

Coast Defence in British Columbia, 1939-1941: Attitudes and Realities

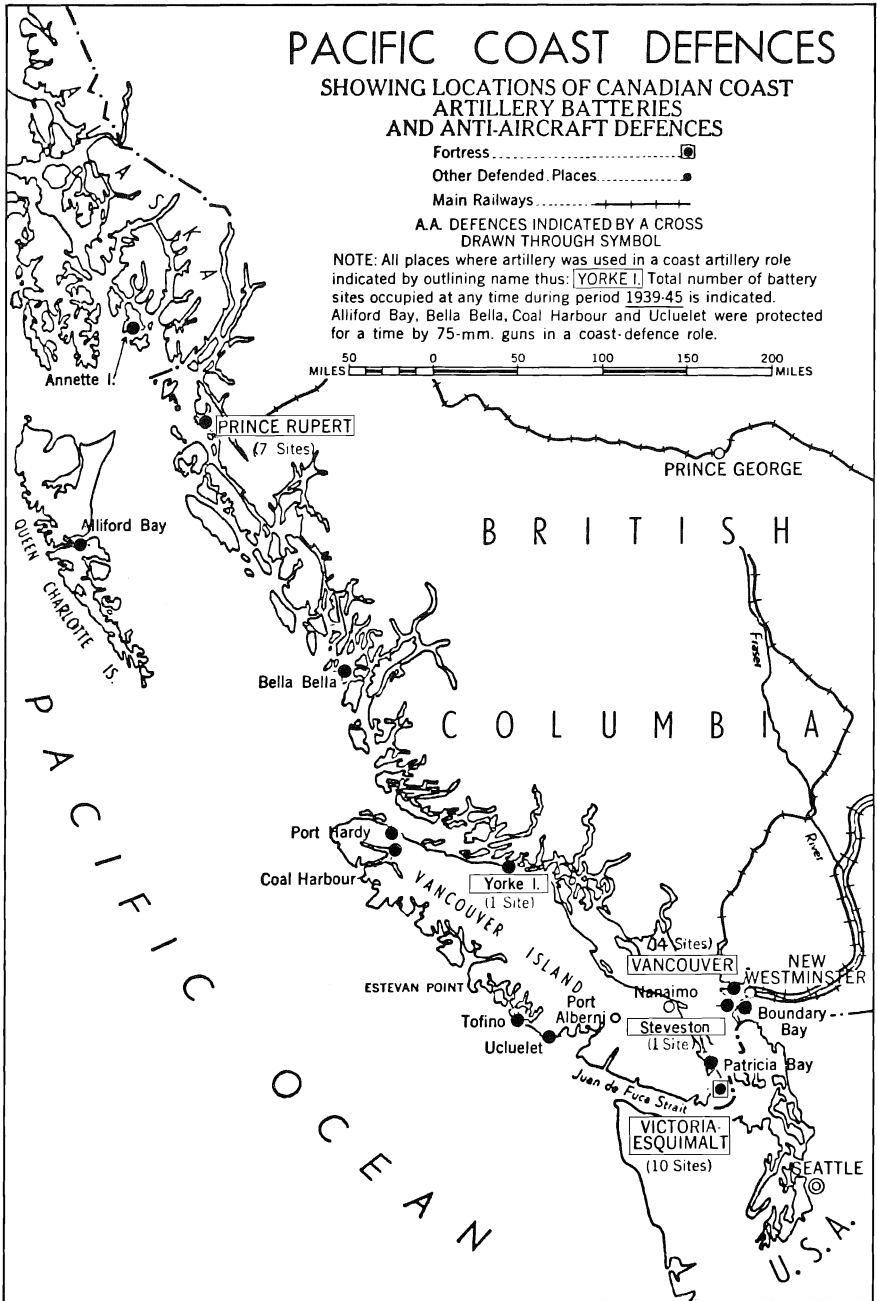
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On the evening of 20 June 1942 the Japanese submarine I-26 shelled the remote lighthouse at Estevan Point on the west coast of Vancouver Island. Lieutenant-Commander M. Yokota's gunners were not very accurate: although they bracketed the lighthouse and broke windows in its tower, they did little damage to the facilities.¹ This was the only occasion in either the First or Second World Wars when enemy shells fell on Canadian soil. Nevertheless, at the time of the incident, the attack seemed to justify preparations for coast defence which had been carried out on the Pacific Coast. This paper focuses attention on attitudes and realities governing military preparations in the period beginning with the outbreak of the Second World War and ending with Japan's entry into the conflict on 7 December 1941. The topic is restricted to an examination of the coast defence artillery and its armament; no attempt is made to assess the contributions of other arms and services.

Historically, defence of Canada's west coast was linked to imperial strategy and the Royal Navy's need for Esquimalt Harbour as one of the principal British bases in the North Pacific. Beginning in 1862 the Royal Navy and, after 1906, the Canadian authorities, exhibited fluctuating concern in the fortifications of this area.² Periodic conflicts of British interests with those of the United States and Russia had repercussions on the local scene. In the opening months of the First World War the activities of Admiral von Spee's German Pacific Squadron and, in particular, the daring exploits of the light cruiser *Emden* aroused some apprehension on the west coast of Canada, but this soon ended with the elimination of these threats. Obsolescent defensive works were maintained at Esquimalt,

¹ The attack has been fully documented: records in Directorate of History, National Defence Headquarters [N.D.H.Q.], Ottawa. See, also: Captains Bill Aikman and Dave Cossette, "The Attack on Estevan Lighthouse", *Sentinel* 1974/7, vol. 10, No. 7, pp. 11-14. In 1944 the I-26 was sunk in Philippine waters by an American destroyer.

² Barry M. Gough, *The Royal Navy and the Northwest Coast of North America 1810-1914: A Study of British Maritime Supremacy* (Vancouver, 1971), pp. 206-7.



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Compiled and Drawn by Historical Section, G.S.

SOURCE: Colonel C. P. Stacey, *Official History of the Canadian Army in the Second World War: Volume I: Six Years of War: The Army in Canada, Britain and the Pacific* (Ottawa, 1955), opposite p. 158.

but the strong tide of pacifism after 1918 and the stringent economies of the depression period precluded any improvement in the military situation. There was no revival of serious interest in the defence of the Pacific Coast until Japan emerged as a belligerent power in the 1930s.

Late in 1936 a British expert, Major B. D. C. Treatt, R.A., of the Coast Artillery School at Shoeburyness, in company with senior Canadian officers, visited both the Atlantic and Pacific coasts of Canada and made detailed recommendations for the improvement of their defences. At this time the only military fortifications on the coast of British Columbia were concentrated at Esquimalt-Victoria, the armament comprising nothing heavier than 9.2-inch guns (on obsolete mountings) and weapons of smaller calibre. The official view was that greater urgency was attached to the Esquimalt-Victoria defences than to those of Halifax because of "strategic necessity" related to developments in the Far East and because the defences of the western port were "in poorer condition" than those of Halifax.³ At National Defence Headquarters a Joint Staff Committee considered hypothetical "forms and scales of attack" for the Pacific Coast. The committee concluded that in the case of a war with Japan Vancouver and Prince Rupert would be exposed to attacks by one armed merchant vessel with 6-inch guns, by two submarines with 4.7-inch guns, and "by gunfire at moderate or close range", together with the threat of mines and torpedo attacks on shipping. It was also believed that a gas attack was "a definite risk in conjunction with other operations by ships." While enemy land forces could be ignored, the committee accepted the possibility of torpedo, bomb or gas attacks by air forces.⁴ In general, the service authorities endorsed the Treatt recommendations, and early in 1937 parliamentary approval was given for the installation of additional defences on the Pacific Coast.

From this time onward two major factors determined the speed of rearmament — the difficulty of procuring the necessary equipment and the shift in global strategy attending Hitler's rise to power in Germany.

The Treatt Report had recommended a material strengthening of the defences of Esquimalt-Victoria, especially in relation to its counter-bombardment and close defence artillery. (In Coast Artillery the term "counter-bombardment" was applied to the gun defences of a port designed to engage bombarding ships; "close defence" referred to the gun

³ Public Archives of Canada [P.A.C.], memorandum by Chief of the General Staff [C.G.S.] (Major-General E. C. Ashton), 11 Dec 1936, H.Q.S. 5199-C, vol. 1.

⁴ "Minutes of a Meeting of the Joint Staff Committee, held in the office of the D.M.O. and I. [Director of Military Operations and Intelligence], at 1500 hours, 8th Dec. 1936", *ibid.*

defences of a port designed to resist closely pressed attacks by destroyers, submarines, blockships, boom-smashers and motor torpedo boats.)⁵ In addition, the report had recommended the installation of new batteries at Vancouver, Prince Rupert and Yorke Island, which commanded the northern approach to the Strait of Georgia through the Johnstone Strait.

It soon became apparent that the difficulty of obtaining the necessary additional armament from the United Kingdom, herself busily rearming to meet the German threat, meant that implementation of the ambitious "Ultimate Plan" of the Treatt Report would have to be postponed, and an "Interim Plan" adopted, making the best use possible of equipment readily available, or soon to be available in Canada. (Table I shows the actual situation in December 1937 and the implications of the "Interim" and "Ultimate" Plans for the armament of Pacific Coast batteries.) The Minister of National Defence (Ian A. Mackenzie) approved the "Interim Plan" in December 1937 and a redistribution of armament began.

The new programme was still gathering momentum when a radical shift in global strategy resulting from the threat of Nazi Germany caused a reorientation of Canadian defence policy. In a review of the overall situation undertaken in July 1938, the Joint Staff Committee at National Defence Headquarters concluded:

The menace from the direction of the Atlantic is now fully equal to, if not considerably greater than, that which exists on the Pacific, and it follows that a priority equal to, if not greater than, that now being accorded to Esquimalt, Vancouver and Prince Rupert should be given to the provision of adequate defences for our Atlantic seaboard and Eastern inland cities.⁶

Accordingly, as Canada approached the outbreak of the European War in September 1939, the tempo of rearmament on her west coast was retarded to some extent by the higher priority given to her Atlantic defences. In general, what happened on the Pacific was that the construction of gun emplacements and other installations was pressed forward with all possible speed, but that delivery of the necessary armament (including searchlights) was delayed by the Atlantic competition and the difficulties of overseas supply.

A political factor further complicated the situation on the Pacific Coast. As matters stood in 1939 there was always the possibility that the

⁵ *Coast Artillery Training, vol. I (1938)* [issued by War Office] (London, 1938), pp. 1-2.

⁶ P.A.C., "A Review of Canada's Position with Respect to Defence, July 1938", memorandum by Joint Staff Committee, N.D.H.Q., July 1938, H.Q.C. 5199-B. The name of this committee, composed of the heads of the three services, was changed to "Chiefs of Staff Committee" in January 1939.

TABLE I

LOCATION AND ARMAMENT OF COAST DEFENCE BATTERIES ON THE PACIFIC COAST

	<i>December 1937</i>	<i>"Interim Plan"</i>	<i>"Ultimate Plan"</i>
<i>Esquimalt-Victoria</i>			
1) Mary Hill	nil	3 x 6" (15° mtgs)	3 x 6" (45° mtgs)
2) Albert Head	nil	2 x 9.2" (15° mtgs)*	3 x 9.2" (35° mtgs)
3) Fort Macaulay	2 x 6" Q.F.	2 x 6" (15° mtgs)	2 x 6" (15° mtgs)
4) Belmont	2 x 12-pdrs	2 x 12-pdrs	1 x 6-pdr duplex
5) Duntze Head	2 x 12-pdrs	2 x 12-pdrs	1 x 6-pdr duplex
6) Black Rock	2 x 12-pdrs	nil	2 x 12-pdrs
7) Golf Hill	nil	2 x 12-pdrs	2 x 12-pdrs
8) Ogden Pier	nil	1 x 12-pdr	1 x 6-pdr duplex
9) Trial Island	nil	nil	3 x 6" (45° mtgs)
10) Signal Hill	2 x 9.2" (15° mtgs)	nil	nil
<i>Vancouver</i>			
1) Point Grey	nil	3 x 6" (15° mtgs)	3 x 6" (15° mtgs)
2) Stanley Park	nil	2 x 6" (15° mtgs)**	2 x 6" (15° mtgs)
3) Narrows North	nil	2 x 12-pdrs	2 x 12-pdrs
4) Narrows South***	nil	nil	1 x 6-pdr duplex
<i>Yorke Island</i>	nil	2 x 4.7" Q.F.	2 x 4.7" Q.F.
<i>Prince Rupert</i>			
1) Barrett Battery	nil	3 x 6" (naval)	3 x 6" (45° mtgs)
2) Frederick Point	nil	2 x 12-pdrs	2 x 12-pdrs
3) Venn Passage (Dundas)	nil	nil	2 x 12-pdrs

NOTES

* Relined guns on old 15° mountings from Signal Hill.

** Traded with Yorke Island guns (July 1942).

*** Never installed.

SOURCE: P.A.C., Appendix "A" to memorandum, Chief of the General Staff to the Minister of National Defence, 1 Dec. 1937, H.Q.S. 5199-C, vol. 2.

United States, but not the British Commonwealth, might be engaged in hostilities with Japan. It was inconceivable that Japan could present a serious threat to the eastern seaboard of the United States. However, if the American west coast were threatened, the question of maintaining Canadian neutrality could become a serious issue, and this would have a direct bearing on the coastal defences in British Columbia. In its larger context, the problem of maintaining neutrality in such a conflict had long been a source of concern to Canadian planning staffs. Obviously, if Canada were unable to perform her obligations under international law, the United States might be forced to intervene militarily with consequent derogation of Canadian sovereignty. On the west coast it could be assumed that the most sensitive area would be in the Strait of Juan de Fuca, with the Esquimalt-Victoria defences responsible for the northern shore.

In 1938 senior officers at National Defence Headquarters had got no further with the coastal implications of this problem than the following very tentative statement:

Coast and anti-aircraft defences will be manned as for the Precautionary Stage [that is, calling out troops under section 63 of the Militia Act to guard vulnerable points and man coastal defences] from the outset of war. Subsequently, it may be found expedient considerably to reduce strengths or even to dispense with coast defence garrisons altogether. A decision as to this, however, cannot be taken in anticipation of the event. The point to be emphasized is the importance of taking all possible steps to impress belligerents of our determination to maintain neutrality.⁷

Public opinion in the United States could not be disregarded. In May 1939 Mr. Howard C. Green, MP for Vancouver South, drew the government's attention to a recent editorial in the *Seattle Post-Intelligencer*:

The undefended position of Canada has been a menace, not only to Canada, but to the United States. This nation could not brook an attack upon Canada by an overseas aggressor. But it is manifestly unfair to expect Uncle Sam to guarantee emergency police service for neighbours able to bear a fair share of the cost of continental safety.⁸

However, the Canadian government took refuge in the supposed invulnerability of the British and American navies. Speaking in the House of

⁷ P.A.C., "Joint Staff Committee: Plan for Maintenance of Canadian Neutrality in the event of a war between the United States and Japan", 20 Jan 1938, approved by Minister of National Defence, 27 Jan 1938, H.Q.S. 5199-A, vol. 3.

⁸ Canada, House of Commons, *Debates*, 12 May 1939, p. 3994, H. C. Green, M.P., quoting *Seattle Post-Intelligencer* (14 Apr 1939).

Commons in the spring of 1939, the Minister of National Defence referred to the Royal Navy's supremacy in the North Atlantic and added:

On the United States side of the north Pacific the United States fleet is equally predominant, and any hostile fleet contemplating an attack has to bear this risk in mind, also the risks inherent in the existence of the Singapore base.⁹

The later disasters at Pearl Harbor and Singapore were sufficient commentaries on the validity of this reasoning. Only the considerable delay in the outbreak of the war with Japan prevented the problem of Canadian neutrality from assuming more threatening proportions in relation to rearmament of the Pacific Coast of Canada.

When Canada declared war on Germany on 10 September 1939 the artillery had already manned most of the existing forts on the coast of British Columbia. On 25 August, acting under section 63 of the Militia Act, the government had called out troops "on a voluntary basis" to guard vulnerable points and man the defences.¹⁰ Considering all the circumstances, especially the inexperience of many officers and men and deficiencies of equipment, this task was performed with efficiency and enthusiasm. However, when Canada's forces were mobilized (1 September), some confusion occurred through the calling out of anti-aircraft and searchlight regiments for which armament and equipment were not available. Pending uncertain deliveries of anti-aircraft guns and searchlights, many members of these units were transferred to other duties.¹¹

The defences of the Esquimalt-Victoria Fortress were manned by the 5th (British Columbia) Coast Brigade, R.C.A., under the command of Lt.-Col. V. McKenna, M.C.¹² The purpose of the fortress was to defend

⁹ *Ibid.*, 26 Apr 1939, p. 3261.

¹⁰ Colonel C. P. Stacey, *Official History of the Canadian Army in the Second World War: Volume I: Six Years of War: The Army in Canada, Britain and the Pacific* (Ottawa, 1955), p. 41.

¹¹ P.A.C., D.M.O. & I. to C.G.S., 3 Oct 1939, H.Q.S. 3545, vol. 3. In B.C. the units affected were the 1st Anti-Aircraft Regiment, R.C.A., and the 1st Searchlight Regiment, R.C.A. Nuclei were retained for later activation of units.

¹² On the distinction between "Fortress" and "Defended Port" (such as Vancouver and Prince Rupert) see: Colonel G. W. L. Nicholson, *The Gunners of Canada: The History of the Royal Regiment of Canadian Artillery* (Toronto, 1972), vol. II, p. 449n. It may be noted that, while the term "Fortress" was often "applied to isolated localities where relief could not be expected for some time" (*ibid.*), this was not uniformly true in the British service. In the United Kingdom, during the Second World War, four groups of defences were considered "fortresses": these were located in the Thames and Medway, at Portsmouth and the Isle of Wight, at Plymouth and at Milford Haven. See: Ian V. Hogg, *Coast Defences of England and Wales 1856-1956* (Newton Abbot, Devon, 1974), pp. 91, 93-220.

the Royal Canadian Navy's base, the graving dock and ordnance stores in the harbour of Esquimalt and to protect the commercial port of Victoria. Moreover, as we have seen, these defences guarded the northern shores of the Strait of Juan de Fuca and the southern approaches to Vancouver and New Westminster.¹³

The fort at Albert Head had been designed as a counter-bombardment battery with three 9.2-inch guns on modern (35°) mountings. When the war began only two guns were in position on improvised mountings, the third not becoming available until March 1943.¹⁴ These guns, the most

TABLE II

COMPARATIVE PERFORMANCE OF COAST DEFENCE GUNS AND MOUNTINGS

<i>9.2-inch B.L. Mk X gun:</i>	380 pound projectile
	Rates of fire: 2 rounds per minute by day, 1.5 at night
	Maximum ranges: on Mk V (15°) mounting — 17,400 yards
	on Mks VI and VIA (30°) mountings — 23,400 yards
	on Mks VII and VIII (35°) mountings — 25,800 yards
	(30° of elevation and 5° of depression)
<i>6-inch B.L. Mk VII gun:</i>	100 pound projectile
	Rates of fire: 7.5 rounds per minute by day, 6 at night
	Maximum ranges: on Mk II (15°) mounting — 12,600 yards
	on Mk V (45°) mounting — 19,300 yards
<i>4.7-inch Q.F. Gun:</i>	45 pound projectile
	"Effective range" on 15° mounting — 9,300 yards
<i>12-pounder Q.F. gun:</i>	12 pound projectile
	Rates of fire: 16 rounds per minute by day, 16 at night
	Maximum range of Mk II (20°) mounting — 8,000 yards
	[Superseded by 6-pounder duplex firing 70 rounds per minute.]

NOTE: These performances were affected by many variables, such as trunnion height, type of projectile and charge, wear of guns and meteorological conditions. On the performance of 8-inch (United States) railway guns in a coast defence role see, below, pp. 20-21.

SOURCES: Colonel K. W. Maurice-Jones, *The History of Coast Artillery in the British Army* (London, 1959), pp. 172-3, 215-6; P.A.C., "Modern Guns of the Fixed Armament" with memorandum by Director of Mechanization and Artillery, National Defence Headquarters, Ottawa, 23 Jun 1938, H.Q.S. 3338, vol. 3; *Fort Record Book of Stanley Park Battery*.

¹³ P.A.C., *Fort Record Book of Albert Head Battery, B.C.*, preface.

¹⁴ *Ibid.*

powerful on the B.C. coast, eventually had a range of 27,500 yards. Another new fort, at Mary Hill, combined counter-bombardment and close defence roles with the duties of an Examination Battery. (Apart from any fighting capacity, an Examination Battery was specially detailed to support the Examination Service — the organization which identified and controlled vessels seeking to enter a port.) Under the “Ultimate Plan” the Mary Hill battery required three 6-inch guns on modern (45°) mountings. However, during the opening stages of the war only two guns, on the old 15° mountings, could be provided. Two additional 6-inch guns, on similar mountings, were located at Fort Macaulay for close defence, and a number of old 12-pounders were distributed among smaller batteries to cope with attacks by motor torpedo boats. Again, under the “Ultimate Plan”, the 12-pounders would have been replaced by the new 6-pounder twin gun, mounting two barrels and capable of firing 70 rounds per minute.¹⁵ As will be seen, delivery of this armament was long delayed by difficulties of supply in the United Kingdom. (Table II shows the comparative performances of different Marks of coast defence guns and mountings.)

While, in general, the transition from peace to wartime conditions was carried out smoothly, inevitably certain weaknesses were detected. During heavy rains in December 1939 a pump broke down at Albert Head and the magazine was badly flooded. The *Fort Record Book* noted:

Hand pumps were manned and buckets were used to clear the water. This took several hours. [An electric pump was subsequently installed.] . . . The charges in all shell of flooded magazine had to be examined and the shell itself to be reoiled as all shell had stood in about 5 inches of water. The cartridges were not affected as they had stood on stands 18 inches above the floor. . . .¹⁶

At Vancouver, classed as a “defended port”, three forts were manned at the beginning of the war and, shortly afterwards, an Examination

¹⁵ The British view was that a 6-inch gun on a 45° mounting was “a definite deterrent to an 8” cruiser, and that such a cruiser would not risk a close engagement against such a gun — that the 9.2 under such circumstances is a lethal weapon and could definitely destroy such a cruiser”. P.A.C., Director of Mechanization and Artillery [D. of M. & A.], N.D.H.Q., on discussions with the War Office, 26-27 Aug 1939, H.Q.S. 3338, vol. 4. It is of some interest to note that the Esquimalt-Victoria fortress had included three 6-inch B.L. Mark VI guns on Mark IV (Disappearing) carriages until they were dismantled in 1934. As it was doubtful whether they could be made fit for service, N.D.H.Q. gave authority for these guns to be disposed of as salvage in March 1942. Documents in P.A.C., H.Q.S. 3338, vol. 5.

¹⁶ P.A.C., *Fort Record Book of Albert Head Battery, B.C.*, Part II, Section A, “Description of the Fort”.

Battery was added at Steveston, covering the entrance to the Fraser River and New Westminster. These defences were manned by the 15th (Vancouver) Coast Brigade, R.C.A., under Lt.-Col. G. Y. L. Crossley. Originally a field artillery unit, the 15th, had been reorganized as a coast brigade in the spring of 1938. In spite of this later conversion members of the brigade made a valiant and generally successful effort to accustom themselves to their static role.

Beginning in 1938 a close defence battery had been constructed at Stanley Park, near the memorial to Pauline Johnson, and armed with two 6-inch guns on 15° mountings. This battery supplied a detachment to man the Narrows North fort (two 12-pounders) close to the northern end of the Lions Gate bridge and commanding the restricted entrance to the inner harbour of Vancouver. (During the early days of the war one of the "hazards" experienced by the garrison at Narrows North was the occasional empty beer bottle tossed off the high bridge by late revellers.) The only counter-bombardment battery in the Vancouver defences was located near the University of British Columbia at Point Grey, a lofty headland at the southwestern entrance to Burrard Inlet. Here, two more ancient 6-inch guns were rapidly installed in temporary placements as the gunners moved into the fort on 26 August. The maximum range of these guns, which bore the dates 1899 and 1902, was only 14,500 yards. As in the case of Stanley Park and Narrows North, Point Grey supplied a detachment for the Examination Battery hastily erected at Steveston. The latter consisted of two very old and worn 18-pounders (field guns converted to coast defence), with 1,000 yards of "dead water" between the guns and the channel they covered.¹⁷

While the Esquimalt-Victoria fortress and the Vancouver defences provided some measure of protection for the southern approaches to Canada's most important port of the Pacific, the authorities had followed Major Treatt's recommendations in observing the need to guard the "back door" — that is, the northern approach through Johnstone Strait, between Vancouver Island and the mainland. Far up this channel there was a strategically located island — Yorke Island, which the celebrated Captain (later Admiral) G. H. Richards of H.M.S. *Hecate* had named in 1862 after a distinguished English family.¹⁸ Here, two Quick

¹⁷ Author's recollections as a junior officer at Point Grey Fort, 26 Aug 1939 - 21 Sep 1940 and as officer commanding Narrows North Fort for a brief period in 1940-41.

¹⁸ Yorke (mis-spelled by many authorities) was the family name of the house of Hardwicke, whose name Captain Richards gave to the larger island adjacent to Yorke Island.

Firing (QF) 4.7-inch guns, complete with 150 rounds of high explosive, 100 rounds of semi-armour piercing shell and 14 practice rounds, were manned by the 85th Heavy Battery, R.C.A., of the 15th Brigade on 29 August 1939.¹⁹ Duty at Yorke Island was never popular and periodical rotations of personnel were arranged with the 15th Brigade at Vancouver. Administrative facilities were necessarily limited at the outset, as may be judged by the following report submitted by the officer commanding on 11 September:

The water problem is still acute. When the dead cat was found floating on the surface, the tank was ordered drained. This took considerable time as there is only a half inch hose available on the island. When the tank was emptied as much as was possible it was found that there were several decomposed mice on the bottom, also leaves and other accumulated matter. The M.O. [Medical Officer] has stated that he does not approve of the system.²⁰

In 1939 the most northerly defences on the coast of British Columbia were located in the vicinity of Prince Rupert. As will be seen from Table I, the "Ultimate Plan" visualized a 6-inch counter-bombardment battery at Barrett Point with 12-pounder batteries at Frederick and Dundas Points, the latter covering the western approaches to the port through Venn Passage. However, these installations were far from complete when the unbrigaded 102nd (North British Columbia) Heavy Battery, R.C.A., under Major (later Lt.-Col.) S. D. Johnston, M.C., manned the works at the end of August.

There was no prospect of receiving modern counter-bombardment guns before 1942²¹ and, initially, Barrett Point was armed with three 6-inch naval guns on temporary (15°) mountings. Installation of these guns, begun in 1938, proved a difficult task. "The engineers had to contend with heavy bush and deep muskeg throughout the entire area, and where these were absent, there was the threat of landslides from loose shale on the steep hills."²² However, before the end of September 1939, proof

¹⁹ P.A.C., War Diary [W.D.], 85th Heavy Battery, R.C.A., C.A.S.F. [Canadian Active Service Force], August 1939. Captain (later Lt.-Col.) F. W. Guernsey was the original officer commanding at Yorke Island; later in September Major J. E. Piercy assumed command. Semi-armour piercing shells were intended for use against lightly armed vessels.

²⁰ *Ibid.*, Sep 1939: Appendix "G", Report by O.C., 85th Heavy Battery, R.C.A., 11 Sep 1939.

²¹ See detailed statement on "Coast Defences" with memorandum, C.G.S. to Minister of National Defence, 9 Oct 1940, in P.A.C., H.Q.S. 3338, vol. 4.

²² Nicholson, vol. II, p. 475. Later in the war Barrett Point Fort received its "ultimate" armament of three 6-inch guns on modern (45°) mountings. These guns had a maximum range of 24,500 yards. P.A.C., *Fort Record Book of Barrett Point Fort*.

rounds had been successfully fired at Barrett Point.²³ Meanwhile temporary emplacements for two 12-pounders were constructed for the anti-motor torpedo boat battery at Frederick Point. Here, in October, training was still being "slowed up owing to blasting at gun positions by contractors' crews".²⁴ Another A.M.T.B. battery was afterwards added at Casey Point to bolster the inner defences of the port. However, future improvements in the coast defence armament at Prince Rupert were directly related to the growing threat of war with Japan and the concern of the United States authorities for the protection of the North Pacific.

Some indication of the administrative "short cuts" taken to expedite erection of the defences at Prince Rupert can be found in the records of the small battery at Dundas Point, eventually consisting of one 75-mm gun in a close defence role. This point was on an Indian reserve and it was necessary for the Department of National Defence to obtain the permission of the Deputy Minister of Mines and Resources to proceed with construction on the site. Mr. Charles Camsell, the Deputy Minister, noted:

Before any lands on Indian reserves are leased or sold it is the practice under the Indian Act to obtain a surrender from the Band concerned. Time did not permit of such action being taken in this case and it may be necessary later on to provide for reasonable compensation for the Indians.²⁵

Recapitulating, we can see that in the early months of the war Canada had on the Pacific Coast one 9.2-inch and two 6-inch batteries in action in the Esquimalt-Victoria fortress, two 6-inch batteries at Vancouver, one 6-inch (naval) battery at Prince Rupert and the two 4.7-inch guns at Yorke Island. These defences were supplemented by a variety of smaller calibre weapons, such as 18-, 12- and 6-pounders. In every instance the equipment was tactically obsolete, but, as events proved, it was more than adequate for the purpose.

It is now necessary to turn back to National Defence Headquarters to see how the authorities grappled with the problem of procuring additional and better armament for the west coast in the period after September 1939 and before the outbreak of war in the Far East.

Long before the European war began, Canada was aware of the difficulties likely to develop over delivery of new coast defence armament

²³ P.A.C., W.D., 102nd (North British Columbia) Heavy Battery, R.C.A., C.A.S.F., 27 Sep 1939; W.D., Headquarters, Prince Rupert Defences, 27 Sep 1939.

²⁴ W.D., 102nd (NBC) Heavy Battery, R.C.A., 3 Oct 1939.

²⁵ Deputy Minister of Mines and Resources to Acting Deputy Minister (Militia), Department of National Defence, 12 Oct 1939, H.Q.S. 3545, vol. 3.

from the United Kingdom. Indeed, commenting on certain recommendations in the Treatt Report, the War Office had made it clear that even obsolete equipment would be in short supply: "Treatt gave the impression that we have a large number of surplus 6-inch C.P. [Central Pivot] II (15°) mountings; actually this is not the case as we have not sufficient to meet our needs and are faced with the manufacture of new 6-inch mountings which are to be of the Mark V type (45°)."²⁶ Again, late in 1938, the War Office had advised that the shortage of coast defence armament made it impracticable "to guarantee delivery of new 6-inch guns before 1944."²⁷ The situation was scarcely any better as regards the relining of guns. (A gun was considered "worn" when it reached the point at which the next round fired might render the gun unserviceable.) After war broke out, British allocation of available equipment was of necessity determined by more pressing overseas commitments. Thus, in November 1939, one of the new 35° mountings on order for Canada had to be diverted to South Africa, and the Director of Artillery at the War Office advised the Canadian authorities: "The existing capacity for heavy gun mountings in this country is so overloaded that no promise can be given at the present in respect of the order for nine 9.2-inch mountings [the total required for both the Atlantic and Pacific Coasts] to either Mk VII or Mk VIII designs."²⁸

As already indicated, the situation on the Pacific Coast was also directly affected by the higher priority accorded the Atlantic defences. When war was declared the Chief of the General Staff (Major-General T. V. Anderson, D.S.O.) was of the opinion that the three modern 9.2-inch equipments then expected in 1940-41 should still be mounted, as originally intended, at Albert Head. But he was overruled by the Minister of National Defence, who ordered the diversion of this equipment, if and when received, to the East Coast.²⁹

The supply situation in relation to the United Kingdom became so acute that early in 1940 a meeting was held at National Defence Headquarters with a representative of the British War Supply Board to discuss alternative solutions. These included the possibility of manufacturing

²⁶ Colonel R. B. Pargiter [War Office] to D.M.O. & I., N.D.H.Q., 25 Mar 1937, H.Q.S. 5199-C, vol. 1.

²⁷ Telegram No. 144 12/10, Dominion [High Commissioner for Canada in the United Kingdom] to N.D.H.Q., 12 Oct 1938, H.Q.S. 3338, vol. 3.

²⁸ Director of Artillery, War Office, to Military Representative for Canada (London), 24 Nov 1939, *ibid.*

²⁹ C.G.S. to Adjutant General, Quartermaster General and Master General of the Ordnance, 1 Sep 1939; C.G.S. to Q.M.G., 10 Sep 1939, *ibid.*, vol. 4.

mountings for 9.2-inch equipments in Canada or procuring them from the United States. It was estimated that some 2,500 to 3,000 separate drawings would be required, and the meeting noted "with respect to production in the U.S.A., we would be faced with the difficulty of converting all drawings to render them suitable to American shop practice and once they were available at least 18 months would be required to get into production."³⁰ The C.G.S. would not agree to a temporary withdrawal of existing 9.2-inch equipments for conversion in Canada, and the decision reached was to await completion of a simplified design of mounting in the United Kingdom.

During succeeding months the War Office was still unable to give any firm date for delivery of the new mountings for the three 9.2-inch guns at Albert Head. At Ottawa the Director of Mechanization and Artillery (Lt.-Col. G. P. Morrison) sadly concluded: "It will be several years before we can obtain these in all probability."³¹ Nine Mark V (45°) mountings for 6-inch guns, including three for the Mary Hill Battery, were also on order and three more, to replace the naval equipments at Barrett Point, remained to be ordered. But delivery dates for these mountings appeared to be "very problematical". Meanwhile, the deteriorating European situation following Hitler's successful campaigns in Scandinavia, the Low Countries and France meant that the requirements for both Albert Head and Mary Hill retained a lower priority than those for other batteries on the East Coast.³² The supply situation worsened during the Battle of Britain because the production of anti-aircraft equipment had to take precedence over that of coast defence mountings.³³

In October 1940 Major-General H. D. G. Crerar, who had succeeded Anderson as C.G.S., prepared a realistic assessment of the coast defences for the Minister of National Defence, J. L. Ralston. With reference to Esquimalt-Victoria the report stated:

The present gun defences provide a reasonable degree of protection for the important installations and facilities at Victoria and Esquimalt against the approved scale of attack by enemy naval vessels. The most important deficiency is the absence of modern counter-bombardment guns. This situation is not likely to be improved before 1942.³⁴

³⁰ M.G.O. to C.G.S., 6 Feb 1940, *ibid.*

³¹ D. of M. & A. to D.M.O. & I., 19 Jul 1940, *ibid.*

³² *Ibid.* and D.M.O. & I. to D. of M. & A., 20 Jul 1940, on same file.

³³ War Office to Canadian Military Headquarters (London) [C.M.H.Q.], 8 Aug 1940, *ibid.*

³⁴ Statement on "Coast Defences", C.G.S. to Minister of National Defence, 9 Oct 1940, *ibid.*

The C.G.S. pointed out that the date of delivery of the "ultimate" armament for Albert Head (three 9.2-inch guns on 35° mountings) continued to be "most uncertain". Ammunition for the counter-bombardment battery was also "somewhat below the approved scale" (400, as opposed to 500 rounds) and was obsolete. The 6-inch battery at Mary Hill was, of course, still equipped with the old 15° mountings and its ammunition supply was considerably below the approved scale (398, as opposed to 1,500 rounds). The situation with respect to defence electric lights — that is, the searchlights necessary to illuminate areas covered by the guns — was not considered satisfactory, but was expected to improve in the near future. Under the "Ultimate Plan" seventeen lights were required for the Esquimalt-Victoria fortress.

The C.G.S. also reported that all of the "ultimate" armament had been installed in the Vancouver defences with the exception of one 6-inch gun at Point Grey and one 6-pounder twin to replace the two 12-pounders at Narrows North. Existing defences, still lacking adequate lights, were believed to provide "a satisfactory degree of protection against attack by enemy naval vessels". Two coast defence equipments, when available, would replace the old 18-pounders at the Steveston examination battery. Apart from a serious deficiency in the supply of ammunition and lack of adequate lights, the situation at Yorke Island was acceptable. At Prince Rupert the most important concern was, again, the lack of modern counter-bombardment guns, which were not expected to be available until 1942. However, General Crerar stated that existing gun defences provided "a reasonable degree of protection" against naval vessels. It was also significant that the Royal Canadian Navy had decided to delay installation of an anti-submarine boom pending further developments in the Far East.³⁵

In the summer and autumn of 1940 the policy of National Defence Headquarters with respect to the Pacific Coast quite properly reflected official anxiety over recent developments across the Atlantic. With Hitler in control of nearly all of the western European coastline, providing ample bases for his submarines and surface raiders, the Atlantic Coast naturally assumed very great importance. Adequate Canadian protection of the ports from which Allied convoys operated was clearly essential.

Nevertheless, neither Canada nor the United States could ignore the growing threat of Japanese aggression in the Pacific. Accordingly a series of decisions were taken with the object of strengthening the defences on

³⁵ *Ibid.*

the Pacific. Following the creation of Atlantic Command in August 1940, a parallel organization was set up in October with Major-General R. O. Alexander, D.S.O., as General Officer Commanding-in-Chief Pacific Command, comprising all of British Columbia, Alberta, the Yukon Territory and the District of Mackenzie. One result of the reorganization was increased emphasis on the policy and principles governing the disposition of coast defence infantry and machine gun units at defended ports.³⁶

Simultaneously, Canada and the United States were taking steps to achieve closer co-ordination of their continental defences. In the autumn of 1940 the newly-formed Permanent Joint Board of Defence completed a "basic plan" covering Newfoundland, the Maritime provinces and New England in the east, and Alaska, British Columbia, Washington and Oregon in the west. This plan included provision for "joint use of Canadian and United States bases by sea and air forces of both countries" if the United States entered the war.³⁷ Preparation of the plan was facilitated by a joint reconnaissance on the West Coast. In mid-September the Canadian Deputy Chief of the General Staff (Brigadier K. Stuart, D.S.O., M.C.) and representatives of the Royal Canadian Navy and Royal Canadian Air Force joined American members of the Permanent Joint Board on Defence at Vancouver and performed a reconnaissance of the northwestern American states, British Columbia and Alaska.³⁸ At the end of the year a formal agreement between the Canadian and American governments provided for an exchange of facilities for public vessels and service aircraft of both countries in the waters and over the territory of each country in specified circumstances. These included

passage, upon local notification, of United States public vessels through Canadian waters and United States service aircraft over Canadian territory while en route between United States ports and Alaska . . . [and] visits of public vessels and service aircraft of either of the two countries to ports of the other country, upon local notification, when engaged on matters connected with the joint defence of Canada and the United States.³⁹

³⁶ P.A.C., W.D., D.M.O. & I., December 1940: Appendix 4, C.G.S. to G.O.C.-in-C., Pacific and Atlantic Commands, 20 Dec 1940.

³⁷ P.A.C., W.D., Deputy Chief of the General Staff [D.C.G.S.], N.D.H.Q., 11 Oct 1940; W.D., D.M.O. & I., October 1940: Appendix 8, Telegram GS 0812, Defensor [N.D.H.Q.] to Canmilitary [C.M.H.Q.], 14 Oct 1940. See C. P. Stacey, *Arms, Men and Governments: The War Policies of Canada 1939-1945* (Ottawa, 1970), pp. 349-54. The composition of the Canadian Section of the Permanent Joint Board on Defence was: Mr. O. M. Biggar (chairman), Brigadier K. Stuart, Captain L. W. Murray, Air Commodore A. A. L. Cuffe and Mr. H. L. Keenleyside (secretary).

³⁸ W.D., D.C.G.S., 17 Sep 1940.

³⁹ W.D., D.M.O. & I., December 1940: Appendix 5, copy of Canadian-American Agreement of 16 Dec 1940.

This agreement speedily led to local arrangements to co-ordinate the defences of Esquimalt-Victoria with those of Puget Sound.⁴⁰

Active American participation in these matters brought some alleviation to the Canadian problem of obtaining coast defence armament. Since there was no prospect of early deliveries of equipments on order from the United Kingdom, and since Canada lacked the means to produce these herself, it was inevitable that she would turn to her powerful neighbour for assistance. In point of fact, the possibility of Canada obtaining American coast defence guns had been considered even before the Permanent Joint Board on Defence was formed. Discussing American equivalents in June 1940, the Director of Mechanization and Artillery had stated: "There is no known equivalent for the 9.2 in. but the [American] 8-in. railway mounting with fire control system might be accepted as an equivalent."⁴¹ Surplus 10-inch American equipments were available, and some of these were afterwards installed in Atlantic Command. When the matter came up again for discussion at National Defence Headquarters, in March 1941, consideration was even given to the possibility of procuring American 155-mm guns of First World War design. But the C.G.S. (Crerar) ruled in favour of the 8-inch guns "because of their greater range and heavier shell."⁴²

Meanwhile, the Canadian and American authorities had approved recommendations of the United States War Plans Division "for the provision and despatch to Canada of certain armament to augment [the] coast defences of [the] Straits [sic] of Juan de Fuca."⁴³ However, the General Staff at Ottawa recognized that "certain political difficulties could be foreseen" if United States service detachments were to accompany the armament on a "permanent basis".⁴⁴ These fears were allayed when the United States War Department assured Canada that the role of any such detachments would be restricted to instructing Canadian personnel in its operation and maintenance, that the detachments would return to the United States at the end of this task and that, thereafter, "periodic visits would be required only to make physical checks of the equipment in

⁴⁰ W.D., D.C.G.S., 30 Sep 1940.

⁴¹ D. of M. & A. to M.G.O., 22 Jun 1940, H.Q.S. 3338, vol. 4. It was afterwards estimated that it would take Canada eight months to convert 60-pounders to coast defence equipments. C.G.S. to M.G.O., 14 Mar 1941, *ibid.*, vol. 5.

⁴² *Ibid.*, C.G.S. to M.G.O., 14 Mar 1941.

⁴³ W.D., D.C.G.S., 26 Dec 1940.

⁴⁴ *Ibid.*

accordance with the United States War Department regulations."⁴⁵ The Canadian Minister of National Defence approved these arrangements in January 1941.

Throughout the spring and summer of 1941 joint preparations were made to strengthen liaison and co-ordination of Canadian and American defences on the Pacific Coast. The G.O.C.-in-C. Pacific Command and his staff officers were authorized to deal directly with local military authorities of the United States (Lieut.-General John L. De Witt and Headquarters Fourth United States Army) on "matters of interest affecting both Commands".⁴⁶ One of General Alexander's artillery officers was appointed liaison officer with the American headquarters; since the United States was still not at war, it was expressly provided that "no publication should be given to this appointment".⁴⁷ Arrangements were also made for better communications by laying a cable between Headquarters Pacific Command, at Esquimalt, and the Headquarters of Harbour Defences, Puget Sound, at Seattle. The United States provided the cable and the line was laid by the Royal Canadian Corps of Signals. Subsequently another cable was laid between the Canadian fortress, at William Head, and Port Angeles, Washington.⁴⁸

In June 1941 the Canadian government approved service recommendations for the construction of another counter-bombardment battery, at Christopher Point, armed with two American 8-inch railway guns, to guard the southern and western approaches to the Esquimalt-Victoria fortress. Installation of this battery was regarded as "an interim measure, pending installation of ultimate equipment at Mary Hill and Albert Head".⁴⁹ The American equipments, together with their range-finding system, reached Victoria early in August and were converted to fixed mountings in the following month. National Defence Headquarters approved the expenditure of \$11,000 to purchase seventy-four rounds of ammunition from the United States for immediate training in calibra-

⁴⁵ *Ibid.*, 9, 12 Jan 1941; W.D., D.M.O. & I., September 1941: Appendix 2, C.G.S. to G.O.C.-in-C. Pacific Command, 10 Sep 1941. N.D.H.Q. preferred to do its own installation of American 10-inch coast defence guns in Atlantic Command: "The responsibility of U.S. contractor would end on transfer to site or dock specified." W.D., D.C.G.S., 3 Feb 1941. These guns were despatched to the East Coast from Seattle.

⁴⁶ W.D., D.M.O. & I., 9 Mar 1941; W.D., Vice Chief of the General Staff [V.C.G.S.], 8 Mar 1941.

⁴⁷ W.D., D.M.O. & I., 14 Apr 1941.

⁴⁸ *Ibid.*, 14 May, 25 Sep 1941.

⁴⁹ *Ibid.*, 13 Jun 1941. For this reason a lease, rather than purchase of the battery site, was considered sufficient.

tion.⁵⁰ The 8-inch guns at Christopher Point were capable of firing 200-pound shells a distance of 23,500 yards. They were thus able to cover the southern shore of the Strait of Juan de Fuca to a point west of Port Angeles. These installations were supplemented, on the American side of the strait, by another battery of two 8-inch railway guns and two batteries manning four 155-mm guns.⁵¹

Although not within the chronological limits of this paper, it may be noted that another battery of two American 8-inch railway guns was afterwards erected at Fairview Fort to supplement the Prince Rupert defences. The "normal range" of these guns, reported ready for action in June 1942, was 18,000 yards.⁵² As in the case of Christopher Point, the guns at Fairview were eventually dismantled and returned to the United States at the end of 1944.

From this brief review of official Canadian, British and American attitudes towards the coastal defences of British Columbia we may turn to the realities of the situation as they developed during the first two years of the war. In retrospect, it is of course clear that there never was any real threat of attack during this period. However, apart from the precautions considered necessary to deal with any such contingency, the batteries on the Pacific Coast performed an essential function in the control of wartime shipping through the Examination Service.

While this paper is primarily concerned with military aspects of the topic, it should be noted that from the beginning of the war the R.C.N. had little more than token forces on the Pacific Coast. There had been four destroyers (H.M.C.S. *St. Laurent*, *Fraser*, *Ottawa* and *Restigouche*) based at Esquimalt, but *St. Laurent* and *Fraser* left for the more exposed East Coast at the end of August 1939 and the *Ottawa* and *Restigouche* followed in December. After these departures only three minesweepers (H.M.C.S. *Armentières*, *Comox* and *Nootka*), the training vessel *Skidegate* and some smaller craft remained in Pacific waters.

H.M.C. ships *Nootka* and *Comox* remained on minesweeping duty at Esquimalt, while the *Armentières* was being used temporarily as an examination vessel at York [sic] Island, and seven additional vessels were requisitioned for examination services at the principal western ports. The *Skidegate* took up harbour duties at Esquimalt, and ten Fishermen's Reserve vessels were at

⁵⁰ W.D., V.C.G.S., 11 Aug 1941.

⁵¹ P.A.C., *Fort Record Book: Christopher Point Bty, B.C.* This fort was manned by the 68th Coast Battery, R.C.A., with a total strength of 137, including two officers.

⁵² P.A.C., *Fort Record Book: Fairview Fort.* Originally named Fort Kaien, manned by the 9th Heavy Battery, R.C.A., later redesignated "A" Troop, 9th Coast Battery, 17th (North British Columbia) Coast Regiment, R.C.A.

once assigned to patrol duties: four of them in the areas off Esquimalt, another four in the vicinity of the Queen Charlotte Islands, and two on the west coast of Vancouver Island.⁵³

The Examination Service necessitated particularly close co-operation between the R.C.N. and the artillery of the coast defences. While the navy was responsible for identifying and controlling shipping in the vicinity of ports, the examination batteries provided the "teeth" to enforce naval regulations. In general, incoming warships were challenged and cleared by a Port War Signal Station (P.W.S.S.), manned by the R.C.N., with a Selected Military Officer (S.M.O.) transmitting the necessary orders to batteries. Identification and control of all shipping not dealt with by the P.W.S.S. was handled by an Examination Vessel in direct communication with the defences. Suspicious vessels could be ordered to an Examination Anchorage, under the guns of the Examination Battery or a detaining battery.

Examination Services were in effect at Esquimalt-Victoria, Yorke Island, Vancouver, Steveston and Prince Rupert from 2, 3, 8 September, 13 October and 2 November 1939, respectively.⁵⁴ An adequate description of the numerous, varied and at times amusing problems that arose in connection with these services would fill a large volume.

In the Esquimalt-Victoria Fortress, the Mary Hill Battery combined counter-bombardment and close defence roles with that of an Examination Battery. Orders for the battery pointed out that

Tugs with heavy tows . . . are very much inconvenienced if they have to contact the Victoria Examination Vessel which is sometimes far to the eastward . . . Great care should be taken to signal both the Victoria Examination Vessel and F.C. [Fire Commander] to the effect that the tug has permission to enter Victoria without Naval Examination. Failure to do this will result in a lot of confusion and puts the Examination Vessel in a very difficult position.⁵⁵

⁵³ G. N. Tucker, *The Naval Service of Canada: Its Official History* (Ottawa, 1952), vol II, p. 9. In April 1939 the Minister of National Defence gave the strength of the Fishermen's Reserve on the Pacific Coast as 40 skippers and 160 seamen, all of whom had been given 30 days' training. House of Commons, *Debates*, 26 Apr 1939, p. 3254.

⁵⁴ W.D., D.M.O. & I., 2,5,9 Sep, 13 Oct, 2 Nov 1939; W.D., 85th Heavy Battery, R.C.A., C.A.S.F., 3 Sep 1939; W.D., Headquarters Prince Rupert Defences, 2 Nov 1939.

⁵⁵ *Fort Record Book of Mary Hill Battery, B.C.*, Appendix "C": "Examination Service". See, also, printed *Notice to Mariners: Ports of Esquimalt, and Victoria, B.C.: Public Traffic Regulations* by Commanding Officer Pacific Coast with concurrence of G.O.C.-in-C. Pacific Command, 1 Dec 1941, *ibid.*

At Vancouver, throughout the period under review, Point Grey Battery fulfilled the role of an Examination Battery. Due to its primary counter-bombardment task, this battery was located at the southern entrance to Vancouver Harbour, while major shipping invariably followed the deeper, northern channel into port. The result was that the Examination Vessel was normally on patrol at a distance of nearly four miles from the battery, a long range for this purpose. Lacking radar, and with no searchlights until early in 1941, the battery operated under severe hardships, particularly at night and during foggy weather. In October 1941 the situation was alleviated by the construction of a small "heave to" battery (one 18-pounder) at Point Atkinson, in close proximity to the Examination Vessel at the northern entrance to Burrard Inlet.⁵⁶

The northern batteries employed on Examination Service also had problems peculiar to their location. In September 1939 the officer commanding Yorke Island Battery reported:

In regard to the effectiveness of the battery at night, unless the night is clear with moonlight, a ship with no lights can not be seen. Several nights have been hazy with light fog and it has been impossible to see the examination ship or to communicate with her by lamp. This is a distinct disadvantage. During an engagement at night, no observations could be seen unless the target was illuminated.⁵⁷

In February 1940, dealing with the by then familiar problem of a ship failing to observe regulations in stormy weather at night, the Examination Vessel signalled the Yorke Island Battery to fire a stopping round. The battery could see only a faint light at intervals, but fired a shot at 7,300 yards which was unobserved. The Examination Vessel then had to chase the ship for 18 miles before apprehending her.⁵⁸ At Prince Rupert, where the Barrett Point Fort was the Examination Battery, masters of American vessels complained when warning rounds were fired across their bows.⁵⁹ In all cases where 6-inch batteries were used in an examina-

⁵⁶ Author's recollections; P.A.C., *Fort Record Book: Point Grey Bty.* "Owing to the presence, from tide to tide, of Fraser River water over the very extensive Spanish Banks [beneath Point Grey] . . . there is a decided tendency toward Fog or Mist especially over these banks, except during the summer season." (*Ibid.*)

⁵⁷ W.D., 85th Heavy Battery, R.C.A., C.A.S.F., September 1939: Appendix "G", Report by officer commanding, 11 Sep 1939. Although the Yorke Island battery was a unit of the 15th (Vancouver) Coast Brigade, R.C.A., it remained under the direct control of the District Officer Commanding, Military District No. 11, with headquarters at Victoria. (W.D., D.M.O. & I., 24 Apr 1940).

⁵⁸ W.D., 85th Heavy Battery, R.C.A., C.A.S.F., February 1940: Report by officer commanding to Headquarters Military District No. 11, 12 Feb 1940.

⁵⁹ W.D., 102nd (North British Columbia) Heavy Battery, R.C.A., C.A.S.F., November

tion role, ammunition was conserved by having 6-pounders fire "heave to" rounds. However, it was commonly understood that, apart from other punitive action, owners of ships transgressing the regulations were required to pay the cost of stopping rounds.⁶⁰

As we have seen, the principal responsibility of the artillery in the coast defences was to guard against naval attacks. However, it was clear that in a tri-dimensional war air defence could not be ignored. Here, again, problems of priorities and supply imposed many difficulties. In March 1939 the Chiefs of Staff Committee had agreed that, in a war with the Axis Powers, the Atlantic Coast would be more liable to air attack than the Pacific. The reasons given were:

- (a) The German Navy have not the same strategic role as the Japanese Navy and ships capable of carrying aircraft are liable to be despatched to sea, or may be already in waters, from which their aircraft can operate against the Atlantic Coast.
- (b) The Atlantic Coast is closer to potential enemy bases than the Pacific Coast.
- (c) Germany has developed airships capable of crossing the Atlantic.
- (d) The Air Forces available for attack on [the] Atlantic Coast are larger than those on the Pacific Coast.⁶¹

There was also the strategic necessity of defending the naval base at Halifax.

In any case, modern anti-aircraft and searchlight equipments, like coast defence guns, were in very short supply when the war began. National Defence Headquarters had ordered eighteen 3.7-inch guns from the United Kingdom, but realized that delivery was uncertain.⁶² It was for this reason that the mobilization of anti-aircraft and searchlight regiments was delayed. (See, above, page 5). When 3.7-inch guns were received in 1940 they were allocated to the defence of Halifax.⁶³

Very little progress was made with the problem of anti-aircraft armament during the period covered by this paper. (Table III shows the "ulti-

1939: Appendix I, report by officer commanding, 18 Nov 1939, on incident concerning the United States S/S *North Coast*.

⁶⁰ Author's recollections.

⁶¹ P.A.C., Memorandum of Chiefs of Staff Committee to Minister of National Defence, 11 Mar 1939, H.Q.S. 3338, vol. 3.

⁶² P.A.C., D.M.O. & I. to C.G.S., 3 Oct 1939, H.Q.S. 3545, vol. 3.

⁶³ W.D., D.M.O. & I., April 1940: Appendix 1, "Consolidated Survey of Activities of the Militia Service from 23rd Jan. to 31st March, 1940", dated 30 Apr 1940.

TABLE III
 "ULTIMATE ALLOTMENT" AND ANTI-AIRCRAFT GUNS
 AVAILABLE ON THE PACIFIC COAST (NOVEMBER 1941)

	<i>"Ultimate Allotment"</i>		<i>Available</i> <i>(November 1941)</i>
	<i>3.7-inch A.A.</i>	<i>40 mm Bofors</i>	
Esquimalt-Victoria	16	12	2 x 13-pdrs
Vancouver	8	0	0
New Westminster	8	0	0
Prince Rupert	8	4	0
Ucluelet	0	2	0
Coal Harbour	0	2	0
Bella Bella	0	2	0
Alliford Bay	0	2	0

NOTE: 16 A.A. searchlights (not to be confused with Coast Defence searchlights) were included in the "ultimate allotment" for Esquimalt-Victoria. None were available in November 1941.

SOURCE: War Diary, Director of Military Operations and Intelligence, National Defence Headquarters, November 1941: Appendix 2, Telegrams G.S. 0756 and 0773 to Canadian Military Headquarters (London), 9, 15 Nov 1941.

mate allotment" and the guns actually available on the Pacific Coast in November 1941.) As war with Japan grew imminent, the total anti-aircraft equipment on the West Coast comprised two obsolete 13-pounders in the Esquimalt-Victoria fortress. It was not until 1942 that the Albert Head, Christopher Point, Point Grey, Barrett Point and Fairview batteries were each allotted two of the new 40 mm Bofors light anti-aircraft guns. These were useful in a dual role: not only against low-flying aircraft but also against motor torpedo boats at ranges under 2,500 yards.⁶⁴

In passing, it may be noted that the R.C.A.F. made a significant contribution to the air defence of the Pacific Coast. At the beginning of the war, Western Air Command, with headquarters in Vancouver, had only two permanent and two auxiliary active squadrons at its disposal. A number of bases were quickly established and others improved. By the end of 1940 there were five squadrons on the Pacific, including bomber

⁶⁴ *Fort Record Books* of batteries concerned. With the exception of the obsolete 13-pounders, the only anti-aircraft defence in coast defence batteries in September 1939 was provided by Lewis light machine-guns of First World War pattern. (Author's recollections.)

reconnaissance squadrons at Ucluelet and Coal Harbour, on the west coast of Vancouver Island. A year later, after war had broken out with Japan, the R.C.A.F. had eight of its sixteen squadrons in Canada committed to Western Air Command. These included bomber reconnaissance squadrons at Prince Rupert, Alliford Bay in the Queen Charlotte Islands and Bella Bella on the mainland.⁶⁵ (See note on map of "Pacific Coast Defences".)

Official policies regarding "black-outs" and the division of service and civilian responsibilities were clearly defined in 1941:

The policy of the Government is that the general responsibility for Air Raid Precautions devolves upon the Department of Pensions and National Health and under Regulation 35 of the Defence of Canada Regulations (Consolidation) 1941 the control of lights, sounds and traffic is vested in the Minister of Pensions and National Health or any person duly authorized by him subject to the concurrence of the Senior Defence Official designated by the Minister of National Defence in each District in respect of orders which affect, or in any way relate to, the Naval, Military and Air Services. Consequently, the extent and scope of the Civilian A.R.P. organization and the limits within which that organization will function in any particular area are matters for the Department of Pensions and National Health to decide.

* * *

It follows, therefore, that the Chiefs of Staff will advise the Department of Pensions and National Health as to the general area in Canada which is considered exposed to air attack but the responsibility for organizing A.R.P. measures in any particular locality is a civil responsibility.

* * *

Initiation of the Air Raid Warning in the event of air attack by the enemy remains a Service responsibility and will be given by the Air Officer Commanding under whose jurisdiction the Air Detection Corps works and through whom Air Intelligence is assembled. The precautions consequent thereon insofar as they affect the civil population will be carried out under the direction of the Civil Authority, the Services remaining responsible for active anti-aircraft defence.⁶⁶

⁶⁵ *RCAF Logbook: A Chronological Outline of the Origin, Growth and Achievement of the Royal Canadian Air Force* (Ottawa, 1949), pp. 59-60, 62, 64, 67. Throughout this period Bomber Reconnaissance squadrons were mainly equipped with Blackburn "Shark" and Supermarine "Stranraer" aircraft. In December 1941 the numbers of aircraft on the strengths of squadrons at Alliford Bay, Bella Bella, Coal Harbour, and Ucluelet were 7, 4, 14 and 7, respectively. There were also two fighter squadrons at Patricia Bay equipped with "Kitty Hawks" and Bristol "Bolingbros". (Information from Directorate of History, National Defence Headquarters.)

⁶⁶ W.D., D.M.O. & I., November 1941: Appendix 1, C.G.S. to G.O.C.-in-C. Atlantic Command, 8 Nov 1941.

It was recognized that not only should there be “the closest liaison between the three Services”, but also “close co-operation” should be maintained between them and the appropriate provincial and municipal authorities.⁶⁷ These policies were put into effect in Pacific Command.

However, when Japan attacked Pearl Harbor, National Defence Headquarters took a calm view of the air threat to the Pacific Coast. The C.G.S. (Crerar) advised the G.O.C.-in-C. Pacific Command: “Possibility of air attack on west coast is considered remote. Nevertheless you will of course include this possibility in your precautions.”⁶⁸ His judgment was justified by later developments. The later Japanese balloon attacks directed against the west coast of North America were among the most futile projects of the entire war.⁶⁹

A review of some of the military problems of defending the Pacific Coast during 1939-41 is a reminder of the importance of foresight, improvisation and chance in warfare. How can these factors be related to the attitudes and realities of the situation?

The official Canadian attitude showed a shift of emphasis, and priorities, from the Pacific to the Atlantic at the start of the war. This policy was to be reversed after the Japanese attack at Pearl Harbor. But apart from the oscillation of attitudes, coast defence policy was determined by the realities of the supply situation — compelling postponement of the ambitious “Ultimate Plan” and adoption of the more restricted “Interim Plan”. Even the latter was not easily implemented although, insofar as coast defence guns were concerned, it had been completed, and the defences of Esquimalt-Victoria augmented by the Christopher Point Battery, before Canada was at war with Japan. As we have seen, there were still great deficiencies in anti-aircraft and searchlight equipment. On the other hand, the realities of the strategic situation in the Far East during 1939-1941 meant that Canadian authorities were able to take a calculated risk in the defence of British Columbia.

If there was no reality of threatened attack to our western shores, was all the time, money, manpower and resources devoted to their defence wasted?⁷⁰ The answer is clearly in the negative. Having regard to the

⁶⁷ *Ibid.*, January 1941: Appendix 12, C.G.S. to G.O.C.-in-C. Pacific Command, 20 Jan 1941.

⁶⁸ *Ibid.*, December 1941: Appendix 3, Telegram GS 0811, C.G.S. to G.O.C.-in-C. Pacific Command, 7 Dec 1941.

⁶⁹ Stacey, *Six Years of War*, pp. 177-8.

⁷⁰ On 27 Dec 1941 the total Army strength in Military District No. 11 (comprising British Columbia and the Yukon Territory) was 16,559. (Information from Directorate of History, National Defence Headquarters.) Most of these were employed on duties either directly or indirectly connected with coast defence.

threatening situation in the Pacific, as it appeared before and after the opening of the European war, no sensible government or military authority could afford to leave the west coast defenceless. Local public opinion would have demanded action. Moreover Canada could not ignore the attitude of the United States towards adequate defence of the North Pacific, and the difficult problem of maintaining Canadian neutrality if the United States were alone at war with Japan. Finally, there was the indispensable work of the coast defence artillery in the Examination Service at all major ports and key points on the Pacific.

In essence the attitudes and realities of coast defence resembled those of householders in relation to fire insurance. Even though the individual may never experience fire in his lifetime, can he afford to risk injury and destruction through failure to provide a reasonable safeguard? The steps taken by the Canadian authorities in 1939-41, if not the exaggerated posture of subsequent years, represented a reasonable solution to a very difficult problem on the Pacific.