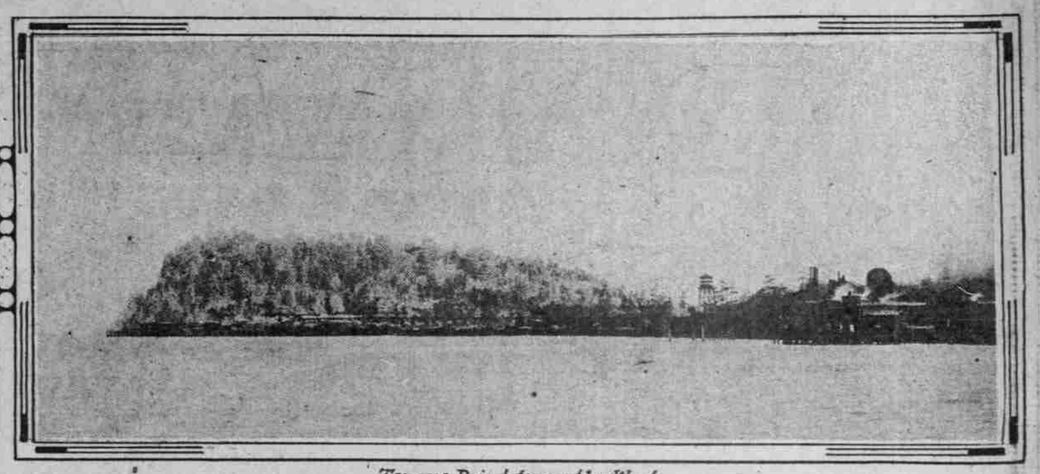
ESTABLISHMENT OF NAVAL BASE WILL BE PROTECTION TO WHOLE NORTHWEST

Location Accepted by Government at Tongue Point and Cathlamet Bay Declared to Be Ideal for Purposes of Defense—$1,500,000 Is Recommended for Immediate Use—Astoria Gives Site With No Outside Aid

East Side of Tongue Point Showing Base Site.



Tongue Point from the West.

By Ben Hur Lampman.

TIME was when the great waterway of the Columbia river needed no defense of ships and guns. The tribesmen came to the magnificent stream to fish for salmon. It was their pathway to the interior, over which the canoes voyaged to new hunting grounds. Though the savages may have complimented one another with an occasional exchange of arrows, as the dugouts slipped past, certainly there was no fear of an enemy that might come by sea. Only the salmon, lusty and red for the spear, swam over the bar—and these were the gift of the Manitou.

When Astor came, in 1811, even when Captain Grays' good ship poked her blunt nose into the virgin harbor, the new era opened. Thenceforward the Columbia and the vast territory that the river and its tributaries drained became the property of civilization, destined to play an important role in commerce and in the development of the American republic. And the sea lane, the road to deep salt water, was at once the avenue of trade and the possible approach of an enemy. The Columbia, from that distant day to this, stood in need of defenses. That the emergency never arose does not belie the necessity, which still exists.

Not Oregon alone, but the Pacific northwest and all the coast country, may well be gratified at the recent decision of the special board of admirals of the navy department granting to Tongue Point and Cathlamet bay, near Astoria, a site for a submarine and destroyer base and aviation plain, with harbor facilities for a squadron of dreadnaughts. For the jutting fist of solid rock that breaks into the harbor a rifleshot east of the city of Astoria is the logical site for a defensive naval establishment—a guard at the portals of the great river itself, pledging the safety and security of the fertile lands and thriving cities that lie behind it.

Site Long Favored.

Tongue Point is not a stranger to the bevy of strategic locations that are included in the plan of Pacific coast defense. Naval committees have come and gone, each with a favorable opinion of its advantages. Promises have been made and encouraging reports have been filed. But the actual status of Tongue Point and Cathlamet bay as the site for an important naval base, a link in the armor of coast protection, was never definitely determined until November of last year, when Admirals Parks, McKean and Commander Hickson, who visited the site some months prior to the formulation of their report, recommended to Secretary Daniels that a naval base be established at Astoria, on the site offered by the local committee.

The report of the board recommended that the government acquire all of Tongue Point and all of the shore line lying between Tongue Point and John Day river and that a minimum of 12 destroyers, six submarines and a squadron of naval aircraft be detailed to the new base. The project also includes the dredging of anchorage space for a division of dreadnaughts, so that the mightiest fighting arm of the Pacific fleet may find haven near the base.

An initial appropriation of $1,500,000 is recommended and an eventual appropriation of $7,500,000—though it is understood that Astoria must contribute the site. A price of $100,000 had been agreed upon between B. F. Stone, chairman of the port commission of Astoria and the owners of the prospective naval base area.

The establishment of a naval base at Tongue Point and Cathlamet bay will not only afford the protection that the mouth of the Columbia requires and the unbroken continuity of a chain of coast defenses from Mexico to Puget sound, but it will have more prosaic advantages for the port of Astoria and the state of Oregon. Such a naval base as is projected for the Tongue Point site will necessitate the stationing of 1000 to 1200 men at the base, as a permanent force. Upon the rocky knoll of the promontory, guardian of the river, will rise a naval city—and at its foot will lie the leashed submarines and destroyers, waiting the word to slip out to sea, as fit for actual battle as for practice cruises.

Old Bugaboo Vanished.

When the board of admirals reported favorably upon Tongue Point and recommended that Secretary Daniels include their findings in his report to congress, they settled once and for all the old bugaboo of the bar—long since non-existent, but kept alive as a canard through mistaken or malicious gossip. For the finding of these expert navigators, as well as the proof furnished by the recent entrance of the fleet, demonstrates that the entrance to the Columbia is a broad sea highway, deep enough to float with safety and a comfortable margin the largest vessels that swim the seas.

And the naval base at Tongue Point site was a dictated necessity. Along the Pacific coast from San Francisco to the Straits of Fuca the only harbor of deep-draft vessels is the Columbia. There is but one break through the Cascade and Sierra Nevada ranges from British Columbia to southern California. And through that break flows the tremendous current of the Columbia, constantly augmented by its tributaries. It is the most accessible route to the Columbia basin and the intermediate region between the Cascades and the Rocky mountains.

The Columbia river is navigable for deep-draft vessels to Portland, a distance of approximately 100 miles, and for light-draft vessels the river road lies open for a distance of 200 miles above Portland. The Columbia basin is the only point on the Pacific coast that possesses an extensive system of inland waterways, available for commercial uses, or for the distribution of troops for protective or offensive purposes.

"This route is the most vulnerable for a hostile approach upon the interior," declares B. F. Stone, chairman of the port commission of Astoria. "It is the most vulnerable to be found upon the Pacific coast. It is the highway of approach to the greatest interior producing region of the Pacific coast. Whatever protection the navy is to afford the country argues for giving consideration to this entrance, and the decision of the board is a happy one.

"This is a region advancing in population so rapidly that it registers 100 per cent increase every decade, according to census figures. More transcontinental railroads converge on the Columbia basin to approach the Pacific coast than can be found on any other part of the western slope. It offers the only natural ingress and egress from the interior of the United States.

Advantages Are Shown.

"It is the nearest point to Yokohama, having a sailing distance advantage over Seattle of 294 miles, and over San Francisco of 423 miles, for the round trip. In the Columbia river basin is every resource necessary for the maintenance of an army or a navy, easily assembled on a down-grade haul by river, rail or highway.

"The accessibility from the sea of the Columbia harbor is indicated by the fact that the coast line of Oregon and part of Washington forms a straight north-and-south line, and there are no islands or reefs in the open roadstead of the ocean. Only one-half hour's sailing time from this open roadstead is required to reach the inside harbor.

"An examination of the general chart of the coast shows the regularity of the curves of equal depth at the approaches of the mouth of the Columbia river—the soundings increasing at the rate of 30 feet per mile, reaching 300 feet when 11 miles west of the entrance. The general chart, as well as the most detailed coast survey chart of the entrance, show the approaches and the vicinity of the entrance to be free from sunken rocks or other hidden obstructions, which, with the uniform slope of the ocean bed, permit vessels to stand close in when seeking to enter the harbor. The crossing at the mouth of the Columbia is very short, and the wide and deep water areas on either side of the main channel are important factors in the accessibility and safe navigation of the river.

"The harbor entrance has a depth of water of 40 feet in a channel some 3000 feet wide at mean low tide, and it is a well known fact today that access to the Columbia river is no more difficult than passage through the Golden Gate at San Francisco. Inside the entrance there is a deep, wide and well-defined channel leading to a large area of protected anchorage.

Harbor Location Ideal.

"The harbor of Astoria is one of five deep water harbors on the entire Pacific coast. Its position is ideal in reference to river, rail or ocean transportation, it connects directly with the Pacific ocean, and is protected from the ocean swell by adequate jetties protecting the entrance to the north and south channel entrance.

"There is about 12 square miles of anchorage ground with a depth of water from 24 to 30 feet, and eight square miles from 30 to 70 feet in depth, taken at mean low tide. The water is fresh, eliminating the ravages of the toredo. In connection with timber construction this is a distinct advantage to a port harboring offshore vessels; the harbor is always free from ice; the average tiderange is eight feet five inches. No fluctuation or rise and fall of the water on account of freshets in the river is noticeable, on account of the large area of the harbor and its proximity to the ocean.

"The presence of a long line of outside jetties obliges an attacking fleet to steam directly in from the west, thus enabling the coast defense guns to converge their fire on a definite spot; the channel has an even flow and regular depth which greatly facilitates the planting of a veritable network of mines; the great depth which exists in the harbor would make the operation of submarines an assured success; the promontories in the inside harbor which project from the shore, afford safe refuge for vessels and ideal bases for harbor defense guns.

"The entrance to the Columbia river can be made as impregnable as Gibraltar or the Dardanelles. Its land defenses can be cheaply developed and made highly effective. One of the forts located there now has an advanced position on a headland projecting into the Pacific, which gives it an advantage in gun range of nearly 5000 yards. In addition there are two other coast defense forts strategically located so they can be made highly effective. The hills at the mouth of the Columbia are well screened by forest, affording a splendid mask for batteries. Railroad trackage already laid practically to coast line, and paralleling the coast for approximately 14 miles, affords opportunity for effective operation of heavy mounted artillery against enemy fleets."

Arguments presented by the port commissions of Astoria and Portland, and which were instrumental in compelling the favorable report of the board to Secretary Daniels, also set forth admirable port facilities, as follows:

Astoria—This port has constructed and in operation well located, modern public docks, directly connected with rail transportation and capable of accommodating at one time four to five large ocean carriers. In addition there are several commercial docks available for deep-draft vessels.

Portland—The city has already developed by private interests, a river frontage about 4½ miles in length, which is now being used by vessels ranging from the small river boats and coasters up to the large ocean-going steamers, and the municipality has expended, nearly $2,500,000 in providing most modern docks, equipped to handle cargoes quickly and economically.

Portland has two drydocks. The Port of Portland has a sectional floating drydock with capacity for lifting ships weighing 10,000 tons. Its length is 468 feet, inside width 82 feet, and depth over keel and blocks 25 feet. The Oregon Drydock company operates a one-piece floating dock having a length of 340 feet, width of 60 feet, and depth over keel blocks of 18 feet, and 3500 tons deadweight lifting capacity.

OFFICIAL INSPECTION BOARD REPORT.

From Special Board of Inspection of Naval Bases, etc., on the Pacific coast.

To the Secretary of the Navy.

Subject—Proposed submarine, destroyer and aviation base, Columbia river.

1. The board is in full agreement with the report of the Helm commission as to necessity for the location of a submarine, destroyer and aviation base between Puget sound and San Francisco, and is in further agreement with the commission in its selection of the Tongue Point site at Astoria, Oregon, and the best site both strategically and tactically. The board recommends the site in the locality chosen, but that a larger area, including all the shore front between the railroad and the pierhead line, extending from the western point where Tongue Point peninsula joins the mainland around and including Tongue Point and along the shore line to the mouth of John Day river, is essential.

2. The board recommends that this area be secured at the earliest date practicable, either by gift or purchase; that its development to a capacity for the successful maintenance and operation of a minimum of 12 submarines, six destroyers and the necessary aircraft for the patrol of the waters in the vicinity of the mouth of the Columbia river be proceeded with at once; that the project be planned to be completed within three years, and that the plans be so made as to permit of the operation of double the force recommended above in time of emergency.

3. It is further recommended that the navy department take up with the war department the desirability of the dredging of the necessary channel and anchor ground in the vicinity of this proposed base to permit a safe entrance and anchorage of at least a division of dreadnoughts. This anchorage and channel development will not only be of great service to the fleet, but will be of greater aid to commerce and will permit and provide for the full use of the fine harbor facilities, built and building at Astoria. It is the opinion of the board that the problem of the Columbia river bar has been satisfactorily solved, there now being a depth of 42 feet over the bar, and the board is also of the opinion that it will be only a short time until a minimum of 50 feet will be obtained, thus making this a practicable port in any weather.

4. It is recommended that an appropriation of a million and a half be obtained from the present congress, with authorization of the completion project not to exceed five million, to be completed within three years.

5. Although not, strictly speaking, a part of this report, the board calls attention of the department to the desirability, primarily from a commercial point of view, but also from the navy point of view, of the continued development of the Columbia river and the Willamette river as far as Portland, Oregon.

C. W. PARKS, Rear-Admiral, (CEC), U. S. Navy,
Chief, Bureau Yards and Docks.
J. S. McKEAN, Rear-Admiral, U. S. Navy,
Asst. Chief of Naval Operations.
J. C. HILTON, Commander, (SC) U. S. Navy,
Supplies and Accounts.

PORTLAND CLIMATE DECLARED IMMENSE ASSET

Weather Bureau Records Show City and Vicinity Have Equable Conditions, With Plenty of Sunshine—Rainfall Not as Heavy as Generally Believed.

By Edward L. Wells,
Meteorologist, U. S. Weather Bureau.

THE climate of Portland is characterized by mild, moist winters, cool, bright summers and absence of high winds and destructive storms. Some of these characteristics are well known—in fact, have been given undue prominence; others have not been so widely advertised.

Portland has the reputation of being a place of very heavy rainfall, with few pleasant days in the rainy season. This reputation is not justified by the official records of the weather bureau. The average annual rainfall is 43.13 inches; this is about the same as that at New York city or Springfield, Mo. It is more than four inches less than the average for Atlanta, Ga., Knoxville, Tenn., or Little Rock, Ark., and more than 12 inches less than the average for New Orleans, La. While there are many rainy days in winter, there has not been a calendar month since official records were begun in 1871, without several days of fair weather. In January, for example, the average number of days with 0.01 inch or more of rain is 20, while the average number of days with 0.25 inch or more is only eight. In July the average number of days with 0.01 inch or more is four.

Sunshine Is Plenty.

Taking the year as a whole, Portland has an average of 2053 hours of sunshine, or 5 hours and 37 minutes per day; this is somewhat greater than the average recorded in the Puget sound country, or in parts of the lake region and upper Ohio valley. There are few places, except in the arid and semi-arid regions, that have more sunshine in summer than Portland; the average for the three summer months is 874 hours, or 9 hours and 30 minutes per day. New York city has 789 hours; Washington, D. C., 846 hours; New Orleans, La., 655 hours; Milwaukee, Wis., 555 hours; Seattle, Wash., 860 hours; San Diego, Cal., 860 hours. In July and August, taken together, Portland has more sunshine than Denver or San Francisco, and in July has more than Santa Fe, N. M.

Comparison of Portland's temperature with that of eastern cities is difficult, because of the difference in the character of the seasons. The normal annual temperature at Portland is 52.4 degrees, which is about the same as that at Indianapolis, Ind., and compares closely with that at Nantes, France.

This does not mean, however, that the temperature throughout the year is like that at Indianapolis; in January the normal temperature at Portland is 39 degrees, which is 11 degrees higher than the January normal for Indianapolis, while in July the normal temperature at Portland is 66 degrees, which is 10 degrees lower than the July normal for Indianapolis. The January temperature at Portland is about the same as that at Memphis, Tenn., or Roswell, N. M., while the July temperature compares close with that experienced at Duluth, Minn., or Winnipeg, Man.

In an average summer there are five days with maximum temperature of 90 degrees or higher, and in an average winter there are 31 days with minimum temperature of 32 degrees or lower.

Snow can always be seen from Portland, on the neighboring mountains. Old residents are surprised to learn that the records show an average annual snowfall of 15 inches, for the snow that falls usually melts almost at once. The weather bureau makes its official measurement of the depth of snow on the ground at 6 P. M. each day. In the last 20 years there has been snow enough to be measured at that hour on about five days each winter.

Portland has sufficient breeze to carry away the city smoke, but is protected from high winds by the surrounding hills. The average wind movement is 6 miles an hour; at other well-known places the average movement is as follows: Seattle, 7; Omaha, 9; Minneapolis, 11; Chicago, 16; New Orleans, 8.

The most unpleasant wind in Portland is from the east or northeast. This wind is dry, and is cold in winter and warm in summer, but its duration and force are commonly overestimated. In the winter of 1918-1919 the wind blew from the east or northeast about 17 per cent of the time, the average velocity being five miles an hour. In the summer of 1919 the wind blew from the east or northeast less than 4 per cent of the time, with an average velocity of four miles an hour.

Tornadoes are unknown in this section; severe hailstorms do not occur; light hail is recorded about once in three months. Thunder is heard about once in three or four months.

Detailed information relative to any particular phase of the climate at Portland will be furnished upon application to the weather bureau office, 221 Custom House.

PORTLAND OFFICIAL BUILDING PERMITS BY YEARS.

Year.	Permits.	Valuation.
1905	2,318	$ 4,183,368
1906	3,166	6,902,032
1907	3,580	9,446,983
1908	4,849	10,405,151
1909	4,739	13,481,280
1910	6,522	20,886,207
1911	7,687	13,157,376
1912	8,224	14,652,971
1913	8,710	12,956,915
1914	5,959	8,334,075
1915	4,672	4,595,345
1916	4,467	6,301,560
1917	3,261	3,752,125
1918	5,707	6,172,154
1919*	9,239	9,977,501

*December total estimated.

TRANSPORTATION PROBLEMS UP

Movement of 1920 Wheat Crop Concerns Those Engaged in Business. Prospects Are Bright.

THE United States grain corporation's activities this year have been only as in regards to wheat. Of the 19,664,000 bushels of the government estimate of the wheat crop for Oregon, there has been delivered in the warehouses to date approximately 16,000,000 bushels, against a total last year at this time of 13,000,000.

On account of the car shortage and thereby lack of transportation facilities the larger part of this still remains in the interior country warehouses. After making due allowances for lower grades, country handling charges and freight, it is safe to say that on the average it should at least net the grower $2 per bushel.

On the 16,000,000 bushels delivered to date it means a total of $32,000,000. Added to this, the amounts received on the other crops, including barley and corn, and the values of these crops that have been fed to stock; a conservative estimate of all the grain raised in the state of Oregon this year would be $50,000,000.

When we consider the limited amount of land under cultivation as compared with the total area of the state, it demonstrates the possibilities in the opening up of central Oregon with railroad transportation and the clearing up of our logged-off lands.

Through the careful selection of seed, having in mind the soil and climatic conditions through the different sections of the state, the wheat produced of recent years has shown a slow, but steady increase.

During the past three years the grain corporation's guaranteed price has for the most part, been a stabilizer or regulator of prices. With the exit of the government's regulations this coming May, the price for the 1920 crop will of necessity have to be based on world-wide conditions and transportation facilities, and conditions will be no small factor in determining the average price to be obtained.

Unless the United States and Canada should raise an abnormal crop, the indications are that we are going to see at least a fair price, ranging from $1.50 to perhaps $2 per bushel for wheat, regardless of what can be done by all the wheat producing sections, with the elimination of Russia as a source of supply, there undoubtedly will be a good, healthy demand for the surplus from the grain producing sections, for at the best it will be sometime, even under the most favorable political conditions, before Russia can again enter as a competitor in the world's markets.

Hence, about the only obstacle that stands in the way of a good, fair price is transportation facilities and the ability of the importers and the consuming countries to find the wherewithal to make payments.

No doubt these problems will have been worked out during the spring and summer.