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THIRTEENTH NAVAL DISTRICT  
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From: The Commandant, Thirteenth Naval District.  
To: The Vice Chief of Naval Operations.  
Subject: The Defenses of British Columbia.  
Enclosure: (A) Three copies of Digest of the Defenses of British Columbia.

1. Enclosure (A) portrays the position and strength of the defenses and defense forces of British Columbia as they existed May 1, 1943.

2. Transmission of this document by registered mail is necessary and is authorized.

Frank Jack Fletcher  
Commandant

*Hartwell C. Davis*  
Hartwell C. Davis,  
By direction.

Copy to:

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War Plans Officer, NWSF  
Commanding General, WDC  
Commanding General, ADC  
Naval Attache, Ottawa (via ONI)

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A DIGEST  
OF THE DEFENSES  
OF BRITISH COLUMBIA

\* \* \* \* \*

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COMPILED BY  
THE DISTRICT INTELLIGENCE OFFICE  
THIRTEENTH NAVAL DISTRICT

May 11, 1943

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## SOURCES OF INFORMATION

### ARMY, NAVY and AIRFORCE STRENGTH

Canadian Army, Navy and Airforce Headquarters, Vancouver,  
British Columbia.

### RADAR INSTALLATIONS

Royal Canadian Airforce Signal Corps.

### COMMUNICATIONS

Joint Service Command Board, Canadian West Coast Defenses.

### THE ALASKA HIGHWAY IN BRITISH COLUMBIA

District Intelligence Office Files., Thirteenth Naval District.

### FUEL OIL STOCKS

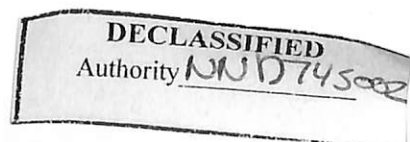
Navy - C.O.P.C. Headquarters, Vancouver.

Commercial - British Columbia Commercial Oil Companies.

## I N T R O D U C T I O N

The West Coast Defenses of Canada are under the command of Major General G. R. Pearkes. These defenses consist of all the military forces, Army, Naval, and Air situated in Western Canada. The military units of the three services located in Alberta are either in training or are reserve and Veteran units, being utilized for guard duty. They are not considered as being of importance from the standpoint of actual defenses of the coastal area.

The following pages portray the position and strength of the major military forces and equipment located in British Columbia on May 1, 1943, that could be counted upon to aid in the defenses of that province.



### THE ROYAL CANADIAN ARMY IN BRITISH COLUMBIA

The Canadian Army Headquarters for the Pacific Command are in Vancouver, British Columbia. The operational troops are headquartered at Victoria, British Columbia (6th Division), and Prince George, British Columbia (8th Division). The 6th Division has the responsibility for the defense of Vancouver Island; the 8th Division for the defense of the mainland.

The maps on pages 3 and 4 show the location of all major units of the Canadian Army in British Columbia and the total men available for carrying out the responsibilities of each division. The figures shown on these maps do not include training, hospital, or supply and special service units (when these latter are separately established).

The maps on pages 5 and 6 show the location of coastal defense, field and anti-aircraft guns operated by Army artillery and anti-aircraft units in the northern and southern parts of British Columbia.

In addition to the Bren anti-aircraft guns shown at Vancouver and Esquimalt, the Pacific Command of the Canadian Army has a total of 236 Bren Ground guns and 69 Bren anti-aircraft guns distributed throughout its units.

A general reserve of 180 percent of ammunition furnished the batteries is maintained. Three reserve bases have been established at Nanaimo (for Vancouver Island), Kamloops (for Southern British Columbia), and Prince Rupert (for Northern British Columbia). At Prince Rupert, due to the difficulty of transportation, a further distribution of ammunition is made so that the general reserve is only equal to the distributed ammunition.





8th Division  
Headquarters  
Prince George.  
Responsibility:  
defense of  
mainland.  
Total officers  
and men: 9,905

6th Division  
Headquarters  
Victoria.  
Responsibility:  
defense of Van-  
couver. Island.  
Total officers  
and men: 21,192

ROYAL CANADIAN ARMY  
FORCES IN BRITISH COLUMBIA

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Annette Island  
Total: 375

Prince Rupert  
Total: 1,530

Terrace  
Total: 2,735

Alliford Bay  
Total: 140

Prince George  
Total: 2,250

Bella Bella  
Total: 125

Coal Harbor  
Total: 150

York Island  
Total: 240

Vernon  
Total: 2,750

Tofino  
Total: 962

Ucluelet  
Total: 165

Port Alberni  
Total: 2,330

Vancouver  
Total: 3,900

Nanaimo  
Total: 3,340

Chilliwack  
Total: 680

Bamfield  
Total: 50

Boundary Bay  
Total: 550

Duncan  
Total: 150

Patricia Bay  
Total: 565

Victoria & Esquimalt  
Total: 7,985

LOCATIONS OF ARMY PERSONNEL  
IN BRITISH COLUMBIA  
AS OF MAY 1, 1943

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LOCATION AND STRENGTH OF MAIN GUN  
BATTERIES IN SOUTHERN BRITISH COLUMBIA  
AS OF MAY 1, 1943

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ALLIFORD BAY

2 - 40 mm Bofors  
2 - 75 mm

BELLA BELLA

2 - 40 mm Bofors  
2 - 2 in. Mortars  
2 - 75 mm

COLD HARBOR

2 - 40 mm Bofors  
1 - 75 mm  
2 - 2 in. Mortars

YORK ISLAND

2 - 6 in. (fixed)  
2 - 40 mm Bofors

TOFINO

8 - 40 mm Bofors  
4 - 3.7 in. A/A

UCLUELET

2 - 75 mm  
2 - 2 in. Mortars  
2 - 40 mm

ESQUIMALT

4 - 40 mm Bofors  
4 - 3.7 in. A/A  
7 - 12 pounders (2622 shells on hand)  
1 - 75 mm (599 " " " "  
5 - 6 in. (1197 " " " "  
3 - 9.2 in. (404 " " " "  
2 - 8 in. (390 " " " ")

VANCOUVER

2 - 18 pounders (485 shells on hand)  
2 - 12 " (763 " " " "  
2 - 25 " (636 " " " "  
2 - 4.7 in. (540 " " " "  
3 - 6 in. (695 " " " ")

NANAIMO

12 - 25 pounders

SEA ISLAND

16 - 40 mm Bofors  
4 - 3.7 in. A/A

PATRICIA BAY

8 - 3.7 in. A/A  
12 - 40 mm Bofors

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ANNETTE ISLAND

- 4 - 3.7" A/A
- 8 - 40 mm Bofors

LOCATION AND STRENGTH OF MAIN GUN  
BATTERIES IN NORTHERN BRITISH COLUMBIA

PRINCE RUPERT

- |                   |             |
|-------------------|-------------|
| 1 - 6 pounder     |             |
| 12 - 40 mm Bofors |             |
| 1 - 75 mm         |             |
| 4 - 25 pounders   | 1960 shells |
| 4 - 3.7 A/A       |             |
| 2 - 12 pounders   | 900 "       |
| 2 - 6 pounders    | 400 "       |
| 3 - 6"            | 693 "       |
| 2 - 8" U.S. Patt. | 299 "       |

PACIFIC (Armored Train)

- 2 - 75 mm
- 4 - 40 mm Bofors

TERRACE

- 14 - 25 pounders
- 2 - 24 pounders
- 8 - 40 mm Bofors

THE ROYAL CANADIAN NAVY IN BRITISH COLUMBIA

The Royal Canadian Navy on the west coast has its headquarters at Vancouver and its fleet based at Esquimalt and Prince Rupert.

The Navy offers small protection to the miles of coastline it must defend. As can be seen in the following map, its largest ship would be no match against one of the new enemy destroyers.

The vessels shown on the following map represent all armed vessels under the command of the Royal Canadian Navy as of May 1, 1943.



● PRINCE RUPERT

1 Large minesweeper (one Q.F. 4")  
2 Large minesweepers (12 pdr. H.A.)  
1 Yacht (12 pdr.)  
1 Yacht (6 pdr.)  
12 Fishery Reserve  
Patrol Vessels (L.M.G.)  
6 Fishery Reserve  
Vessels M/S (L.M.G.)  
1 Harbor Patrol Vessel (Depth Charges)

ROYAL CANADIAN NAVAL VESSELS  
DEFENDING WEST COAST OF CANADA

● ESQUIMALT

3 Auxiliary Cruisers (Under refit) (4 B.L. 6")  
2 Corvettes (temporarily detached) (1 B.L. 4")  
4 Large Minesweepers (1-3" H.A.)  
1 Large Minesweeper (1 A.F. 4")  
1 Yacht, A/S (Training) (1 A.F. 4")  
1 Yacht, A/S (one 12 pdr.)  
6 Fairmiles, A/S (3 pdr., twin .5 and D.C.)  
18 Fishery Reserve  
Patrol Vessels (L.M.G.)  
10 M/S Fishery Reserve  
Patrol Vessels (L.M.G.)  
2 Small fast yachts (Depth Charges)  
1 Small yacht (twin .5 and D.C.)

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## ROYAL CANADIAN AIRFORCE IN BRITISH COLUMBIA

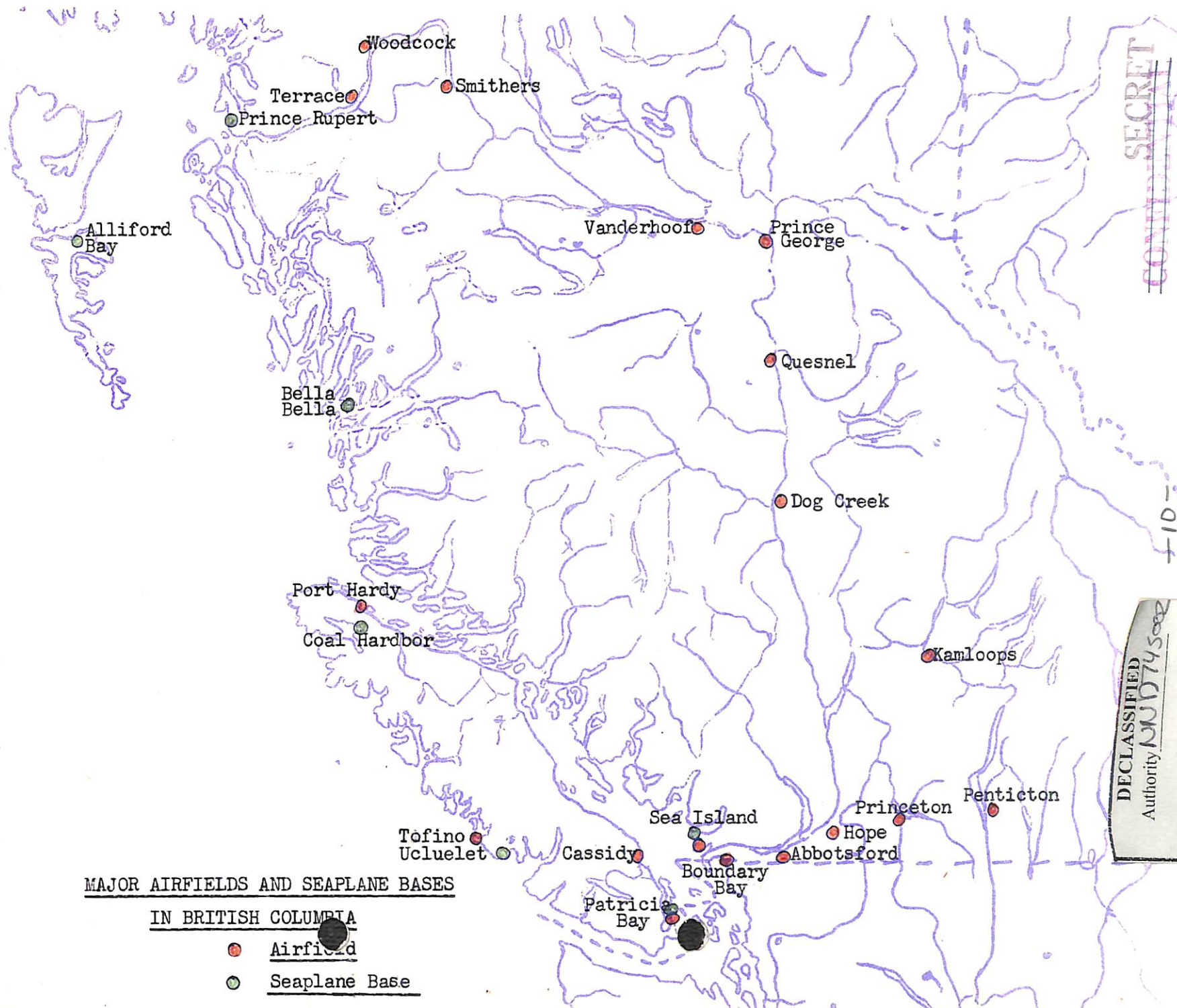
The Western Air Command has its headquarters located at Vancouver, British Columbia, and its operational command located at Victoria (#2 Group) and Prince Rupert (#4 Group). #4 Group includes all stations as far south as Bella Bella. #2 Group is in command of all other Royal Canadian Air Force stations in British Columbia.

### AERODROME FACILITIES

There are no planes as yet at Port Hardy. Runways here are finished, however, and some airforce personnel are stationed there. All other air harbors and aerodromes of all the operational stations under Royal Canadian Airforce control were serviceable May 1, 1943.

The map on page 10 shows the location of the major airfields and seaplane bases in British Columbia.

The map on page 11 shows the number and disposition of Royal Canadian Airforce aircraft as of May 1, 1943.



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Annette Island

4 Harvard  
13 Bolingbroke  
14 Kittyhawk

Prince Rupert

1 Canso  
10 Shark  
2 Stranraer  
1 Norseman

Alliford Bay

3 Stranraer  
1 Canso

Bella  
Bella

4 Stranraer  
1 Canso

Patricia Bay

19 Hurricane  
2 Harvard  
15 Lysander  
6 Bolingbroke  
2 Shark  
1 Electra  
3 Goose  
5 Norseman  
9 Stranraer  
11 Anson  
9 Oxford  
43 Hampden  
10 Beaufort

Sea Island & Vancouver

9 Stranraer  
26 Bolingbroke  
4 Crane  
2 Harvard  
2 Anson  
5 Hampden  
6 Hurricane  
5 Kittyhawk  
2 Shark  
1 Norseman  
1 Oxford  
1 Canso

Coal Harbor

4 Stranraer  
1 Canso

Port Hardy

Tofino

16 Kittyhawk  
15 Bolingbroke  
4 Harvard

Ucluelet

3 Stranraer

Boundary Bay

16 Hurricane  
2 Harvard  
1 Crane

NUMBER AND DISPOSITION OF AIRCRAFT (RCAF)

AS OF MAY 1, 1943

Airfield

Seaplane Base

Total Planes: 315

Combat: 199

Others: 116

### FUEL OIL STOCKS

The map on page 13 shows the location of the major stocks of fuel oil in British Columbia and the amount of fuel oil at each location. All stocks are computed by barrels (35 Imperial Gallons to the barrel).

The fuel oil shown in the Royal Canadian Navy tanks at Vancouver, Esquimalt, and Prince Rupert is described as "Admiralty Type". This is Bunker "C" Fuel Oil mixed with Diesel oil at a ratio of approximately 75/25. The Crude oil listed for Vancouver is that at refineries. The Fuel oil in the Commercial Stocks is Bunker "C" Fuel oil.

The stocks noted are as of May 1, 1943.



MAJOR FUEL OIL STOCKS IN BRITISH COLUMBIA  
(AS OF MAY 1, 1943)  
 (RCN) Royal Canadian Navy  
 (Comm) Commercial

(Stocks are computed by barrels —  
 35 Imperial Gallons to the barrel)

Prince Rupert  
 Fuel Oil (RCN) 69,226  
 Fuel Oil (Comm) 4,800  
 90 Octane (Comm) 191,278

Ocean Falls  
 Fuel Oil (Comm) 64,200

Powell River  
 Fuel Oil (Comm) 36,300

Port Alice  
 Fuel Oil (Comm) 22,500

Vancouver  
 Fuel Oil (RCN) 663,044  
 Fuel Oil (Comm) 76,835  
 Crude Oil (Comm) 257,145  
 Diesel Oil (Comm) 414,818  
 90 Octane (Comm) 115,315  
 87 Octane (Comm) 37,177

Esquimalt  
 Fuel Oil (RCN) 87,834  
 Fuel Oil (Comm) 33,175  
 90 Octane (RCN) 146,534  
 87 Octane (Comm) 2,447

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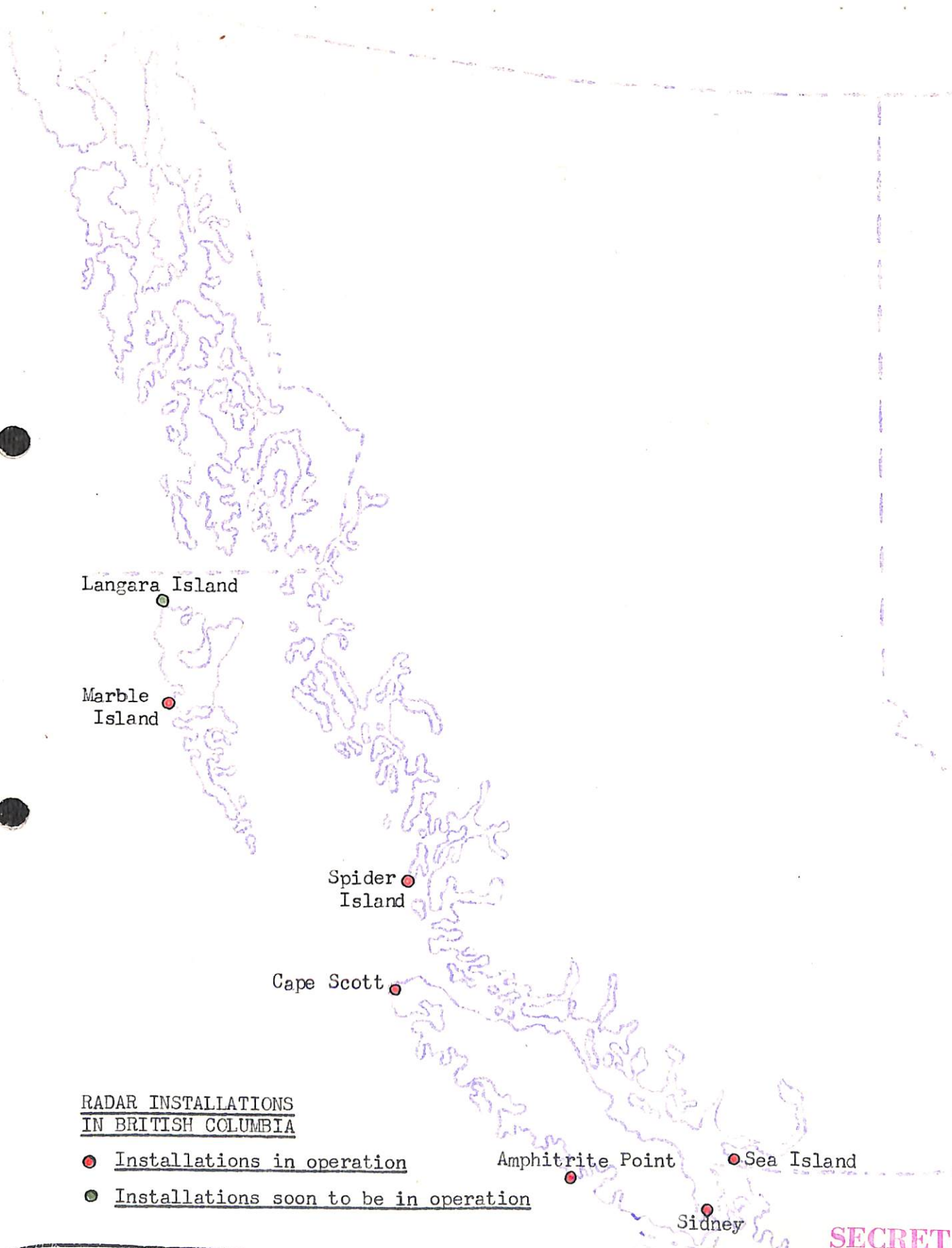
### RADAR INSTALLATIONS IN BRITISH COLUMBIA

With the completion of the radar beacon at Spider Island, military forces in British Columbia had six radars in operation on May 1, 1943. A seventh should be added to this list by the end of May, when the Langara Island set is completed. These stations are controlled by the Western Air Command, Royal Canadian Airforce.

Like the wireless stations, the radar installations have very little in the way of protection. They could be seized by an enemy agent without great difficulty. Those beacons that are not near military installations are provided no military protection.

A proposal was made sometime ago to install RDF equipment in the Government elevator in Prince Rupert. This would have a range of approximately 20 miles, and would cover the entrance to Prince Rupert Harbor. It would be used as a temporary measure until longer-range sets were available. The equipment is in Prince Rupert but there is no personnel to man it.

The map on page 15 shows the location of operating radars and the Langara Island installation now being completed.



Langara Island

Marble Island

Spider Island

Cape Scott

RADAR INSTALLATIONS  
IN BRITISH COLUMBIA

● Installations in operation

● Installations soon to be in operation

Amphitrite Point

Sea Island

Sidney

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## COMMUNICATION FACILITIES IN BRITISH COLUMBIA

### A. Outline of existing and planned facilities

There are five existing communication facilities which can be used by the military services in the defense of Western Canada. These are illustrated on the maps shown on pages 18 to 22. Separate maps have been prepared in order to give a clearer picture of the area covered by each communication system.

A single voice circuit between Vancouver and Prince Rupert has been completed. The lines from Prince George to Prince Rupert are ready for use. The final program which calls for three voice channels and two T/T channels has been delayed because of shortages of materials and lack of coordination but should be completed by September 1, 1943.

In addition to the above, there are some planned facilities under the Pacific Command Programme - namely, radio telephone communications from the mainland to Vancouver Island, Queen Charlotte Islands and Annette Island, as well as some additional telephone circuits on Vancouver Island and between important mainland points. These will be used solely by the military until the end of the war. They are shown on the map on page 23.

Negotiations are underway to make use of American mail planes to provide a daily mail service between Vancouver and Prince Rupert via

Annette Island. At the present time American planes are handling mail in this manner once a week.

B. Lack of Protection for wireless Station on Digby Island

The Canadian Government wireless station on Digby Island still remains unprotected. This station is a powerful short wave transmitter which was installed by the Canadian Government for the purpose of broadcasting to Japan and the Orient. It is believed that a great deal of damage could be accomplished by the enemy seizing this station for even a few hours. Its capacity to transmit and receive messages throughout the entire Pacific area, as well as its potential use in the broadcasting of false messages to the North American continent would make it a highly strategic objective for the enemy. It is situated on the highest point of a small, wooded island about one mile from Prince Rupert and could be easily held by a small force, once occupied. The tremendous areas of muskeg which constitute the majority of the land surface on these northern islands would make it impossible to approach the station from most directions. The station has its own generator and maintains a gasoline supply on hand that would keep it operating for approximately six months. A new short wave set is presently being installed.



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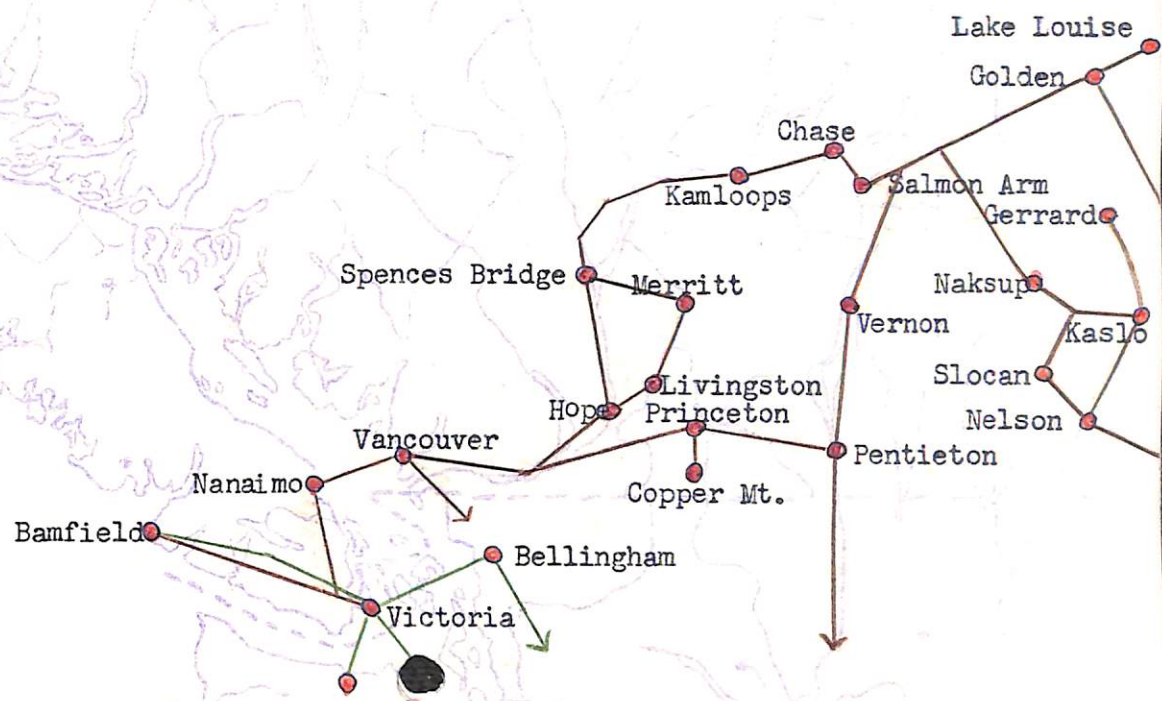
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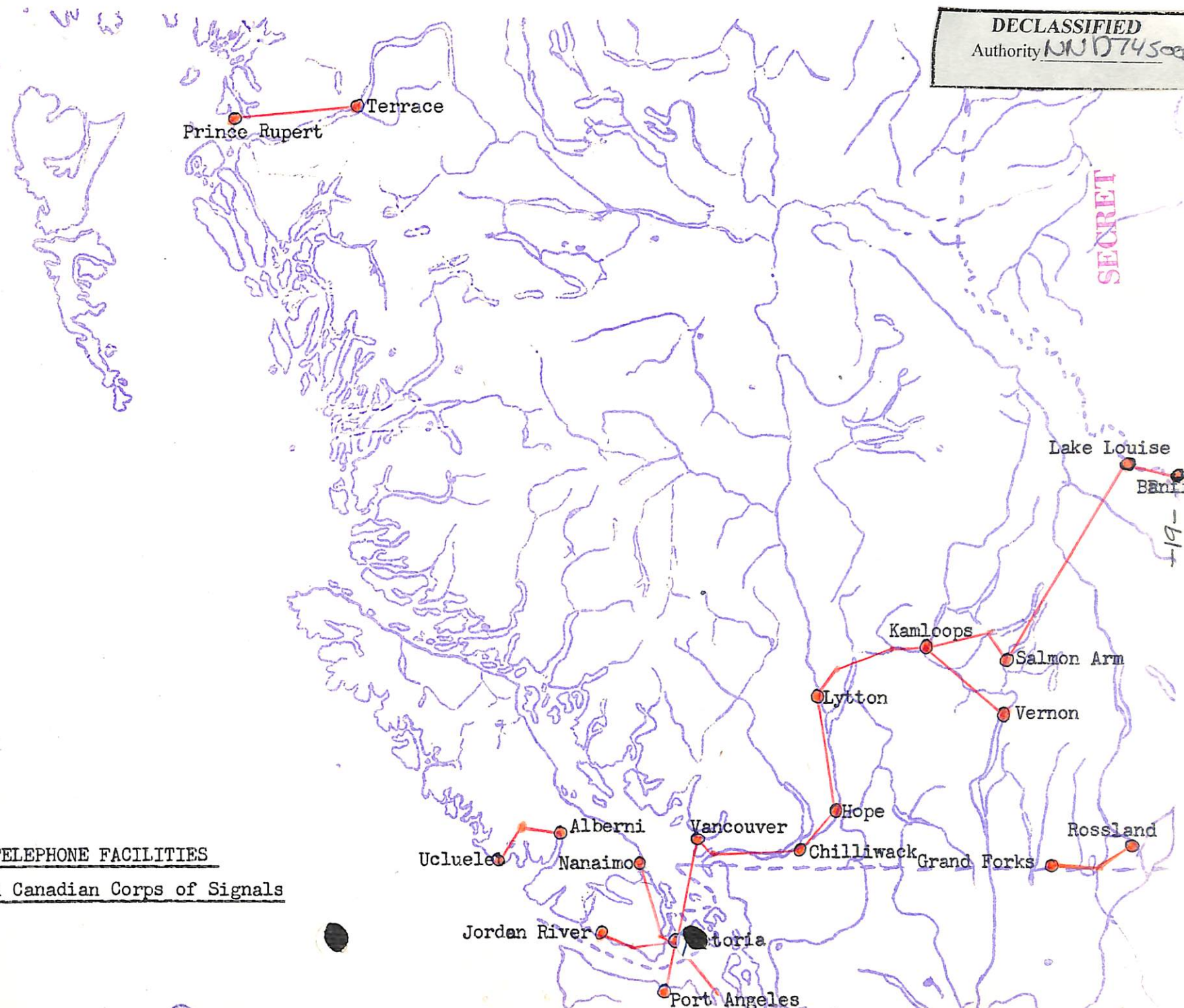
TELEPHONE CIRCUITS

Canadian Pacific Telegraph

Royal Canadian Air Force



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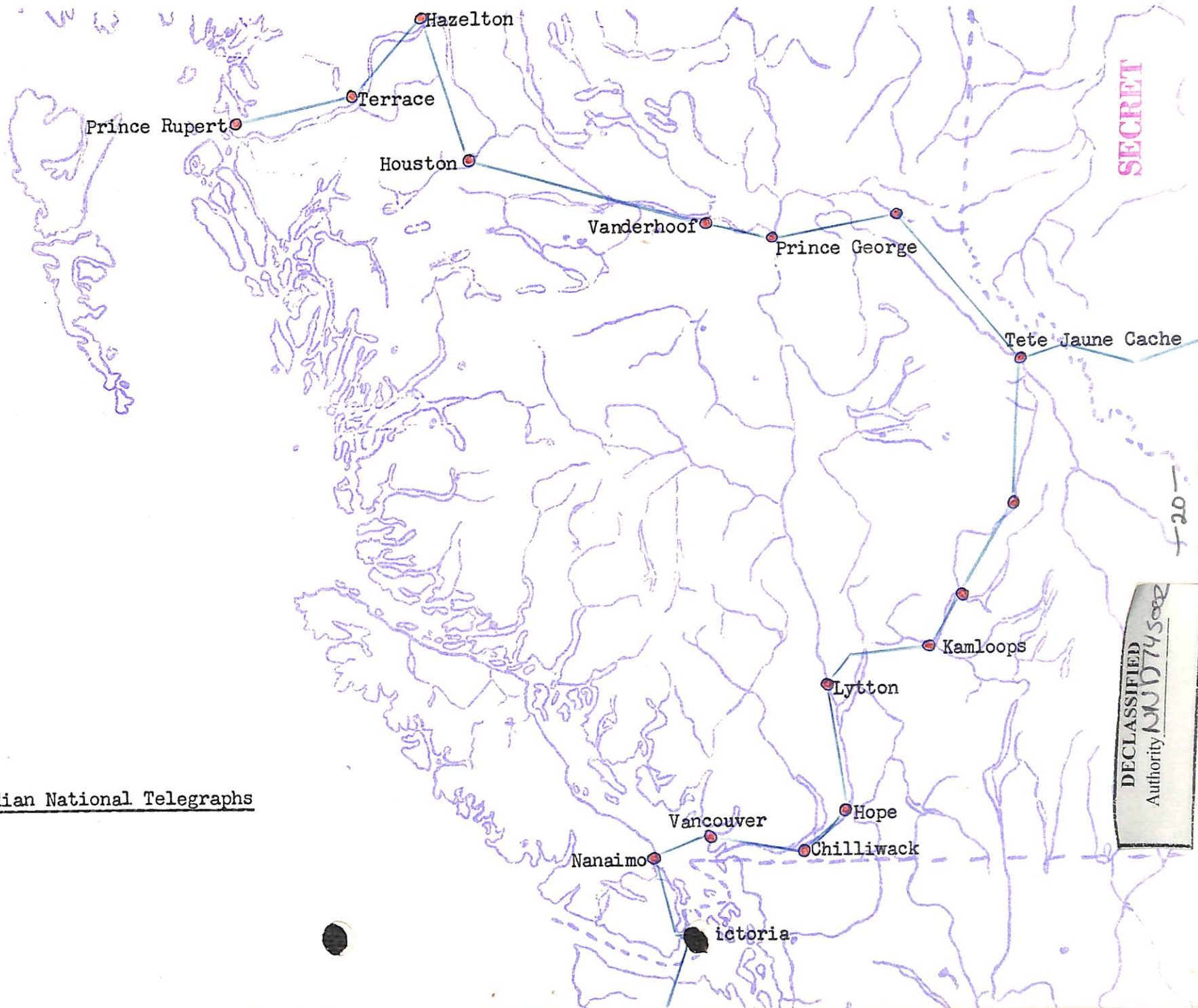
TELEPHONE FACILITIES

Royal Canadian Corps of Signals



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Canadian National Telegraphs

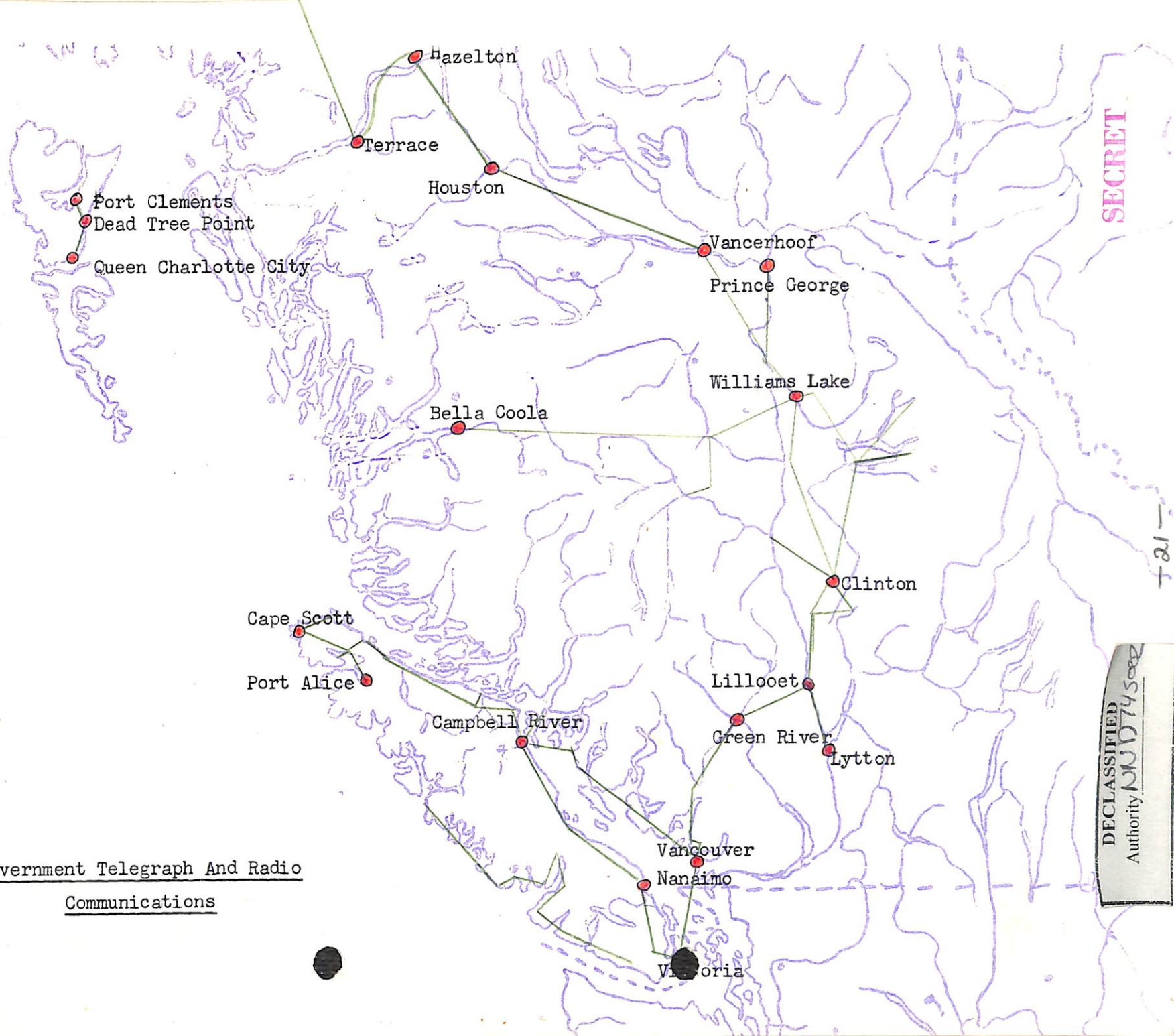


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Government Telegraph And Radio  
Communications

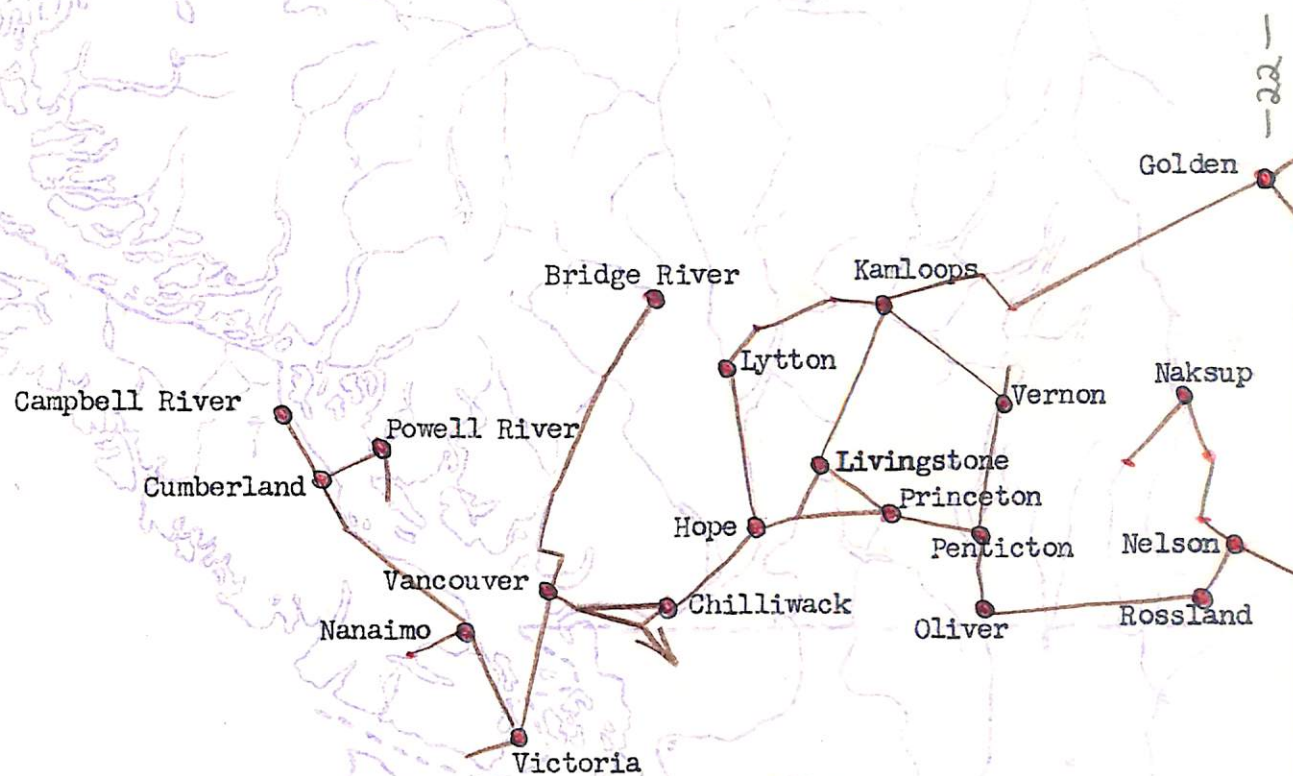


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TELEPHONE CIRCUITS

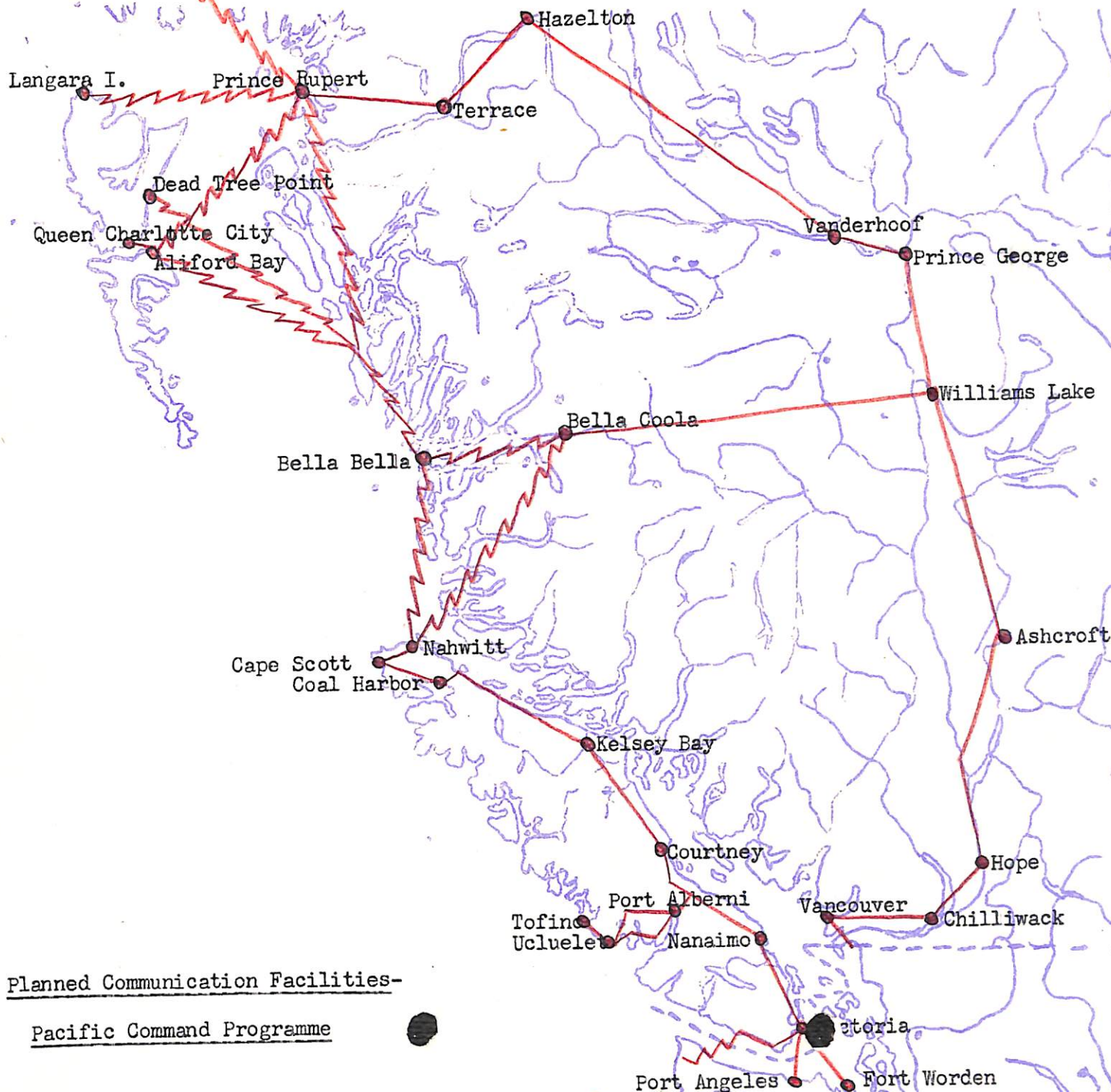
B. C. Telephone Company



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Planned Communication Facilities-

Pacific Command Programme



## HIGHWAYS IN BRITISH COLUMBIA

### ALASKA HIGHWAY

The Alaska Highway is being constructed in two sections in British Columbia. One section is from Dawson Creek to Fort Nelson, 293 miles, and the other from Fort Nelson to Lower Post, a distance of 340 miles.

The Army pioneer road is being primarily used now with some exceptions. Camps have been established for the contractors who will complete the new road. Each contractor is set to work on 10 to 20 miles of road. It is likely that two to three thousand men will be employed in this area. The contractors between Fort Nelson and the Liard River (215 miles from Fort Nelson) are Eastern Canadian firms.

Between Dawson Creek and Fort Nelson important bridges are to be erected over the Peace and Sikanni Rivers. The permanent route between Dawson Creek and Fort St. John has been fixed and grading is well advanced. There is much to be done, however, relative to the final location, grading, gravelling, etc. of the road between Fort St. John and Fort Nelson.

The Miller Construction Company (U.S.) is now erecting telephone poles and line along the road. They are making good progress, although, because of the frost, installation of the poles has been difficult. About 200 poles are being placed daily. Portable sawmills have been erected near the sparse stands of timber along the road to make use of this source of supply.

PRINCE RUPERT - TERRACE - CEDARVALE HIGHWAY

Provision is made in the 1943 appropriations of the British Columbia Provincial Government for a \$5,000,000 expenditure on the Prince Rupert-Terrace-Cedarvale Highway in British Columbia, which will link Prince Rupert at the coast with existing highway systems in the interior.



MAIN HIGHWAYS AND RAILROADS  
OF BRITISH COLUMBIA

- Highways
- - - Railroads

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