# COAST GUARD HEADQUARTERS

DATE 8 August, 1933.

#### MEMORANDUM FOR-

The Secretary of the Treasury (via Assistant Secretary Gibbons).

Subject: Proposed new construction and reconditioning projects for the Coast Guard.

Inclosure: Memorandum relative to the projects listed on the project sheets submitted to the Federal Employment Stabilization Board.

- 1. There is transmitted herewith a memorandum relative to the proposed new construction and reconditioning projects for the Coast Guard presented to the Federal Employment Stabilization Board under date of 25 May 1933.
- 2. The various items listed on the project sheet are referred to in sequence and detailed reasons of the need for the various projects are indicated.

H. G. HAMLET, Commandant.

August 8, 1933.

Approved and forwarded.

Assistant Secretary of the Treasury.



### TREASURY DEPARTMENT



#### WASHINGTON

8 August, 1933.

Hon. H. L. Ickes, Federal Emergency Administrator of Public Works, Washington, D. C.

Sir:

I am inclosing herewith a memorandum of the Commandant, United States Coast Guard, explaining in detail the need of the Coast Guard for the various construction and reconditioning projects recommended for emergency public works.

These projects are approved, and are recommended for your favorable consideration.

Respectfully,

Inclosure.

Secretary of the Treasury.

Hon. H. L. Ickes, Federal Emergency Administrator of Public Works, Washington, D. C.

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These projects are approved, and are recommended for your favorable consideration.

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I am inclosing herewith a memorandum of the Commandant, United States Coast Guard, explaining in detail the need of the Coast Guard for the various construction and reconditioning projects recommended for emergency public works.

These projects are approved, and are recommended for your favorable consideration.

Respectfully,

Inclosure.

Secretary of the Treasury.

- 1. Because of the importance to the federal government of the numerous duties performed by the Coast Guard, it is necessary that the vessels and equipment provided be maintained in adequate strength and condition for the services it is required to undertake.
- 2. During the past nine years the emergency nature of the work done in combating smuggling added to the severe requirements of the regular duty performed has resulted in the undue deterioration of both vessels and stations. This deterioration has been increased by the reduction in appropriations during the past two years until the point has been reached where serious consideration should be given to a plan for replacements and repair which will remedy the situation which now confronts the service.
- 3. The items listed on the sheets "Construction Projects Recommended for Emergency Public Works" and "Reconditioning Recommended for Emergency Public Works" (National Industrial Recovery Act) are in accordance with such a plan. They are based on a careful study of the construction and reconditioning needed to bring the operations of the service to a high degree of efficiency.
- 4. The completion of these projects will not increase the annual operating costs of the service as a whole.
- 5. In order to establish the need of the Coast Guard for the items of construction listed on the project sheets, copies of which are appended hereto (inclosure 1), there are presented herein:
  - (a) A brief account of the purposes and duties of the U. S. Coast Guard.
  - (b) A forecast of the expected effect of the repeal of the 18th Amendment on these duties.
  - (c) Data relative to the vessels and equipment at present available for service.
  - (d) A statement in detail of the need for the various items listed on the project sheets.
  - (e) Consideration of the effects on employment of the projects submitted.

### 6. DUTIES -

(a) The Coast Guard is a general maritime law enforcement and humanitarian agency of the government operating upon the high seas and navigable waters of the United States and its insular

possessions, and along the coasts thereof. The service performs three main duties. These are (1) the enforcement of the federal law on the seas wherever the jurisdiction of the United States extends; (2) saving life and property and assisting vessels in distress; (3) acting as a part of the Navy in time of war.

- (b) The duties and responsibilities of the Coast Guard are a result of laws, executive orders, regulations, customs, practices and traditions extending over a period of 143 years. The two peace time duties of the service are performed concurrently, and each has served to strengthen the other. Thus by the law of the sea, which knows no exception, on receiving a call for assistance, the Coast Guard drops everything and proceeds to the rescue. On completion of this emergency duty the service again takes up its interrupted routine. The policing of the seas has always been the function of a military force, and in line with this principle the Coast Guard was organized on a military basis and has so continued.
- (c) In the performance of its duties the Coast Guard does work for every executive department of the government. The following tabulation, while not complete, indicates the variety of duties performed by the service:

### LAW ENFORCEMENT

- (1) (a) Prevention of smuggling.
  - (b) Enforcement of the customs laws.
- (2) (a) Enforcement of navigation and other laws governing merchant vessels and motor boats.
  - (b) Enforcement of rules and regulations governing anchorage of vessels (Captains of the Port).
  - (c) Enforcement of law to provide for safety of life on navigable waters during regattas or marine parades.
  - (d) Examining merchant seamen for certificates as lifeboatmen.
  - (e) Enforcement of the law relative to oil pollution.
- (3) Enforcement of laws relating to immigration, quarantine and neutrality.
- (4) (a) Protection of game and the seal and otter fisheries in Alaska.
  - (b) Enforcement of rules and regulations for protection of the fisheries in Alaska.
  - (c) Enforcement of international conventions relative to fisheries on the high seas.
  - (d) Enforcement of the sponge fishing law.
  - (e) Protection of bird reservations established by Executive Order.
- (5) (a) Enforcement of law and the administration of oaths generally in Alaska.
  - (b) Enforcement of miscellaneous laws for other branches of the government.

(6) Suppression of mutinies on merchant vessels.

### LIFE-SAVING AND ASSISTANCE

- (1) (a) Saving life and property.
  - (b) Assistance to vessels in distress.
  - (c) Flood relief on the western rivers.
- (2) Destruction and removal of wrecks, derelicts or other dangers to navigation.
- (3) International service of ice observation and ice patrol in the North Atlantic Ocean.
- (4) Extending medical and surgical aid to United States vessels engaged in deep sea fishing.
- (5) (a) Assisting other branches of the government in the performance of duties assigned.
  - (b) Transporting government agents.
  - (c) Caring for and transporting shipwrecked and destitute persons in Alaska and elsewhere.
  - (d) Carrying the United States mails.
- (6) Collecting statistics regarding loss of life and property on vessels.

#### MILITARY DUTIES

"The Coast Guard - - shall operate under the Treasury Department in time of peace and operate as a part of the Navy, subject to the orders of the Secretary of the Navy, in time of war or when the President shall so direct - - ". Act of Jan. 28, 1915.



#### TREASURY DEPARTMENT

### UNITED STATES COAST GUARD WASHINGTON

8 August 1933

#### MEMORANDUM

From:

Commandant.

To:

The Secretary of the Treasury.

(Via Assistant Secretary Gibbons)

Subject:

Proposed new construction and reconditioning projects for the Coast Guard.

- Inclosures: (1) Construction Projects Recommended for Emergency Public Works (National Industrial Recovery Act).
  - (2) Duties and Functions of the U. S. Coast Guard, with Summary of Operations, Fiscal Years 1918 - 1932.
  - (3) Building Program. Cruising Cutters. U. S. Coast Guard (Replacement Program).
  - (4) Location of Vessels (Proposed).
  - (5) Chart, U. S. Department of Agriculture, Weather Bureau. Tracks of tropical cyclones of hurricane intensity of the North Atlantic Ocean, 1887 - 1929.
  - (6) Communication Construction Projects Detailed.
  - (7) Reconditioning Recommended for Emergency Public Works (National Industrial Recovery Act), including Communication Reconditioning Projects.

In order to establish the need of the Coast Guard for the items of construction listed on the sheets "Construction Projects Recommended for Emergency Public Works (National Industrial Recovery Act)", submitted to the Federal Employment Stabilization Board under date of 25 May, 1933, copies of which are appended hereto (inclosure 1) there are presented herein: (1) A brief account of the duties performed by the Coast Guard; (2) data relative to the vessels, and their equipment, at present available for the performance of these duties; (3) a detailed statement indicating the need for the various items listed on

the several project sheets; (4) a forecast of the effect of the repeal of the Eighteenth Amendment on the duties performed by the service; and (5) consideration of the effect on employment of the projects submitted for approval.

#### 1. DUTIES -

The Coast Guard performs three main duties. These are the enforcement of law on the navigable waters of the United States and its insular possessions; saving life and assisting vessels in distress; and acting as a part of the Navy in time of war.

The two peace time duties of the Coast Guard are performed concurrently, and each has served to strengthen the service in the performance of its function in time of war. The policing of the seas, whether in war or in peace, has always been the function of a military force, and in line with this principle the Coast Guard is the federal police power on the seas wherever the jurisdiction of the United states extends.

There are attached hereto (inclosure 2) a list of the principal duties with which the Coast Guard is charged, and a set of charts showing the results of the operations of the service during the past 15 years.

#### 2. VESSELS, AND THEIR EQUIPMENT AT PRESENT AVAILABLE.

For the performance of its duties in connection with the enforcement of maritime law and saving life and assisting vessels in distress, the Coast Guard fleet consists of 24 cruising cutters for offshore work, 12 smaller cutters for coastwise assistance work, where extended cruises offshore are not involved, and one special type for Arctic service (NORTHLAND). In addition to this main class of vessels, there are eight destroyers and 54 offshore boats acquired primarily for antismuggling operations, but capable of performing offshore duty, and a flotilla of upward of 200 inshore picket boats built for coast line preventive service and operated from 12 shore bases and from certain of the 279 Coast Guard (Life Saving) stations that form a cordon along the coast line of the country. There are also 32 harbor craft and a small number of vessels and boats engaged on special duties.

It is a significant fact that while the fleet of vessels engaged

in anti-smuggling operations was largely increased, due to the influx of smuggling craft along the coast incident to the passage of the 18th amendment, there was no corresponding increase in vessels devoted to the traditional work of the service. Thus, in 1924 there were in commission 34 cruising cutters, and as long ago as 1908 there were in commission or under construction 33 vessels of this type.

There has been, therefore, in the past 25 years a net increase of but four of those ships which are the backbone of the service in its operations offshore. This has resulted in the continuance in service of many vessels which have outlived their normal lives, and which are not only expensive to repair and operate, but which are unable to perform the duties which the increased volume of shipping demands. Nine of these vessels are from 24 to 42 years old, and none of the nine is worth extensive repairs. The life of a vessel engaged in the arduous duty that these vessels perform is about 25 years, and even if they could be made seaworthy, they are obsolete in respect to speed since none can make over 12 knots.

Taking 25 years as the useful life of a cruising cutter, the need of a continuing program of replacements is apparent. Such a detailed program, covering the replacements necessary to keep the fleet of cruising cutters in satisfactory operating condition has been prepared and is attached hereto (inclosure 3). It will be seen from this list that there exists at present an urgent need for the replacement of six offshore cruising cutters and of three inshore cruising cutters. These nine vessels comprise six of Priority No. 1 and three of Priority No. 3 on the project sheet for vessels and boats submitted to the board. These items will be discussed in detail in the paragraph following:

# 3. STATEMENT RELATIVE TO THE NEED FOR THE VARIOUS ITEMS LISTED ON THE PROJECT SHEETS -

#### VESSELS AND BOATS

### (a) Priority No. 1. Nine cruising cutters about 300 feet long.

Of these nine cutters six, as said before, are intended to replace obsolete cutters for offshore work. The cutters to be replaced, their dates of building, age and present station are as follows:

Vessel	Year Built	Age	Station
GRESHAM	1897	36	Mobile, Alabama.
SEMINOLE	1900	33	Sault Ste. Marie, Mich.
TUSCARORA	1902	31	St. Petersburg, Fla.
SENECA	1908	25	San Juan, P. R.
SNOHOMISH	1908	25	Port Angeles, Wash.
YAMACRAW	1909	24	Savannah, Georgia.

All of these vessels were built before the World War, and saw hard service either in European waters or in the coastal patrol during that war. The GRESHAM, in fact, was built the year preceding the Spanish American War. These vessels are slow (none can make over 12 knots), all are coal burning except the GRESHAM, and of small cruising radius, uneconomical in operation, and are generally unsuitable for present day service. In addition, the SEMINOLE, TUSCARORA and SNOHOMISH are too small for the work they are required to perform, and verge on being unseaworthy. The repairs necessary to place them in even fair operating condition would average over \$100,000. each, and they are not worth the expenditure of this amount. These vessels require an amount of repair money to keep them in operation that depletes the limited amount of repair funds available, with the result that the newer vessels can be allotted but limited funds. Consequently, these vessels are deteriorating at a more rapid rate than should be permitted.

It will be apparent from the foregoing that replacements for these six vessels should be laid down immediately. With due regard to the development of shipbuilding design and the needs of the service, these replacement vessels should be cutters of about 2000 tons displacement and 20 knots speed. Experience has demonstrated the desirability of increased speed for cruising cutters, and a speed of 20 knots is in agreement with the limitation of armament treaty wherein certain technical characteristics which cruising cutters can possess are outlined. It is proposed to make these new cutters of simple but sturdy design with the facilities and equipment aboard which development of Coast Guard duties demonstrates will be necessary for future operations. For instance, it is proposed to provide salvage gear for airplanes as well as for vessels and, if practicable, an airplane will be carried aboard for searching and observation purposes under favorable conditions. It is increasingly evident that certain cutters will require equipment of novel design to undertake rescue and assistance work for aircraft flying the ocean traffic lanes. It is anticipated the availibility of an airplane with each of these new cruising cutters may reduce somewhat the cruising of the vessel itself so that minor economies may result. Primarily, however, the increase in size of the proposed cutters, of from 250 feet long, for the last ten cutters built, to about 300 feet long, is for the purpose of obtaining an increase in speed to 20 knots.

The cruising cutters contemplated by the Coast Guard will be used for the most important work of the service during at least the next twenty years. These ships should not only meet the minimum requirements of the service at present, but they should also embody in their design such features as the expected progress of commercial transportation over the seas by ship and airplane may suggest.

Recent experience of the service in the design of new vessels has pointedly demonstrated the need for keeping its future requirements in pace with the trend toward increased speed in commercial transportation. The permanent duties of the Coast Guard today show

the need for seaworthy vessels of 20 knots speed each equipped with an airplane. The value to the service of such vessels in future years will increase to a marked degree. The estimated cost of a vessel of this general type is \$1,500,000.

The two essential needs of the Coast Guard in vessels designed for saving life and offshore assistance and patrol work are sea-worthiness and speed.

Increasing demands upon the resources of the service within recent years, due largely to improved methods of communication, resulting from the development of radio, have emphasized these needs. A few minutes gained in arriving at the scene of a disaster may measure the difference between success and failure in an effort to save life.

The radius of operations of the vessels of the service is constantly increasing. It is not unusual to receive calls for assistance from large vessels several hundred miles at sea, and occasionally from vessels as far as 1,000 miles offshore. This type of work calls for larger vessels, for the responding ship must be able to maintain a sustained speed even under adverse weather conditions, and after assuring the safety of the personnel may have to tow the ship several hundred miles to port through winter gales. For this type of work seaworthiness is the prime essential.

Due to the great increase in air traffic the problem of assistance to aircraft is one of great importance. A plane forced down at sea is comparatively helpless, and unless it is reached promptly loss of life may result. In rescue work involving this type of craft speed is the governing requirement, but stability and space for salvaged material are also important.

Both seaworthiness and speed are intimately connected with size and displacement. While the utmost attainable speed and the greatest possible seaworthiness are the characteristics desired in the operation of the Coast Guard, practical considerations limit the attainment of each of these qualities. The limitations are set by the technical aspects of the problem, both from a shipbuilding and an operations viewpoint. A further restriction is the London Naval Treaty of 1930 which provides that combatant vessels greater than 2000 tons standard displacement or of a speed greater than 20 knots, are to be classed as effective tonnage subject to the limitations imposed by the terms of the treaty. Were these limitations not set it might be said that the general increase in speed of passenger vessels to a figure above 20 knots, and the increase in the speed of cargo vessels to a figure around 15 knots would call for a speed on the part of vessels built for assistance work greater than the 20 knots allowed under the terms of the treaty.

The design of a 20 knot vessel of less than 2000 tons standard displacement involves a number of technical problems to the ship designer that can only be solved by the installation of much higher

powers, with a consequent increase in operating costs, or a fining of the hull design at the expense of seaworthiness and durability.

To illustrate: The Coast Guard has developed over many years and is operating for offshore assistance and patrol work a type of vessel of the following characteristics: length 250 feet, shaft horse power 3,200, cruising radius 8,000 miles, standard displacement about 1,546 tons, speed 16.5 knots. This type vessel has been found highly satisfactory in seaworthiness and is well fitted for the work required, except for the quality of speed. To increase the speed to 20 knots would necessitate installing engines and boilers capable of developing about 10,500 shaft horse power. The cruising radius would have to be reduced to 4,000 miles on account of lessened operating efficiency and decreased bunker capacity. The cost of such a vessel might be approximately \$1,300,000. as compared with \$900,000. for the 16.5 knot ship. If it were attempted to design a vessel of equal seaworthiness but of lighter construction to reduce horse power required, the cost of high tensile steel and special construction, would more than compensate for the smaller power plant required. On the other hand, a 20 knot vessel of slightly over 300 feet can be built, of somewhat better seagoing qualities than the 250-foot type, with a power plant of only 6,000 horse power, and a cruising radius of 8,000 miles. The cost of such a vessel would not exceed \$1,500,000. adopting materials and fabrication of the normal character in the interest of economical design. In other words, the power required to drive a vessel 250 feet long at 20 knots is almost twice that of a 300-foot vessel and the operating efficiency of the shorter vessel is correspondingly less. While the 300-foot vessel would cost initially more than the 250-foot vessel, the increased operating cost of the latter type would make it the more expensive in the long run.

Without going further into the technical considerations that governed the decisions, it may be stated that a careful study of the entire problem, both from a design and an operating standpoint, has indicated the desirability and reasonableness of planning ships of 2,000 tons standard displacement and 20 knots sustained speed for the class of ships destined for offshore cruising duty. The need for larger cutters to carry an airplane is daily becoming more apparent. In its Alaskan work and patrol of the Bering Sea, in the patrol of the North Atlantic for protection of shipping against icebergs, in searching for derelicts or floating craft, including disabled airplanes, the value of a plane as part of the equipment of a cutter, both from the standpoint of efficiency and economy is readily apparent.

A further consideration affecting the type of vessel to be built, although by no means the determining factor, is the fact that the Coast Guard by law operates as a part of the Navy in time of war. During the World War the cutters of the Coast Guard were used extensively by the Navy for patrol and convoy work and they were found to be very suitable for these important tasks. Their

one handicap was insufficient speed. The need of destroyers was very acute and many of them could have been released from convoy duty if 20-knot vessels of the cutter type had been available. The increase in the average speed of merchant vessels necessitates a corresponding increase in speed of vessels that, in case of war, will be used in convoy duty. The proposed type of cutter is along the lines suggested by the Chief of Naval Operations in a conference held with the Coast Guard in March 1932, and is eminently suited to the needs of the Coast Guard in time of peace and the needs of the Navy in time of war.

The cost of operating these ships will be no higher than that of continuing in service vessels which have passed their normal useful life, and which are no longer capable of filling the demands made upon the service.

Three additional cutters of the same type are included in this priority to provide vessels for service at Unalaska, Alaska; San Pedro, California; and the Canal Zone. These stations are of primary importance for service work but there are no vessels of the characteristics necessary for the work required available for the duty contemplated.

A careful study of the requirements of the service for vessels of all types has shown the need for 28 offshore cruising cutters. There are at present in commission of this type 14 electric drive vessels suitable for the duty performed. There are, in addition, 10 reciprocating engine cutters which are covering the less important stations where offshore cruising is involved, but which are unsuitable for the purpose by reason of age, obsolescence and excessive cost of operation. Counting all ten of these vessels in the class, the total number available is 24, 4 short of present requirements. Inclosure (4) shows the proposed location of the 28 offshore cruising cutters and of the destroyers and offshore patrol boats at present in commission. The three additional 300-foot cruising cutters listed are intended to fill the three most important of these stations, as follows:

(1) UNALASKA, ALASKA. During the summer of each year the Coast Guard sends to Alaska the Bering Sea Patrol Force consisting of six vessels for the performance of numerous and highly important law enforcement and humanitarian duties required in the administration of the territory of Alaska. The service has performed these duties since the purchase of Alaska in 1867. As much of Alaska is ice bound in the winter season, it has been considered sufficient, until within recent years, for the patrol to be withdrawn when the last commercial vessel has left Bering Sea. More lately, however, there has been an insistent demand among the shipping interests on the Pacific and from the territorial officials of Alaska for the retention of a vessel at Unalaska during the winter. This is partly due to the fact that Unalaska is in the great circle route traversed by the passenger and cargo vessels engaged in the transpacific trade, and partly to afford

assistance to the isolated towns and villages of the territory, which can now be reached in the winter either by vessels or by plane. The Coast Guard recognizes the validity of these demands but is unable to meet them except by withdrawing vessels from important west coast stations during the severe winter season on that coast. The demands for a cutter have become so insistent within the past year that plans are being made to withdraw a vessel from another station on the west coast for station at Unalaska during the season not covered by the regular Bering Sea Patrol. This must be done without regard for the requirements of the regular duties performed on the west coast.

The duty that will be required of the vessel assigned to Unalaska will be the most severe of any performed by the Coast Guard and it is necessary to detail one of the latest type of electric drive cutters of which there are only five on the entire west coast.

Because of the importance of this station, the vessel provided for the duty should be of greater speed and cruising radius than any the service now possesses. It should be provided with airplane facilities in order that villages isolated by ice may be reached in case of emergency. For these reasons, it is proposed that one of the three additional vessels carried in this priority be allowed for prospective station at Unalaska.

- (2) SAN PEDRO, CALIFORNIA. San Pedro, which is the port of Los Angeles, is the fourth largest port of the United States in the volume of exports. The growth of Los Angeles as a shipping centre has been very great within recent years. The California coast, in the vicinity of San Pedro is one of the most dangerous localities on the west coast, from a navigational standpoint, and it has for many years been apparent that a first class cutter should be stationed there. It has been impossible to do this because of the lack of ships and for no other reason. The need here is for a ship of the highest seagoing qualities, and of the maximum obtainable speed. Due to the increasing volume of air traffic to the islands offshore and along the thickly populated coast it is considered important that this vessel carry an airplane. It is, therefore, proposed that the second of the three additional vessels carried in this priority be allowed for station at San Pedro, California.
- (3) CANAL ZONE. The need for a vessel stationed at the Canal Zone is based primarily on the great volume of shipping converging in the canal from both the Atlantic and Pacific oceans. The number of vessels transiting the canal annually is over 5,000, of a tonnage of nearly 20,000,000. The Caribbean is yearly swept by severe hurricanes which frequently leave disabled vessels in their track and a vessel located at the Atlantic entrance to the canal would be in a favorable position to respond to calls for assistance along the southern trade routes crossing the Caribbean Sea. In addition, to this requirement the rapid extension of air routes to South America indicates the need for more adequate safeguards to

this important traffic. The need here is for speed and for a plane to provide quick response to calls which may originate anywhere within a very large radius.

There is attached hereto (inclosure 5) a chart prepared by the U.S. Weather Bureau, showing the tracks of tropical cyclones of hurricane intensity for the period 1887-1929, inclusive. This chart shows the favorable location of Colon, C.Z., as a base for assistance in case of the passage of hurricanes.

# (b) Priority No. 2. One cruising cutter, about 165 feet long for Lake Erie (ESCANABA type).

This vessel has been authorized but no funds have been allotted for its construction. It is intended for service on Lake Erie and will provide the same facilities on that station as have been afforded Lake Michigan by the construction of the ESCANABA. It is intended to duplicate the design of the ESCANABA for this vessel. Experience during the past winter has shown that this is an efficient and useful type of vessel for the duty.

# (c) Priority No. 3. Four cruising cutters about 165 feet long (ESCANABA type).

Of these four cutters, three are intended as replacements for three obsolete vessels for coastwise work; those to be replaced, their dates of building, age and present station are as follows:

Vessel	Year Built	Age	Station			
APACHE	1891	42	Baltimore, Maryland.			
PAMLICO	1907	26	Newbern, N. C.			
ACUSHNET	1908	25	Woods Hole, Mass.			

The same general remarks apply to these vessels as to the six referred to in priority No. 1. All are 25 years old or more; the APACHE, 42 years old, is the oldest armed vessel in the government service; all are coal burners, with a speed of less than 12 knots; and all are wasteful to operate and uneconomical in upkeep. The replacements are intended for use in the more important stations on the Atlantic, Gulf and Pacific coasts, and it is intended — if these vessels are allowed — to replace the particular vessels listed above with others more suitable for the work, stationing the three replacement vessels at the three most important stations on the coast for this type of vessel.

The additional cutter of this type is intended for station in or near New York so that it will be available for inshore duty on Long Island Sound and in addition available for ice breaking in the Hudson River. It is now necessary to call the ACUSHNET from Woods Hole, Mass., to break ice in the Hudson and, as in severe winters the greater part of the ACUSHNET'S time is devoted to breaking ice

In Nantucket and Vineyard Sounds and Buzzard's Bay, this vessel will be unable to perform the additional work required. It is important that this additional vessel be provided for the purpose shown.

## (d) Priority No. 4. Nine 165-foot patrol boats to replace nine destroyers.

The nine patrol boats listed in this priority are intended as replacements for a similar number of destroyers which, under the terms of the London Naval Treaty will have to be scrapped by 31 December, 1936. These destroyers, with dates of building and age are as follows:

Vessel	Year Built	Age	
GEORGE E. BADGER	1920	13	
HERNDON	1920	13	
HUNT	1920	13	
SEMMES	1920	13	
ABEL P. UPSHUR	1920	13	
WELBORN C. WOOD	1920	13	
WAINWRIGHT	1916	17	
WILKES	1916	17	
SHAW	1917	16	(Recently placed out
			of commission due to lack of funds).

The replacement of these nine Coast Guard destroyers is a matter which requires serious consideration at an early date. The London Naval Treaty of 1930 limits the destroyer tonnage of the United States and these particular vessels will have to be disposed of before 31 December, 1936. The type of replacement proposed — the 165-ft. Diesel driven patrol boat — is a proven type. Nine of these boats are in commission at present and actual experience has shown that they will accomplish to a reasonable degree the duties now performed by the destroyers. While they do not possess the speed inherent in the destroyers, they are excellent, seaworthy vessels, and their operating costs will be but a fraction of that of the vessels they will replace. The design of this type of patrol boat has been demonstrated to be a success and the duplication of an existing type will make for efficiency in operation and upkeep.

### (e) Priority No. 5. Four harbor craft.

These four vessels are intended as replacements for an equal number of obsolete boarding boats now in service. Those to be replaced, with dates of building, age and station are as follows:

Vessel	Year Built	Age	Station		
HUDSON	1893	40	New	York,	N.Y.
CALUMET	1894	39	11	11	11
GUTHRIE	1895	38	11	11	11
WINNISIMMET	1903	30	Baltimore		, Md.

They are all coal burning, expensive to run, and all are in need of extensive repairs. These vessels are engaged in important duty in connection with customs and boarding, and the importance of this duty justifies the proposed replacements. It is intended to replace these vessels with Diesel driven boats which will require smaller crews and whose operating costs will produce appreciable economy.

## (f) Priority No. 6. Lifeboats and surfboats for cutters and stations.

The lifeboats and surfboats for which replacements are desired comprise the small boat equipment of both the cutters and the shore life-saving stations. These small boats are subject to severe service and the money available is not sufficient to provide normal replacements. As a result there is an actual shortage of lifeboats and many of those continued in service have passed their useful and even safe life. Twenty-four important stations which should be provided with power lifeboats have none. The largest boat at present supplied the life-saving stations is the 36-foot, self-bailing and self-righting power lifeboat. These power lifeboats have not been increased in size since the introduction of gasoline engines during the past 25 years. There is a definite need for a 50-foot boat of this type for replacement of the smaller type at stations called upon to make unusually long runs under difficult weather conditions for rescue work. This project is intended to remedy the situation and also to provide replacements for small boats needed for use aboard ship.

It should perhaps be emphasized in this connection that during the past nine years the efforts of the service have been directed toward the suppression of the vast smuggling operations which have been carried on along all our coasts, that in these efforts the wear and tear on service craft and equipment have been severe, and that in the efforts to combat smuggling it has been necessary to neglect for the period noted the normal upkeep and replacement of equipment designed for the life saving and assistance work of the service. During the past three years drastically reduced appropriations for repairs and rebuilding have resulted in a horizontal deterioration of all service equipment. Thus, the attitude of the appropriations committee last year was that repairs and upkeep were to be placed on a bare maintenance basis with recognition of the fact that ultimately greater costs would be needed to restore the service equipment to normal. This attitude was based on the need for reduction in the budget of the country rather than upon a consideration of correct depreciation allowances as a business principle.

#### COAST GUARD AIR STATIONS, SEAPLANES AND EQUIPMENT

The Coast Guard was authorized by the Act of 29 August 1916 to establish, equip, and maintain a total of ten air stations on

the Atlantic and Pacific coasts, the Gulf of Mexico and the Great Lakes. Under this authority, air stations have been established at Gloucester, Massachusetts; Cape May, New Jersey; and Miami, Florida. These air stations have performed useful work far beyond the expectations held at the time of their construction. With the rapid growth of air traffic and the large increase in number of commercial and private planes, it is apparent that a considerable percentage of the work of the service in the immediate future will involve aircraft operations. It is felt that an increase in the facilities available for this work is urgently needed.

(a) Priority No. 1 (on this sheet). Hangar, station, seaplane and equipment to provide for the replacement of the meagre facilities at present available at Gloucester, Massachusetts.

This air station was built in 1926 when small, experimental types of planes were being used to determine their suitability for Coast Guard work. The decision has been made relative to the type of seaplane best adapted to the needs of the service and the FLB flying boat with a cruising radius of 1000 miles has been adopted as the primary type for station use. The hangar at Gloucester is too small to accommodate this type of ship and its location is such that it is not practicable to erect a larger hangar on this site nor feasible to handle these large seaplanes at the Gloucester Air Station. It is proposed to move the station to a more suitable site (probably Salem, Mass.) and the project provides the necessary funds for the relocation of this very important station.

### (b) Priority No. 2. Replacement seaplanes and equipment.

The Coast Guard has in service at present eleven seaplanes. Of these two are seven years old, two are approaching the completion of their third year and seven are in their second year. Under the severe conditions incident to their duty, the life of a seaplane in the Coast Guard is relatively short (three to five years) and in addition is extremely uncertain. Thus last winter one of the latest types of flying lifeboats, FLB, was damaged to the extent of \$45,000 in performing a single rescue. Major repairs and replacements cannot be undertaken from the limited funds available and it is, therefore, necessary to provide a replacement program to cover the requirements that may be expected to result from the increasing demands upon the aviation service in the immediate future. The amount requested in the estimate is intended for this purpose.

(c) Priority No. 3. Hangar, station, seaplane and equipment, Port Angeles, Washington.

This air station is one of the ten authorized in 1916. The Coast Guard has no planes on the west coast and it is believed important, in view of the demonstrated value of the five FLB type seaplanes during these two years of operation on the east coast, that these facilities

be now extended to the west coast.

The proposed location of this station has been chosen with careful consideration of present conditions and future probable requirements. Port Angeles is strategically located so as to cover, not only the Puget Sound region with its rapidly expanding commerce, but also to guard the Pacific terminus of air lines at present operating into Alaska and those proposed for transpacific service.

# (d) Priority No. 4. Hangar, station, seaplanes and equipment, Biloxi, Mississippi.

This air station will also comprise one of the ten authorized in 1916. The Coast Guard has at present no air station on the Gulf of Mexico. This is an area of great commercial importance and from an air traffic standpoint is one of great future importance. The air routes projected to South and Central America will traverse the Gulf and the rapid expansion of air communication planned by the Pan-American Airway and other commercial companies are indication of the need for protection of the airways that will shortly be in operation in this locality.

In addition, Biloxi is centrally situated as a base for flood relief from the air to the lower Mississippi Valley and for extending aid to the coasts of the gulf in the case of hurricanes.

# (e) Priority No. 5. Seaplanes (9) and equipment for nine 300-foot cruising cutters.

While this item is carried last in the priorities assigned to aircraft in the program submitted, it is believed that the importance of the aircraft equipment feature of the proposed replacement program for cruising cutters warrants especial consideration of this item. These seaplanes are essential equipment for the type of cruising cutter proposed and in view of the limited number of planes available to the Coast Guard in its general work, it is believed that the feature of mobility provided by the assignment of planes to the type of ship proposed warrants a higher degree of consideration than the priority given would otherwise indicate.

### LIFE SAVING STATIONS AND MISCELLANEOUS

The various items appearing on this list have been divided into four priorities. The general need of each of these priorities, together with a more detailed explanation of projects other than station will be given in this summary. A more detailed explanation of the items covering communication work in each of the four priorities will be found in inclosure 6 attached hereto.

### (a) Priority No. 1. Academy, approach, fill and fence.

The amount of the appropriation for the new Academy was insufficient for its completion. This item is given first place on the list because of the relatively small amount involved and because it is essential that the work be done in order to complete the Academy grounds. Proper landscaping cannot be undertaken so long as this project remains in an uncompleted condition.

- (b) The next seven items in priority No. 1 cover work at stations regarded of primary importance. As has been indicated before, the stations and buildings on shore have, during the past few years been repaired on a bare maintenance basis. No funds have been allotted for major repairs and replacements, and the result has been that where major deterioration has been encountered or where storm destruction has occurred no funds have been available. Thus, the station on Little Egg Island was damaged by a storm last year to an extent that required its abandonment and relocation in a more protected situation. These items are all urgently needed.
- (c) The next two items in priority No. 1, installation of piping in steam laboratory building, Coast Guard Academy, and installation of boiler uptakes, stacks, forced draft fan and ducts in steam laboratory building at Coast Guard Academy.

These items cover the completion of the steam laboratory at the new Academy. The funds originally appropriated proved insufficient for this work, and the reduction in appropriations has not permitted the work to be undertaken out of other funds. As a result, the boiler installed for the instruction of the cadets in steam engineering cannot be used and the contemplated instruction in steam engineering at the Academy cannot be given until this condition is remedied.

### (d) Priority No. 2. Academy Chapel.

The original plans for the Academy provided for a chapel but the funds appropriated were insufficient to cover the costs involved. As the chapel is a desirable and even necessary part of the Academy plan, it is felt that the project is warranted.

- (e) The next five projects under this priority are in the same category as the seven projects for station buildings carried in priority No. 1, the only difference being that they are considered slightly less urgent.
- (f) The last item in priority No. 2, Oakland, California, construction of an interlocking steel sheet pile bulkhead along the established harbor line. This relates to the project at Government Island, Oakland, California. It is necessary to complete this bulkhead before the necessary dredging to provide berthing for the cruising cutters at the island can be done.

- (g) Priority No. 3. These items cover new construction and major replacements at stations similar to those listed in the two previous priorities. While the need for these items is not as acute as in the higher priorities, it is felt that there is a pressing need for all of them and as an instance of this need attention is called to the note appearing opposite the item for a station building at Point Arguello, California, under this priority, on the sheet under consideration. This station was authorized 59 years ago but to date no appropriation has been available for its construction. As stated in the note, this vicinity by reason of fogs and storms is one of the most dangerous localities to shipping on the California coast.
- (h) Priority No. 4. Of the six items carried on this priority, specific mention is made only of the item: Curtis Bay, officers' quarters. These quarters are very much needed at the Depot. The present officers' quarters are frame buildings of flimsy construction, poorly arranged and in poor physical condition. As the Depot is seven miles from Baltimore, it is felt that adequate quarters should be provided for the officers stationed there. This is in the nature of a self-liquidating project in the return to the government of the amount of rental allowance made by the officer occupying the quarters. The other items listed are of the same nature as those carried in the previous priorities, but are considered of less present urgency.

### RECONDITIONING RECOMMENDED FOR EMERGENCY PUBLIC WORKS

The items listed on the sheets submitted for reconditioning (inclosure 7) are largely self-explanatory. The first eleven items are for modernization of machinery and hulls on some or all of the nine electric drive cutters. These cutters are from 5 to 12 years old, and while they are generally in good condition, the reconditioning required is in the nature of major overhaul for the purpose of replacing obsolete or worn out machinery and rearranging the layout of the vessels in order to secure better operating efficiency.

The next four items relate to the re-engining of ten 125-foot patrol boats in order to increase speed and to improve maneuvering. The last item is to provide a major overhaul for the OSSIPEE which is now 18 years old and requires extensive rebuilding.

The two items listed on sheet two are to place in good condition the hangar and buildings at the air station, Cape May, and to re-engine and otherwise recondition seaplanes and training planes, to provide major items of repair for spare engines, instruments and other equipment at present in service.

All the items on sheet three are reconditioning projects for shore stations, boat launchways and bulkheads. While the individual items are generally small, the work is of considerable importance in that it will restore to good condition the facilities at the shore stations most subject to deterioration.

The items carried on sheet four all relate to major renewals in the coastwise communication system. These projects are of great importance in assuring prompt communication between the various Coast Guard stations. A detailed list of these projects is attached to inclosure 7.

# 4. THE PROBABLE EFFECT OF REPEAL OF THE 18th AMENDMENT ON THE DUTIES PERFORMED BY THE COAST GUARD -

In some quarters the idea is entertained that the repeal of the Eighteenth Amendment will automatically do away with smuggling and that, consequently, there will be no need for replacement of such vessels as destroyers and 165-foot patrol boats which were acquired by the Coast Guard primarily for law enforcement purposes. It is, therefore, believed desirable to acquaint you with the present smuggling situation and what might reasonably or even inevitably be expected to follow from this situation in the event of repeal of the Eighteenth Amendment.

Smuggling is carried out for only one purpose, that of making a profit, and the commodity smuggled. Whether it be a prohibited article such as distilled spirits at the present time, or narcotics, or a legalized commodity with a relatively high tax or tariff, is of no moment to the smuggling syndicates. The international syndicates now engaged in the smuggling of distilled spirits and other contraband are undoubtedly the most highly organized in the history of smuggling, employing hundreds of foreign and domestic vessels and thousands of persons. The system in use is as well adapted or, in fact, better adapted for the illicit introduction into United States ports of narcotics, aliens, or any dutiable or prohibited article as it is for distilled spirits. Smuggling organizations which have been brought to a state of efficiency comparable to a large importing company, with the added advantage of being able to employ illegal methods, do not by any means confine their activities to distilled spirits. The highly restricted immigration laws passed in the last decade, have put a premium on the smuggling of aliens. Narcotic smuggling continues and the present economic situation has given the greatest incentive for smuggling in order to evade payment of tax or tariff.

In order to arrive at an estimate of what the Coast Guard will be required to do with respect to the patrol of the coasts for law enforcement purposes, with particular reference to the prevention of smuggling, during the next several years, regardless of any action taken with respect to repeal of the Eighteenth Amendment, we have proceeded along two lines: First, we have gathered, through various agencies, exhaustive information and statistics as to the smuggling situation in Canada, Finland, and other countries where an absolute prohibition of the importation of a commodity has been succeeded by a measure of governmental control and high tax. All of these countries have their smuggling problems, almost to the same degree that the United States is now encountering, due to the persistent and continued

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efforts to evade the tax or tariff. The history of these countries which have passed through an experience similar to that which is now prophesied in many quarters for the United States is that, with the legalization of a formerly prohibited article, accompanied by a relatively high tax, the smuggling problem has actually become more acute and it has become more important to maintain an adequate patrol to prevent smuggling when millions of revenue are involved than simply for the purpose of keeping out of the country a prohibited article. Within the past year, for instance, in Canada the prevention of smuggling has been taken over by the Royal Northwest Mounted Police; Poland maintains a coast guard similar to the United States Coast Guard, and Finland has recently strengthened its frontier guards by suitable legislation. It would appear, therefore, that, where millions of revenue are involved, the work of the Coast Guard in law enforcement will be equally, if not more important than heretofore. For, obviously, one of the principal purposes of the repeal legislation is lost if the tax or tariff can be evaded through smuggling.

The second approach to the problem of what may be expected in this matter has been to ascertain through various governmental agencies, both in the United States and abroad, whether or not the international smuggling syndicates, organized primarily for the smuggling of alcoholic beverages, are using their organizations—or making preparations to use their organizations—for the purpose of smuggling legalized or dutiable articles, or prohibited articles other than distilled spirits. We find that these organizations do smuggle a large variety of prohibited articles, also aliens and dutiable commodities, and that recently this smuggling has shown signs of increasing. It can be confidently asserted that a coast patrol, as at present maintained by the Coast Guard, will be required for years to come.

### 5. THE EFFECT ON EMPLOYMENT OF THE PROJECTS SUBMITTED-

As the purpose of the construction projects is to provide employment, consideration of the effect upon employment of the work proposed is presumably an important factor.

The constructional and reconditioning projects for ships will be within the capabilities of a large number of small yards on the Atlantic, Pacific and Gulf coasts and on the Great Lakes. Most of these yards will be unable to bid on the larger vessels required by the Navy and it is probably true that work of the character proposed will be the only type of construction that a majority of the smaller yards can undertake. As the factor of labor costs comprises about 85 percent of the total for this class of work, it is believed that from an employment angle the construction proposed by the Coast

Guard will provide work for a large number of shipyard employees who would not be affected by the building and reconditioning of larger vessels.

The projects for stations and buildings are widely distributed throughout the country, and, while the various items are small, they will afford employment to many small communities.

This principle prevails in practically all the projects listed.

H. G. HAMLET,

Rear Admiral, U. S. Coast Guard,

Commandant.