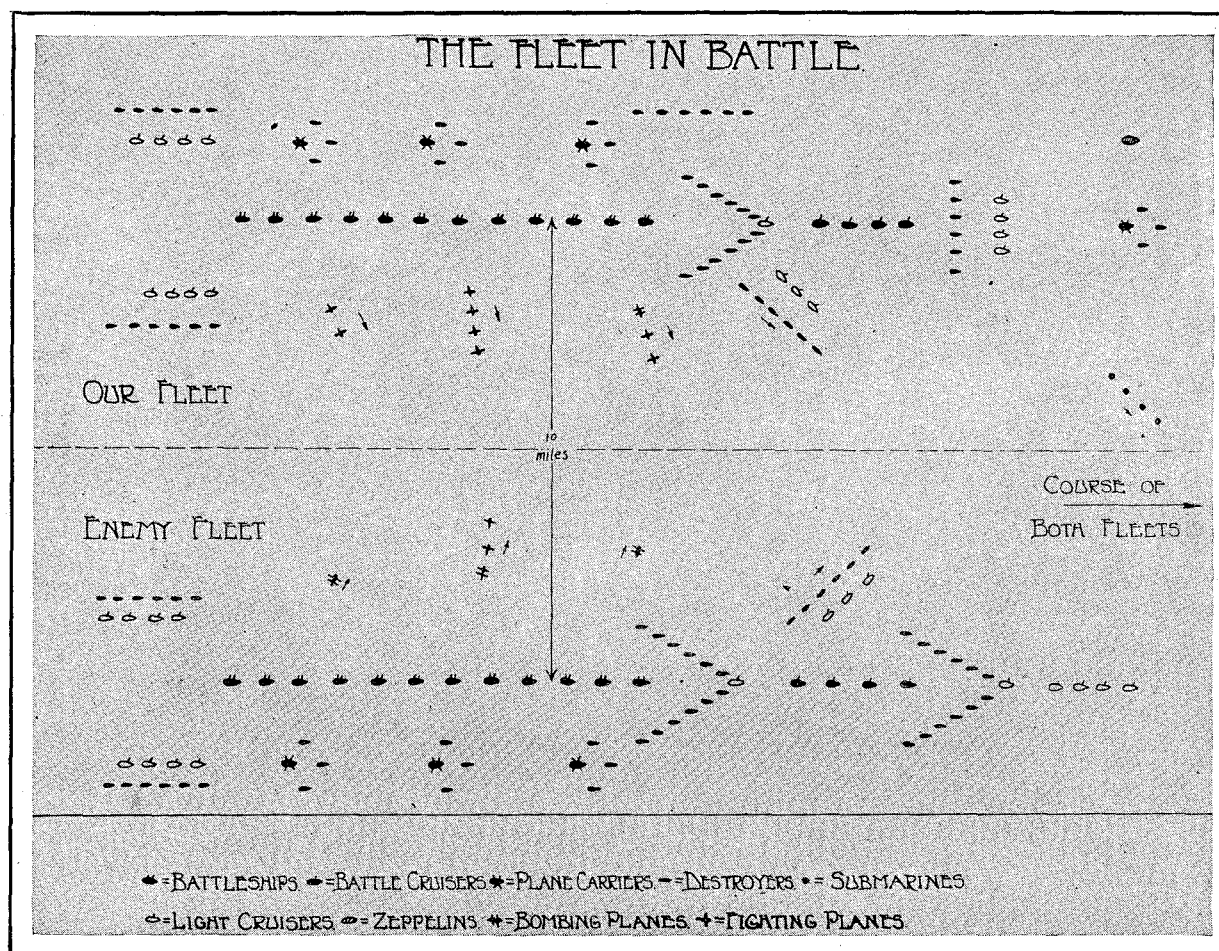
The member of Parliament referred to the fact that in Great Britain, with a United Air Service, some of its personnel on a British plane carrier is under the Admiralty and some under the Air Minister—obviously a ridiculous arrangement. This insight into British naval strategy shows that they too expect battleships to operate thousands of miles from home. It seems clear that the bombing of battleships in a naval campaign must be done by bombers flown from plane carriers and from other fighting ships.

BATTLESHIPS DO NOT BOMBARD COASTS

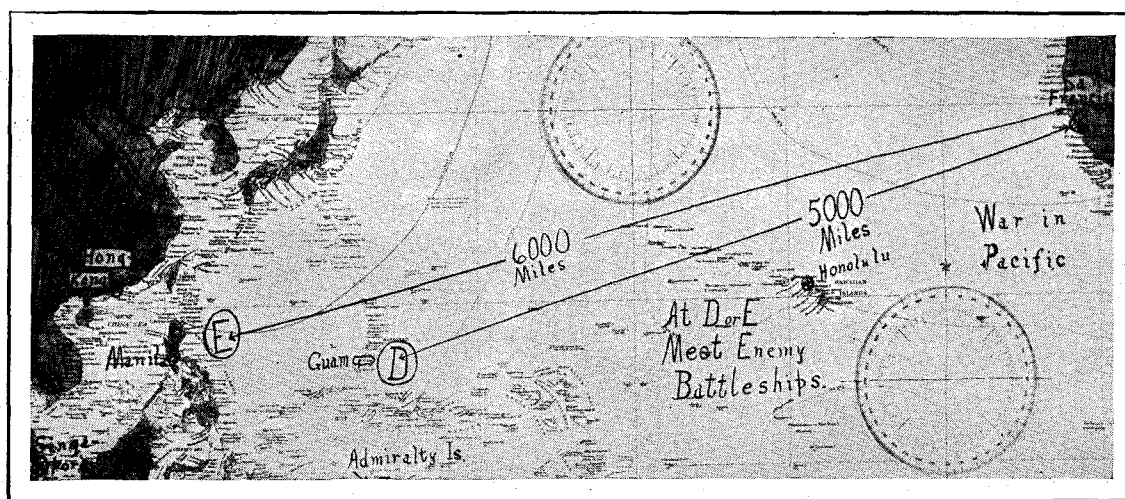
Many have questioned the value of British battleships during the Great War, as they remained much of the time at Scapa Flow. The great British battleship fleet represented tremendous power; so much so that its mere existence forced the Germans to withdraw from the high seas their whole fighting fleet (except submarines) and their merchant marine. Only a few raiders dared to take the sea, and these were soon run down. Of what use were the German battleships? This is easily answered. The fact that the German battleship fleet was held ready in port forced the

British to keep their battleship fleet in readiness at Scapa Flow. Furthermore, the German submarine menace compelled the British to hold some 60 to 70 destroyers with their battleship fleet, that they might be ready to protect the battleships should these be suddenly called out. But for the German battleships, these 60 or 70 British destroyers could have been released and sent to the submarine zone. The existence of German battleships, therefore, prevented a big force of British destroyers from attacking German submarines.

The German Admiral never bombarded the British coast with battleships. Occasionally he sent a few fast cruisers in for the strategic purpose of drawing out British ships. If the British ships came out, he could attack them with his battleships and destroy them. When the German Admiral, von Scheer, raided the English coast on August 20, 1916, a German Zeppelin, L-13, discovered a British naval force and reported its location. Bad weather drove the Zeppelin away, but von Scheer continued to look for the British force. He could not find his enemy, and thought it probable that the aviator had not given him its correct position. This brings out the point that aviators in naval scouting aircraft must be skilled navigators in order to report the exact latitude and longitude of any ship sighted. They must



—TO ANOTHER REQUIRES NOT ONLY SEAMANSHIP OF THE HIGHEST ORDER BUT ALSO PROLONGED TRAINING



ON THIS MAP AND ON THE COVER ILLUSTRATION OF THIS WEEK'S OUTLOOK THE CHIEF STRATEGIC POINTS IN THE ATLANTIC AND THE PACIFIC ARE INDICATED. WITHIN THE AREAS MARKED BY THE CIRCLES WOULD PROBABLY BE FOUND THE POINTS OF CONTACT BETWEEN HOSTILE FLEETS

also thoroughly understand naval strategy, fleet tactics, and fleet scouting in order to work in harmony with the rest of the fleet. This points to the absolute necessity of a naval air force.

AIRCRAFT AFFECTED BY BAD WEATHER

A glance at the naval pilot chart for July shows that there was fifty per cent of fog off the New England coast. This means that an enemy's fleet could raid the harbor of Boston fifty per cent of the time during July, when the aviators would be unable to fly in the fog and bomb an approaching fleet. A fleet can come in safely by taking soundings. It would not be wise, therefore, to depend entirely upon bombing planes for the protection of Boston. Mines and submarines are a much surer defense, for they are effective at all times.

When the German Admiral von Scheer was ready to take his fleet out to engage in the battle of Jutland, he had planned on using his aviators to scout for him. On May 23 the weather was too foggy for the aviators to go up and scout. This same situation continued for eight days. Reluctantly von Scheer was forced to change his plan of crossing the North Sea to England, and he cruised up on the German side instead. On the day of the battle of Jutland, May 31, five Zeppelins did go up, but because of foggy and misty weather they were unable to locate the fleets in battle. We must have plane carriers and all the bombing, scouting, and fighting planes necessary to make a complete and well-balanced fleet. We must expect to encounter foggy weather, when aircraft cannot be used, and lay our strategic plans accordingly.

AIR FLEET COSTLY

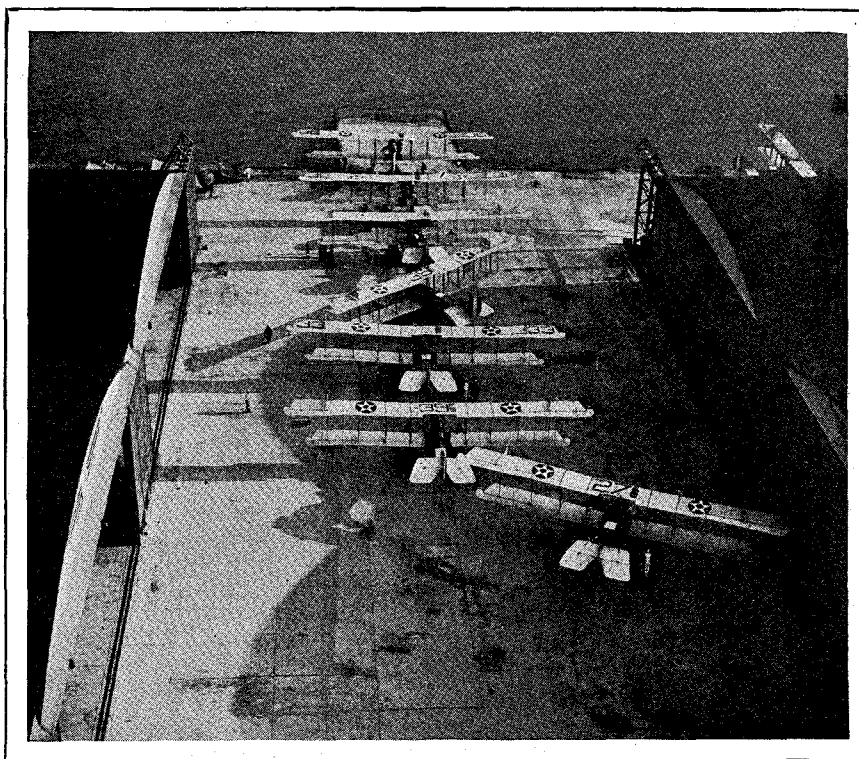
Many have jumped to the conclusion that because airplanes can be built for \$40,000, while it takes some \$40,000,000 to build a battleship, aviation is very

cheap. Already the United Air Force in Great Britain is accused of spending more for bricks and mortar than for aircraft. It costs many millions to build big flying-fields, hangars, runways for launching seaplanes into the water, hydrogen plants, helium plants, barracks for the aviators, shops for repairing the planes, etc., etc. Moreover, this \$40,000 plane may not last a year, while a battleship may be useful for twenty. To bomb the enemy's battleships we must have big, fast carriers, and these, equipped with planes, cost nearly as much as battleships. There is no short cut to

victory. A new weapon does but add increased expense.

NAVAL STRATEGY NEVER CHANGES

Two thousand years ago a great Athenian fleet of galleys started out to conquer Sicily. A notable Sicilian leader advocated sending a Sicilian fleet out to attack the enemy's forces off the Italian coast. His ideas of naval strategy were sound, but he was overruled. The Athenian fleet came, blockaded the coast, besieged the people, and much suffering followed. This could have been avoided had a fleet been sent



NAVAL AIR STATION AT HAMPTON ROADS, VIRGINIA

The hangars and runway cost \$200,000 (two triple hangars to take a total of sixty torpedo planes). The cost did not include land, heating, lighting, and power plants, repair shops, barracks, etc.

out to attack the enemy on the high seas.

During the recent war we despatched battleships to the North Sea, destroyers to Queenstown, Brest, and Gibraltar, submarine chasers into the Adriatic, and submarines to the Irish coast to "seek and destroy the enemy." During the Spanish War we sent a fleet to the Philippines and one to the West Indies to "seek and destroy the enemy." In future wars we should immediately take the offensive and start out a well-balanced fleet, one composed of plane carriers, cruising submarines, mine-laying submarines, destroyers, light cruisers, and battleships, with all the necessary auxiliaries, to sweep the enemy from the high seas.

At the battle of Jutland the light cruisers in the advanced scouting line met and opened fire at 2:38 P.M. This started the battle. At 3:45 the battle-cruisers commenced firing. At 4:30 opposing destroyers endeavored to attack

enemy battle-cruisers, but in reality they met each other, and this neutralized the destroyer attack. After four hours of fighting between these subsidiary forces, the battleships met. The British had the superior battleship fleet. The Germans were forced to withdraw and the British maintained their control of the sea. In future naval engagements the plane carriers will doubtless clash first. As soon as their planes have been expended, the carriers will be forced to seek refuge behind the battleships. The plane carriers are very vulnerable. Light bombs dropped on their flying decks would ruin them for service. They must be guarded carefully by destroyers and cruisers, and when all planes are expended take refuge behind the battleships. It is therefore clear that planes and carriers cannot replace battleships. The destroyers and mine-sweepers will guard the battleships against submarines and mines throughout the battle.

Those who advocate a policy of "stay at home behind the bombing plane" do not realize that if we followed such a mistaken course our merchant marine would be wiped from the seas. Our huge export trade, valued at eight billion dollars annually, would instantly be stopped. Our colonies in the Virgin Islands, Porto Rico, Hawaiian Islands, Samoa, Guam, and the Philippines, and possibly the Canal Zone and Alaska, might be taken from us. While we were safely at home behind the bombing planes, the war would be lost. An enemy's battleship might never come within 2,000 miles of our coast.

Let us, therefore, follow the teachings of good naval strategy, and adhere to our old policy of "seek and destroy the enemy." Surely America will never be willing to take the defensive, to adopt a pusillanimous course and be content to "stay at home behind the bombing plane."

AN APPRENTICE COMES TO PHILADELPHIA

BY RENÉ BACHE

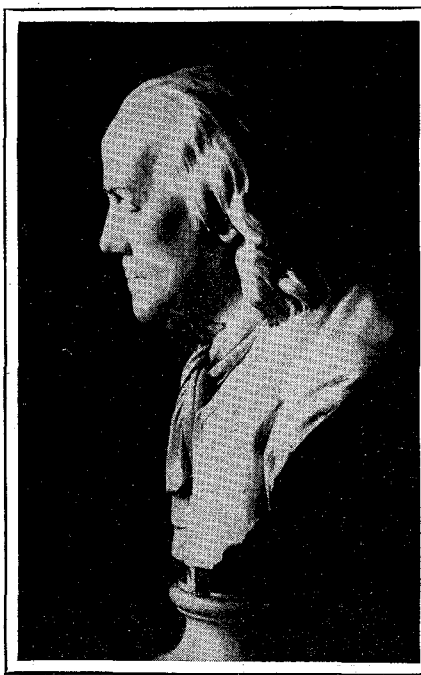
THE city of Philadelphia this year is going to celebrate the two hundredth anniversary of the first arrival there of its most famous citizen, Benjamin Franklin.

It is unfortunate that the house Franklin built and in which he lived, on Market Street, was torn down more than a century ago. Were it standing to-day, it would be regarded by patriotic Americans as a shrine, and there would attach to it a particular interest because of its relation to the philosopher in his personal and domestic aspect.

Franklin's father, whose name was Josiah, had seventeen children, ten of them by a second wife, Abiah Folger, who came from Nantucket. Benjamin was youngest of the ten, save two. He was born January 17, 1706 (new style), in a house on Milk Street, in Boston, opposite the Old South Meeting-House.

Josiah was by trade a tallow-chandler and soap-boiler, and the boy, as soon as he was old enough, helped to cut wicks, fill dipping molds, etc. His first ambition was to go to sea, but his father intended him for the Church, as a "tithe" of his sons. As things fell out, however, he was apprenticed at twelve years of age to his elder half-brother James, who "bossed" him unmercifully, beat him occasionally, and made circumstances so discouraging that, finally, having made up his mind to endure no more, Benjamin stole away from Boston, taking passage on a sloop bound for New York. To get the requisite passage money he sold his books.

Having arrived in New York, he could find no immediate employment, and was advised by a master printer to whom he had applied for a job to try his luck in Philadelphia. Thus it came about that



BENJAMIN FRANKLIN

The Houdon bust, made from a life-mask of the philosopher

after an adventurous journey—fifty miles of it on foot, and the last stage (from Burlington) in a boat which he helped to row—Franklin reached the Quaker City on a Sunday morning in October, 1723, between eight and nine o'clock.

He was then seventeen years old. Landing at the Market Street wharf, he walked up that street as far as Fourth, his pockets (as he has written) "stuffed out with shirts and stockings." He was dirty and hungry; he knew nobody, and

in his pocket he had one Dutch dollar and a few pennies.

To assuage his hunger he had bought at a baker's shop "three great puffy rolls" for a penny apiece, and as he walked up the street he munched one of them, holding the others under his arms.

Oddly enough, while on his way to Fourth Street he saw his future wife, Deborah Read, standing on her doorstep, and also passed the place where his home of later years was destined to be located. She was a young girl, a few months older than himself, and, as it would seem, he attracted her eye. "Saw me," says the philosopher in his Autobiography, "and thought I made, as I certainly did, a most awkward and ridiculous appearance."

Not long afterwards, having got some odd jobbing work to do at the printing trade, Franklin obtained lodging at the Reads' house. A chest containing his clothing and other belongings had been forwarded in the meantime from New York, and he was able to make himself much more presentable. Between himself and Miss Read there developed a love affair; but her mother did not think her old enough to be married, and, though they were engaged, she did not become his wife until some years later, after he had spent eighteen months in England.

The couple had two children—Sarah (called Sally), who married an Englishman, Richard Bache, and a boy, Francis, who died at five years of age. Like most other folks, they changed the location of their domestic establishment more than once as years went by—Franklin, doubtless speaking from experience, said that three moves were equal to a fire—and it was not until 1764 that he built the