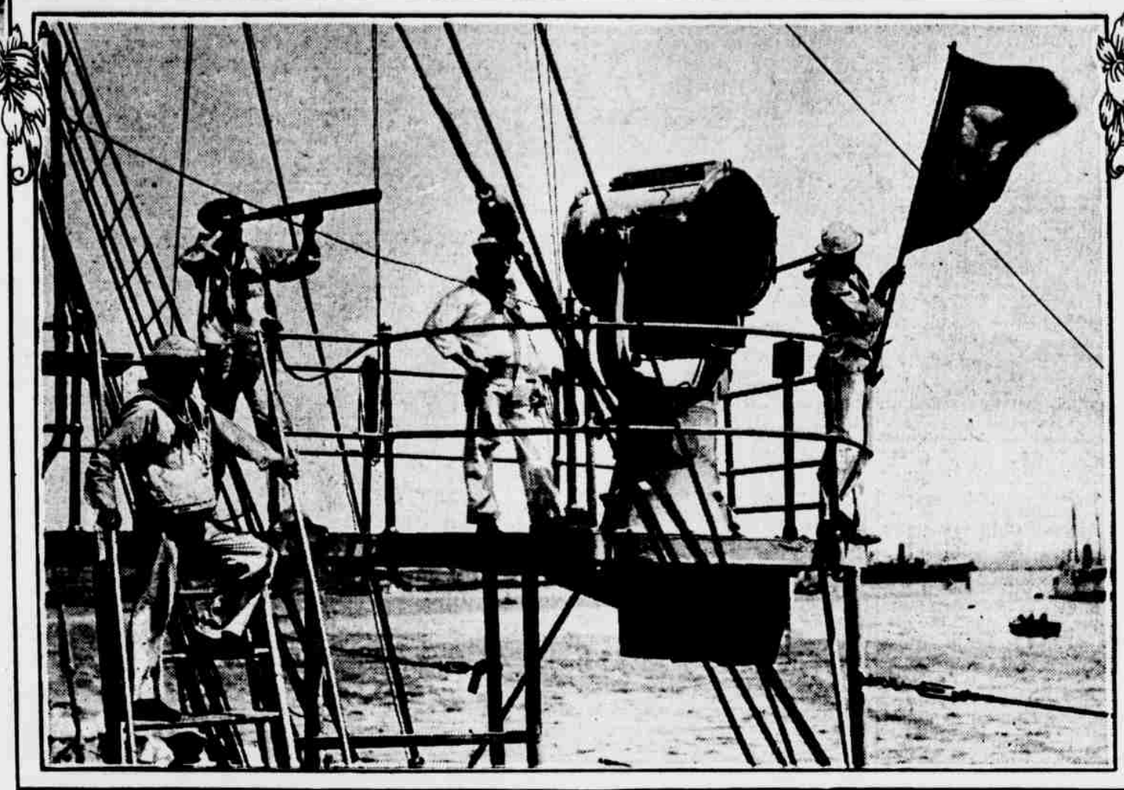
HOW NAVY WILL MEET NEED FOR MEN BEHIND THE GUNS

HOW TRAINING TELLS: A TARGET THAT HAS BEEN TORN TO PIECES BY SPLENDID GUNNERY



THE SIGNAL DIVISION OF A BATTLE CRAFT. HERE QUICKNESS, PRECISION, AND THE SHARPEST OF EYES ARE INDISPENSIBLE

Measures to Secure the 33,000 Recruits Called For in the Nation's First Line of Defence

By ROBERT G. SKERRETT.

MOBILIZE the navy! Such, in effect, is the meaning of the Presidential order issued during the past week authorizing the raising of the enlisted strength to 92,700 men.

The navy needs 33,351 enlisted men to bring up its personnel to substantially 93,000 bluejackets. Where are we going to get these sailormen? And when we get them what is likely to be the fighting efficiency of our battle fleet? Are we going to insist upon the same standards that have heretofore prevailed at recruiting stations?

Just a year ago the Secretary of the Navy said: "It is not as easy to secure the enlistment of the men of the right type in the United States Navy as is generally supposed. We have rigid standards. Out of every six men who apply for enlistment in the navy we reject about five. * * * If by reason of his personal record or his physical deficiencies he does not seem to measure up to the standard we decline to accept him."

Manifestly this sort of sifting out is wise in times of peace; indeed, it has undoubtedly contributed to a great extent to the general efficiency of the navy's enlisted personnel. More than that, it is questionable whether men let in by a lowering of the requirements would be capable of meeting the exactions imposed by the very nature of the complicated mechanical getup of modern battle craft. The young man who wears the uniform of a bluejacket may justly hold his head high and feel himself better than the general run of his citizen brothers, but that very fact should make us ponder now when we are brought face to face with a condition that comes close to demanding the doubling of the sailor force of our fighting fleet.

Merely enlisting a man does not add just that much to the effective working equipment of a ship; the recruit must be made fit for the station to which he may be assigned, and only time will achieve this, the period of probation or preparation, as the case may be, depending upon the ultimate importance of the duty which is given him. The more valuable the man becomes as a human factor in the ship's performance the greater the amount of schooling needed; and those most familiar with our navy know that year by year a larger number of men of this sort are required to get the best possible out of the craft in their keeping.

"It takes longer to train the men capable of filling the positions calling for skill than it does to build a battleship." This is what Rear Admiral Frank Friday Fletcher told Congress three years ago when he informed the national legislators that the navy was much in need of 10,000 more bluejackets. And in that interval every one of our men of war of the active fleet has gained something in technical intricacy demanding not only more men, but more men of the higher ratings which he had in mind when he made that rather startling assertion.

The general public, no doubt, is puzzled over the seemingly sudden need for so many additional seamen for the navy. The need is not a new one, but the fact has been suppressed by the Secretary of the Navy in the name of economy.

As far back as December of 1914, the General Board over which Admiral George Dewey presided then recommended an increase of 19,600 men in the service, and Mr. Daniels refused to make the report public unless the General Board struck out that feature of its communication to the Department. The Secretary has been very reluctant to admit the need of a considerably augmented enlisted personnel, and, as a result, squadron commanders have had to make the most of their somewhat limited crews.

Possibly the most illuminating explanation of how the sea borne arm of our national defence has been handicapped is that given some months ago by Capt. J. S. McKean, then assistant for material in the office of naval operations. He showed just how the fleet has outgrown its personnel. Capt. McKean said:

"I think there is a misunderstanding about this complement business. We built ships without increasing the number of officers and men. We had the ships; they were finer than we had had before, and we wanted to use them.

"We said, 'Now we can get along with a few men less on this ship; we can cut out a little here and cut out a little there and that will give us a crew for the new ship, and we will cut down on the officers here and on the officers there, and we will make a Commander do a Captain's job and a Lieutenant-Commander do a Commander's job,' and so on down the line, until we had small boys just out of the Naval Academy holding down positions that they should not have been holding down and that was not fair to the positions nor to them.

"But we were keeping the fleet alive. Pretty soon we got to the point where we wanted to drill the ships as groups, divisions and squadrons.

"Then the Admiral got behind us and he wanted more ships in commission. Then he would look around and see where we could pull two or three out here and two or three out there in order to put another ship in commission, and thus make the fleet bigger. The result of each one of these reprisals—about every six months—was that we stretched ourselves out more and more until we pretty nearly got to the breaking point in some places. However, we finally became so accustomed to it that we accepted it as the standard.

"In other words, we were working with peace complements and we thought that would do in battle, because we got away with target practice with those complements, namely, by shifting men about. But in battle you cannot shift men about; you have to have all of your guns manned at the same time; you have to have all of your fire control manned at the same time; you cannot take the 12 inch men from the 12 inch guns and use the men for the 8 inch guns, and then return them to the bigger weapons, but you have got to have all the men in their respective places and all trained together."

At the time Capt. McKean spoke a board of officers was busy analyzing the service's needs in this vital matter of personnel, and that body was expected to make a report to the Department. With that in view Capt. McKean said:

"I think that this report that is coming from the fleet will once again get us back to the only real complement of a ship, and that is, the war complement."

The public has heard that our dreadnoughts actually required fewer men than their immediate predecessors, the predreadnoughts, simply because the all big gun batteries bunched, as it were, the fighting effectiveness of the later battle craft. This is a fallacy that the Department found convenient to foster because it had the superficial elements of economy.

As a matter of fact, these vessels carry anti-torpedo batteries of increasing size in the shape of more 5 inch rapid fire guns, and these weapons call for fairly numerous crews because of the speed with which they must be supplied with ammunition, this service extending all the way from the magazines and shell rooms right up to the very loading positions of the rifles. As Capt. McKean has said, it has been the practice to shift these men from gun to gun or from side to side as the 5 inch batteries were brought in action upon the peace time target, but this procedure is just the sort of thing that would be dangerous in time of battle, especially at night, when a flotilla of destroyers might rush to the attack from any direction.

But this does not explain the whole situation, and it is only right to the public that it should know what has been going on in the navy in the course of the last two or three years, for only in that way will the grave necessity for more men be made clear. Admiral Bradley A. Fiske, when aid for operations, had the temerity to tell Congress of the navy's shortage of men, and because he deemed it his patriotic duty to let the public know just where we stood he was relieved of his office and virtually censured. And the service went struggling on after the fashion described by Capt. McKean; ship after ship was put in reserve with greatly reduced crews in order that newer additions to the fleet might be given men enough to work them under a handicap.

The craft that the layman hears most about are the battleships of the Atlantic fleet, consisting of fourteen vessels, most of them dreadnoughts or superdreadnoughts; but the Atlantic fleet also has a reserve force. The latter have only just enough men to navigate them and to keep them in a state of measurable fitness, but totally unequal to the requirements of war.

This reserve numbers eighteen battleships, and these vessels are counted upon to form the second line of our sea borne defence here on the eastern coast. As it happens, most of these ships have more complicated batteries, because of the variety of calibre, than the dreadnoughts and superdreadnoughts, and ton for ton of displacement require more men to handle them than the later and larger battle craft. This introduces a very serious problem when it comes to mobilizing these fighting ships for hostilities.

This situation is very lucidly explained by Capt. McKean in this way: "If you will take the battle stations of the dreadnought class and compare them with the predreadnoughts, that is, the big ships that have the 12 inch, 8 inch, 6 inch and 3 inch guns—ships of the Virginia class, you will find that they call for more men than any dreadnought we have, because they have a more complicated fire control and a more complicated ammunition supply line.

"I do not see exactly how they are going to perform the work on that type of ship without more men, and I am sure there will be more men called for on that type of ship than will be called for on a real dreadnought."

But this is not all, because the dreadnoughts themselves differ to-day in their requirements from last year, mainly because it has been found advisable to introduce new features in the way of fire control apparatus, &c. The ever growing importance of radio work calls for a larger number of skilled men for this special service, and improved methods of training and modern ideas of efficiency demand more people aboard the man-o'-war than was thought necessary two or three years back.

For instance, there was a time a short while ago when the various batteries on our dreadnoughts were controlled by a megaphone system, orders being transmitted to each from a central station. The mere distribution of orders took a measurable length of time, and until so many of the stations got their instructions none of the group was permitted to begin firing.

Now, by reason of the substitution of mechanical and electrical devices of one sort or another, information and orders are distributed with great quickness—among some of the divisions this is done simultaneously. Naturally these facilities have conduced to rapidity of fire as well as to accuracy of control, and this means that the entire line of ammunition supply is speeded up and the number of rounds that can be discharged in a given interval correspondingly increased.

To maintain this performance unbrokenly more men, and skilled men at that, are needed. And let it be understood that our potential enemies are doing virtually the same things. And where would we figure in a contest if we failed to measure up to this present day standard of battle efficiency?

As matters stand, then, the reserve force of the Atlantic fleet will be a harder aggregation of vessels to handle to their fullest possibilities than the all big gun dreadnoughts, and fundamentally because of the more complicated composition of their batteries. And yet these ships must be placed in full commission because the very extent of our Atlantic coast and the Gulf seaboard and the strategic problem of the Caribbean in its relation to the Panama Canal demand that every possible battleship in the reserve force be made available.

In addition to these men-of-war there are both in the active fleet and the reserve fleet armored cruisers, lesser cruisers, mining vessels, destroyers and submarines that must be fully manned in order to get the best out of them. There are besides certain ships of the so-called "train"—supply craft, fuel craft, repair ships, ammunition ships, &c.—that must be completely in the hands of naval officers and bluejackets.

Our mine laying force, and for that matter our sweeping and counter mining divisions, are woefully inadequate as they exist to-day. Undoubtedly this is one of the first departments of the war fleet that must be mustered into service and made adequate. Happily we have sixteen coast torpedo vessels of the earlier destroyer type and seventeen torpedo boats, not generally in commission, that might be manned and made very effective units for mining and counter mining work. But these boats need thoroughly competent men to handle them, quite apart from the special work in connection with mines and mining, and it would take some time, many weeks at best, to whip unfamiliar but promising material from civil life into shape for this important branch of coast defence.

Laying naval mines is not merely the simple job of dropping these subaqueous instruments of destruction into the water. Nearly every harbor presents its own problem and each defended area has conditions peculiar to it that more or less interfere with the rapid planting or removal of mines.

The latter operation would concern more directly the neutralizing of an enemy's efforts to make certain of our water areas unsuspectedly hazardous to our own men-of-war or merchantmen. A year ago Admiral W. S. Benson, Chief of Naval Operations, announced a novel proposition which, if carried out, would do much toward facilitating the navy's mining and counter mining work, and would make available for that service a body of men not commonly considered in connection with coast defence duties. Admiral Benson said:

Civilians in Many Walks of Life Will Contribute to Fighting Efficiency of Our Battle Fleet

"One idea I had hoped to develop was to use vessels that are now utilized for other purposes. For instance an idea that I have had for some years, since being lighthouse inspector in one of the Southern districts, was that the lighthouse tenders might be utilized for that purpose.

"The masters of the lighthouse tenders are more familiar with the waters that they operate in than anybody else perhaps can be, and I think that a system could be developed by which they could be given a certain amount of exercise to familiarize themselves with the methods of laying mines and handling them generally so that they would become expert and could be utilized for that purpose very effectively."

This is not a surprising proposal to those familiar with the skilful work done by the officers and crews of our lighthouse tenders in planting, removing and replacing lost buoys of all sorts, many of them far more difficult because of size and weight than would be the handling of naval mines. True, the total force of officers and crews of these vessels numbers but 1,605, but if 800 of them be placed at the navy's disposal on the Atlantic seaboard we shall be considerably better off than mere numbers indicate.

A year ago Admiral Benson declared that the desirable war strength at that time should be 5,700 line officers and 98,993 enlisted men. This allowed for 3 per cent. disabled by sickness due to normal causes, but made no allowance whatever for battle casualties or breakdowns directly incident to the stress of hostilities, and provided a 10 per cent. reserve force.

A number of vessels have been added since then. It will be observed that the recent Presidential order authorizes raising the enlisted force to 87,000 in addition to the enrolment of 6,000 apprenticeship seamen at the naval training stations. The department counted upon 296 retired enlisted men and 350 naval reserve men, together with 7,200 naval militiamen. Even so, that left a deficit twelve months back of 37,618 in the enlisted ranks. Admiral Benson then believed that something like 23,000 volunteers could be recruited from civil life when needed and broken in for war service "without seriously lowering the efficiency of the whole organization."

He did not state how long it would take to get this wartime addition nor what length of time would be required to get them into line for good work. Just about the same time, Mr. Daniels gave some illuminating figures to Congress, and these have a present bearing when we take into account our prospective needs. The Secretary of the Navy said:

"Every man enlists for four years, and so about 12,875 are discharged every year. * * * In 1913 the total loss by discharge, death and retirement was 15,656; in 1914 it was 13,213, and in 1915 the total loss was 17,157. * * * With the present allowed quota the average annual wastage will be about 6,000."

He based this upon a percentage of assumed reenlistment, the figure in 1915 having reached 85 per cent. of those honorably discharged at the end of their enlistments. Therefore, Mr. Daniels concluded that "in time of emergency the youth of the country would answer the call of patriotism, and I do not doubt that recruits in large numbers could be secured; but in time of peace I do not believe we can recruit sufficient men to add 10,000 to the quota in one year. We have had difficulty in keeping the present quota full, under the conditions of high wages now paid and the expansion of various industries throughout the country."

The demands of these industries will be greater than ever if we enter the war, and again the question arises, will the navy lower its present standards in order to obtain the needful men?

In his statement of our requirements in case of war Admiral Benson showed that the merchant ships that would be called into the service of the navy would require fully 17,600 enlisted men. Can we draw these men from our merchant marine—and they must be American citizens or at least those that have taken out their first papers to be acceptable? The great bulk of our native civilian sailormen are engaged in vitally necessary coastwise or internal shipping that cannot be interfered with without seriously impairing industrial efficiency and endangering the public welfare generally. Either these men must come forward and volunteer for naval service, their places being largely filled by others utterly inexperienced, or the green material must be drawn directly into our battle fleet.

To man the merchant auxiliaries the merchant sailor will answer admirably, but for duty aboard a fighting ship pure and simple the civilian sailor would need quite as much training as an utterly inexperienced landsman in order to qualify him for strictly military duties. The man-of-war is essentially a fighting machine and it is absolutely necessary that nothing should be permitted to interfere with its maximum efficiency in this direction. From the fire room and the engine room all they way up to the spotter tops there are positions that can be filled only by men that have been especially trained for them, and the loss of these men would prove a serious handicap in any of the divisions concerned.

The squadron commander must be able to feel that every ship under him will be capable of attaining full speed within a prescribed interval of time. This hinges in the first place upon the fire room force and their ability to crowd on steam in the boilers under their charge. The fate of battle may rest upon the craft's power to overhaul her foe or, if the enemy appear in superior force, to get away by reason of added speed.

Again, inasmuch as the actual combat may be of short duration, it is indispensable that nothing shall go wrong with the fire control, or, if there be a breakdown, that men shall be immediately available to make promptly the required repairs. Because of the brevity of the contest the men behind the guns should be able to fire fast and to make certain of scoring hits. The wireless outfit must not fail at the supreme moment; the range finders must be equal to the call of the hour, and in the spotter tops there must be no faltering or lack of precision.

The rough and ready bluejacket is a figure of the past, and in his stead stands either a machinist or a specialist; the percentage of the unskilled is extremely low on a modern battle craft. Indeed, conditions in this respect have so altered in the past decade that many officers are very much opposed to employing our sailors for expeditionary service on shore, lest that duty seriously impair the work of the fighting ship afterward in time of contest.

This has been brought out very strikingly by Admiral Benson, and by inference we can realize the peril to which our sea borne defence is exposed through the potential addition of thousands of untrained men. Admiral Benson has said:

"I am very strongly of the opinion that the bluejackets on battleships should never be landed for expeditionary purposes. I think it is a fatal error and should positively be prohibited except in cases of the most absolute necessity. I can give you a very good reason for that idea.

"Our organization on board ship is such that the men in charge of the turrets are our leading men, corresponding, in a way, to the sergeants and corporals in an ordinary military company. Of course, if we land our men from the battleships the noncommissioned officers go with them, and, of course, we train our pointers and turret men with great care, and when they become efficient they are most valuable men, and it would be possible, by landing a company of bluejackets in this way, to lose the very men in a turret that would be absolutely necessary for its proper fighting capacity."

To-day we have 72 submarines—not counting the three fleet submarines—built or in more or less advanced

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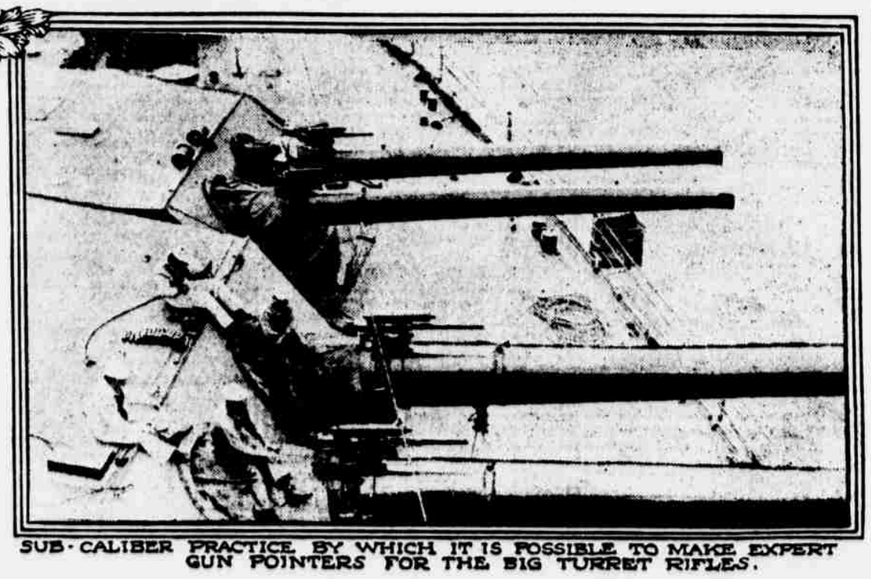
THE BLUE JACKET MAKES A BULLY SOLDIER. HIS SHAM BATTLES ARE FOUGHT AS EARNESTLY AS A REAL CONFLICT



SUB-CALIBER PRACTICE BY WHICH IT IS POSSIBLE TO MAKE EXPERT GUN POINTERS FOR THE BIG TURRET RIFLES.