

Logistics

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PREPARATIONS FOR SUPPLY OF FLEET OPERATING IN THE  
WEST INDIES.

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U. S. Naval War College, Newport, R. I.

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PREPARATIONS FOR SUPPLY OF FLEET OPERATING IN THE  
WEST INDIES

By Paymaster John S. Higgins, U.S.N.

Considerable progress has been made in the inspection of American vessels which could be used for scouts, fuel, ammunition, repair and hospital ships, and plans are under way for the proper conversion of these vessels for the character of duty which they might be designated or called upon to perform. At the present time inspections of such vessels seem to be at a standstill, but for what reasons, I do not know.

To supply a fleet operating in the West Indies, composed of 8 Delawares, 24 Connecticuts, 8 merchant ships, (probably scouts), 3 Oregons, 4 Monitors, 50 Destroyers, 30 submarines and 60 Auxiliaries, I do not believe that at this time you care for the absolute figures, as so many wet and dry provisions or so many tons of coal, and so forth, although all of these figures have been carefully worked out, and are available if needed.

It is well known that the fleet today is always as fully provisioned and stored as circumstances will permit, and it has little more to do than to add a few extra items incident to a cruise and separation for a time from its base of supply. In this connection, I have to quote from Pay Inspector McGowan's Report on the cruise around the world, in which he states, "With reference to what stores and how much of each should be carried on board supply ships, I think the same general idea should be followed as I have suggested for battleships, namely, that a great deal of care should be exercised to maintain the symmetry of supplies to the end that all available supplies be on hand in such manner as to enable the fleet to remain at sea and away from its base just as many days as possible--a shortage in any one necessary article fixing, of course, the limit of such sea service."

In this same report it is further stated, "The maximum economy being obtainable only by treating the storeship simply as a mode of expeditious transfer between the shore and the fleet, each fighting ship to keep its stowage spaces symmetrically full at all times and



depending upon the storeship to replenish them only and as soon as supplies of any kind have been used in sufficient quantity to afford space for further stowage."

Another statement, worthy of note is, "With the control by one officer of all stowage space on board ship, there ought to be a considerable gain in total stowage capacity and a resulting gain in total time which all necessary supplies will last; and this gain, which is necessarily based on physical facts and economy of space, should not be in any instance allowed to be offset by any undue dependence on storeships of any kind, for experience has amply proved that even with good weather conditions no two vessels can always be counted upon to remain in company constantly, unless, of course, they are at anchor."

In line with the above remarks, it appears that the ships of the fleet are in the habit of being complete in themselves, and symmetrically stocked in all directions, and such being the fact, little if any, time should be required to complete the lists of articles necessary for an extended cruise; and therefore, time as well as stores would be available for completing auxiliaries which must be placed in readiness for attendance upon the fleet.

Provisions for the fleet mentioned above could be secured at the different Yards as fast, if not faster, than the Yard and ships could handle them. In 10 days or 2 weeks, provisions for the ships listed could be assembled at the different Yards. Fresh frozen meats could be had in large quantities, such as 5,000,000 pounds, deliveries to commence 10 days after order, and delivered as fast as they could be taken care of. The fresh meat capacity of the CULGOA would be 650,000 pounds, and the CELTIC, with the forward part of the ship refrigerated, would have a capacity of 1,250,000 pounds of fresh meat. With the 20 days' fresh provisions on board the fleet upon leaving the home yard, it will be seen that these two refrigerator ships would be well able to take care of the fleet until two or three other refrigerator ships could be secured from abroad. It is known from the files that such ships could be secured and delivered within 3 weeks to a month from



the time order was given. The chances of picking up a vessel at the River Platte already loaded would be very favorable.

Clothing to supply the fleet mentioned could be had almost immediately, and the supply necessary for the proper maintenance of the fleet and auxiliaries could be manufactured and delivered as requisitions for the same were received.

#### COAL SUPPLY.

Practically all of the coal loaded into naval and chartered colliers for the use of the fleet would be loaded at Norfolk and Baltimore, Norfolk being the main port of supply. The Curtis Bay pier at Baltimore is the tidewater terminal of the Baltimore and Ohio's coal-carrying line, supplying in part the Big Vein George's Creek Navy Standard coal. This pier could load easily two 6,000 ton vessels every twenty-four hours.

It was not long ago when the President of one of the large Navy coal suppliers on this road assured the Department that, if necessary, he was willing to place the entire output of his mines, supplying Navy Standard coal, at the call of the Department. This tonnage would be approximately 200,000 tons a month. This company also has loading facilities at Port Richmond, Philadelphia, where one 6,000 ton collier could be cared for daily, if necessary. One of the largest of the Navy's suppliers in the Pocahontas field, having an annual output of 3-1/2 million tons of Navy Standard coal assured the Department that all of his operations, which we know comprise the largest and best of the Pocahontas field, would be turned over for the use of the Navy if it should be considered necessary. This coal would be loaded over the Lambert's Point pier at Hampton Roads. The Virginian Railroad's tidewater pier is at Sewall's Point, Va., and at least 150,000 or 200,000 tons a month could be obtained at these piers. The Chesapeake & Ohio Railroad Company's pier at Newport News has facilities for loading 300,000 to 400,000 tons a month. Most of this coal is from the Department's acceptable coal suppliers who have been tried



through years of experience. There is no question, so far as the coal supply is concerned, but that there would be an ample supply in case of necessity, particularly during the Spring, Summer and Fall months, when transportation is easy. As long as the present system of supplying the Navy with coal is in force, we need never have cause for anxiety, insofar as our coal supply is concerned.

The subject of coal supply for the Navy is a matter requiring undivided attention, and if it would not be considered out of place, at the end of this paper I would like to give you, in as few words as possible, the manner and conditions under which coal for the Navy is obtained. When occasions have arisen which seemed likely to call forth a test of our resources on fuel supply, it has caused a feeling of inexpressible satisfaction to know that the Navy had no cause for any grave concern, either as to the quality or quantity of its coal, and I trust that the present method of purchase and supply, from acceptable suppliers, which has been brought about by such thorough study and tested successfully through varied experiences, will undergo no change.

With the possibility of war confronting us, the principal coal suppliers of the Navy would be confidentially advised, in order that their car equipment would be kept between the mines and tidewater, instead of such equipment going to the westward, toward the Lake region, which is certain to be the case from May to the close of navigation in the early winter. As a matter of precaution, and knowing how vital is the certainty of supply, a sufficient guard would be placed on our four big coaling piers, namely, at Baltimore, Lambert's Point, Sewall's Point and Newport News. The destruction of these piers would be a blow, so severe as to paralyze our entire supply.

For a supply of 200,000 tons of coal a month to the West Indies for the requirements of the ships above mentioned, 6 CYCLOPS, 3 HECTORS and 9 Merchant Colliers of 6,000 tons each, would be able to deliver at points as far distant as Guantanamo, 208,000 tons a month, allowing 10 days steaming for a round trip, 2 days for loading and



7 days for discharge. This whole coal carrying fleet could be ready and loaded to sail, if the necessity required, in 10 days after receiving orders. It will be noted that the problem assigned me calls for a smaller fleet than that noted in Commander McKean's paper on Logistics; the supply of coal given for my paper being estimated as 200,000 tons a month.

#### FUEL OIL SUPPLY.

For 50 oil-burning destroyers, about 6,000,000 gallons per month would be needed. Taking for an average a 1,000,000 gallon tanker, and allowing 14 days for steaming for the round trip from Port Arthur, our great oil terminal, 2 days for loading, 2 days for discharging, and 2 days for overhaul, 1,500,00 gallons would be delivered monthly per vessel, or, four of these vessels could deliver 6,000,000 gallons per month.

It is known that the British Navy is stocking up with oil at the rate of 42,000,000 gallons per year, and in case of war it would be necessary for this Government to prevent such exports of oil in order to reserve all available supply not necessary for our own industries, for naval use. This point is worthy of consideration.

30 Submarines would require 150,000 gallons of fuel oil and 100,000 gallons of gasoline per month, which could be delivered in bulk from Port Arthur in connection with the delivery of oil for the destroyers. Gasoline for the 30 Submarines and power boats of the Fleet would be supplied by means of a regular gasoline tank vessel, and it would probably be necessary to hold her at the base of supply unless the parent ship, as called for in Commander McKean's paper, were improvised for storing the quantity of gasoline required.

It is well understood that the American-Hawaiian Steam Ship Company's fleet of 25 to 30 ten-thousand-ton steamers is the principal source from which we could draw American vessels for auxiliary purposes, and it must not be forgotten that this fleet (23 now in operation



and the balance building) is divided--some on the West Coast and the others on the East Coast. All of these vessels are engaged in handling business of large industries and it is doubtful if any of them could be obtained except by impressing them into service. While there are some splendid vessels on our coast that could be taken by the Government and which would render efficient service, our success in any large undertaking would depend almost entirely upon our ability to obtain foreign tonnage.

Too much dependence is sometimes placed on the tonnage that could be taken from our coastwise fleet for such an undertaking. While this country enjoys a fair sized fleet in its coastwise trade, it must not be overlooked that this fleet is of vital importance to the very factories and industries that would perform such an important part in a large war. The great manufacturing plants of New England which would be working overtime would be crippled for the lack of coal, and at a time when transportation would be vital to a successful campaign. Therefore, we must not overlook the fact that these very ships engaged in their peaceful pursuits will be rendering valuable services to the fighting forces, both ashore and afloat, by transporting to the great industries fuel and the raw products for manufacturing the many necessities brought on by war.

To procure colliers for the transportation of coal, and other auxiliaries, but particularly colliers and tank vessels, we should first make every effort to secure foreign tonnage, leaving our busily-engaged merchant marine, the main bulk of which is engaged in coastwise trade, as our reserve to fall back upon in case disaster befell our fleet of foreign vessels which had been taken previous to the outbreak of war. With an operation in the West Indies, it is possible that our troubles would also then begin in the Pacific, necessitating the movement of our fleet into those waters at the earliest time practicable. This would necessitate a fleet of at least 200 coal carrying vessels, which would not be had under the American flag without bringing to a complete stand-still the greater percentage of our industries



bordering on our coastlines, as well as large inland industries dependent upon the coast shipping. We should therefore now turn our attention to a certain number of vessels under the foreign flag and obtain information relative to their construction, and determine for what purpose they might be most adaptable. This along the lines of the inspection program which has been devised for American vessels alone. Although our navigation laws have been so amended that certain vessels built during the past 5 years might, under certain conditions, when owned by American citizens, transfer their flag to American registry, few, if any, have seen fit to do so, and until our merchant marine has reached such proportions that we can depend upon it as auxiliaries for the fleet, we must, when war confronts us, spend our efforts toward securing immediately an amount of foreign tonnage which will certainly support our fleet as long and as efficiently as may be necessary.

Logically, as we are forced to seek foreign tonnage in the shape of colliers, unless we wish to cripple our industries, to accomplish this there must be wide discretion and authority to act in advance of a declaration of war. While American tonnage could be purchased or chartered without doubt without the display of cash, it is quite different when the purchase of foreign tonnage from foreign owners is taken up. Congress may appropriate one hundred millions of dollars to do this, but it would likely be too late to accomplish any good results, because that act in itself would practically amount to a declaration of war and there would be little time in which to purchase foreign vessels before International Law made such impossible, or difficult in the extreme.

At most any time there can be found in ports on the Atlantic Coast from 75 to 100 foreign vessels suitable for colliers, but without means of purchasing these vessels quickly they are of little value. If the President of the United States were to be empowered by Congress to expend under certain restrictions a sum of \$10,000,000 to \$15,000,000 when the safety of the country was at a stake, it can



readily be seen that certain things could be done which would not otherwise be possible and tonnage could be procured privately in many ways and be available before war could be declared.

Moreover the fact that the President had such authority, being known to foreign governments, and they being not in a position to know when he might exercise such authority, would add great strength to our natural position in case of dispute or difference, hold up the hands of our diplomatic officers, and should their negotiations fail, vastly increase the facility and effectness of our first naval mobilization.

At one time arrangements were ready to be effected, whereby a fleet of 53 foreign vessels, aggregating about 500,000 tons deadweight capacity, suitable for the coal-carrying trade, would be transferred to the ownership of the Government within 48 hours, should such a course have been considered necessary. The cost of this fleet would have been about twelve million dollars, and the last of the vessels named would have been ready to load in about two months' time. This transaction was to have been covered by an option to the Government, given by the owners of the vessels at \$1.00 per ton for every vessel not purchased. By this means, the American Flag would have been hoisted on these vessels, then plying the Atlantic, as fast as they reached port. This proposition, under certain conditions, might be a most advantageous one to accept, notwithstanding the fact that it would be difficult to obtain a reliable estimate of each steamer's worth without undue publicity, and without subjecting the Government to the chance of a considerable financial loss in case of purchase. If, however, a systematic inspection and valuation of available foreign vessels periodically visiting our ports were made in advance, and if the President were at all times vested with the financial power, to be exercised in case of need, to enter into such contracts and complete such purchases as mentioned, the highest effectiveness of the fleet would be immeasurably more to be depended upon than under present conditions.



SUMMARY

Length of time necessary to assemble provisions and stores at Navy Yards, 10 days.

Time necessary for delivery of 50 colliers, two months.

The present organization of the fleet in commission would require not 72 hours, to fill up with all necessary items of provisions and supplies.

In the purchase of vessels, I anticipate some conflict between the Army and Navy and the crippling of coast-wise trade.

The subject is large enough to be handled by a combined Army and Navy Board, working in conjunction with a Board of Inspection and the Division of Operations of the Department. I know of no step that has been taken in this connection, and it is time that it became a matter of organization.

In the event of our Atlantic Coast being harassed, it would be necessary to effect the delivery of our coal and supplies at Pensacola, Mobile and New Orleans. The water-front facilities for discharging coal and stores, as well as the railroad facilities should be carefully examined and reported upon by some Board.