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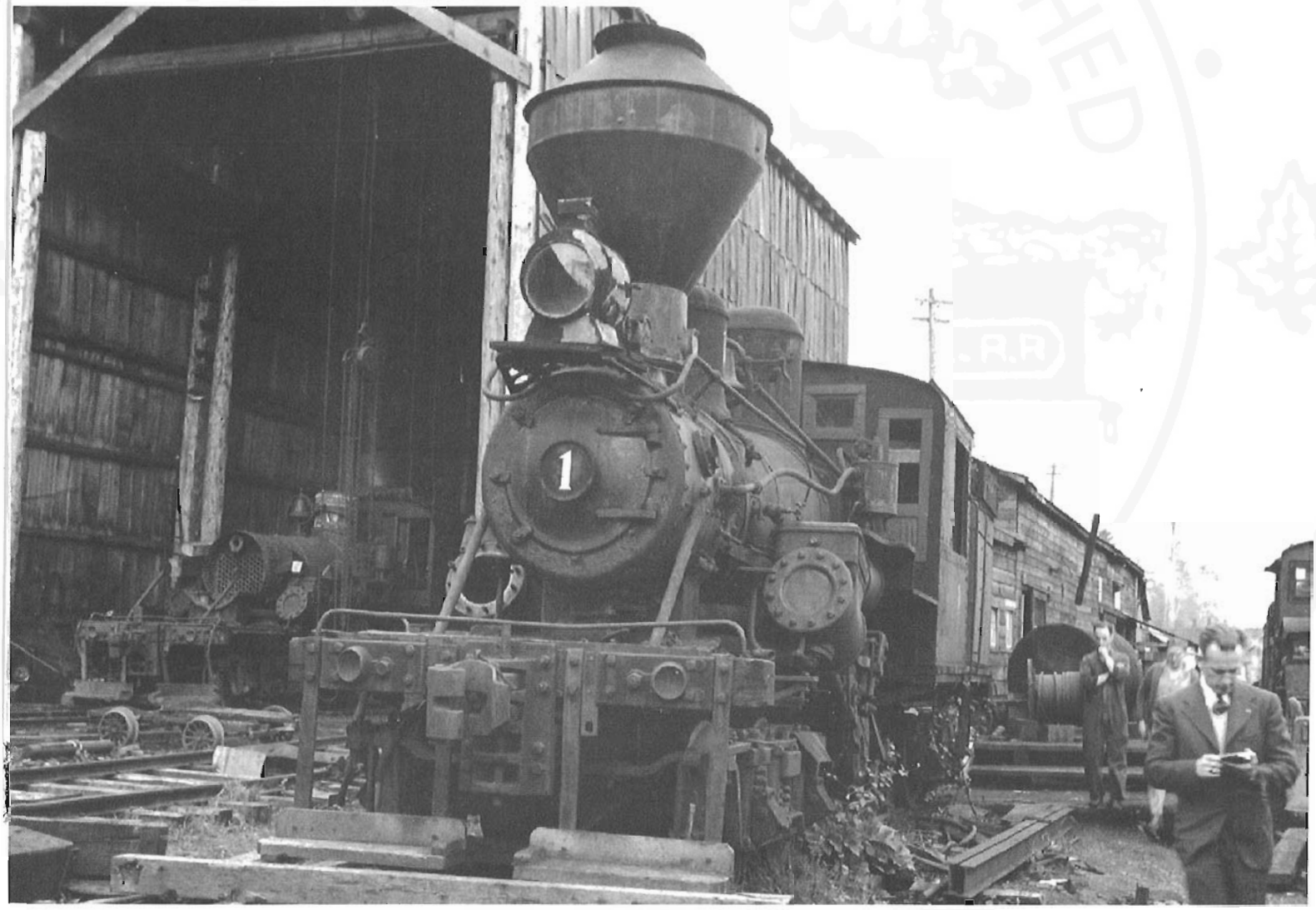

RAILWAYS IN THE QUEEN CHARLOTTE ISLANDS

PUBLISHED BI-MONTHLY BY THE CANADIAN RAILROAD HISTORICAL ASSOCIATION
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FRONT COVER: The shops of the Aero Camp in the Queen Charlotte Islands were well equipped. This post-war photo shows locomotive No. 1 outside the shops, with another Climax, with its smokebox removed, inside. The log framework and other parts of this building were still standing in 1971.

Maurice Chandler Collection.

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Canadian Rail is continually in need of news, stories,, historical data, photos, maps and other material. Please send all contributions to the editor: Fred F. Angus, 3021 Trafalgar Ave. Montreal, P.Q. H3Y 1H3. No payment can be made for contributions, but the contributer will be given credit for material submitted. Material will be returned to the contributer if requested. Remember "Knowledge is of little value unless it is shared with others".

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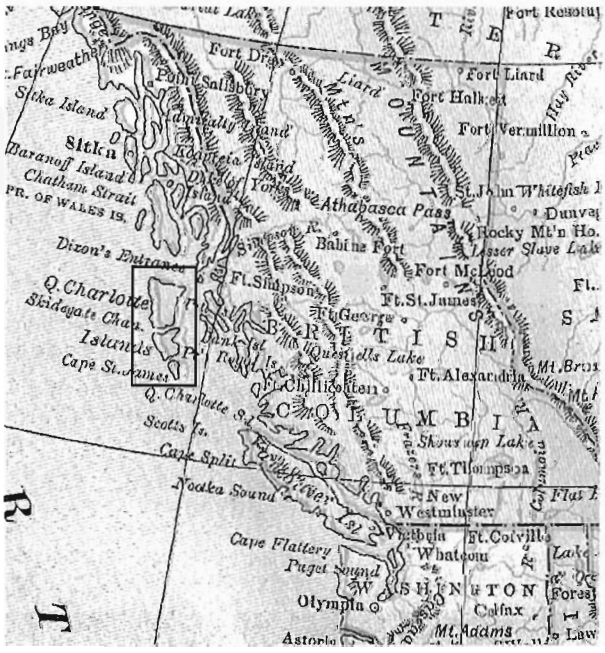
An Issue Devoted to Railways in the Queen Charlotte Islands



The Queen Charlotte Islands lie off the coast of British Columbia between 52 and 55 degrees north lattidude. They are quite remote and off the beaten track for the average tourist. One does not tend to associate these islands with railways, in contrast to Vancouver Island and the B.C. mainland. However the Queen Charlotte Islands were once the site of several interesting railways, of which the history, and even the existance, is virtually unknown to most rail historians.

We are very fortunate to have received three very detailed histories of railways on the Queen Charlottes. These were researched and written by Robert Turner, the well known historian of Western Canadian railways. In addition, we have the observations and photos by Steve Walbridge made during a 1995 visit to the islands, where he observed a suprising number of relics of the railway era.

Thus we present an issue of Canadian Rail devoted to these little known lines.

THE GOAL OF THE ASSOCIATION IS THE COLLECTION, PRESERVATION AND DISSEMINATION OF INFORMATION AND ARTIFACTS RELATING TO THE HISTORY OF CANADIAN RAILWAYS

Haida Gwaii's Steam Logging Railway

By Robert D. Turner

One of Canada's westernmost steam railways operated on the Queen Charlotte Islands or, as the Haida people prefer, Haida Gwaii. Situated 100 miles west of Prince Rupert and south of the Alaska panhandle, these beautiful, remote islands were the site of only one steam powered railway used in logging although there were several mining tramways and a logging operation that used wooden poles as rails to operate specially built tractors for hauling logs.[1]

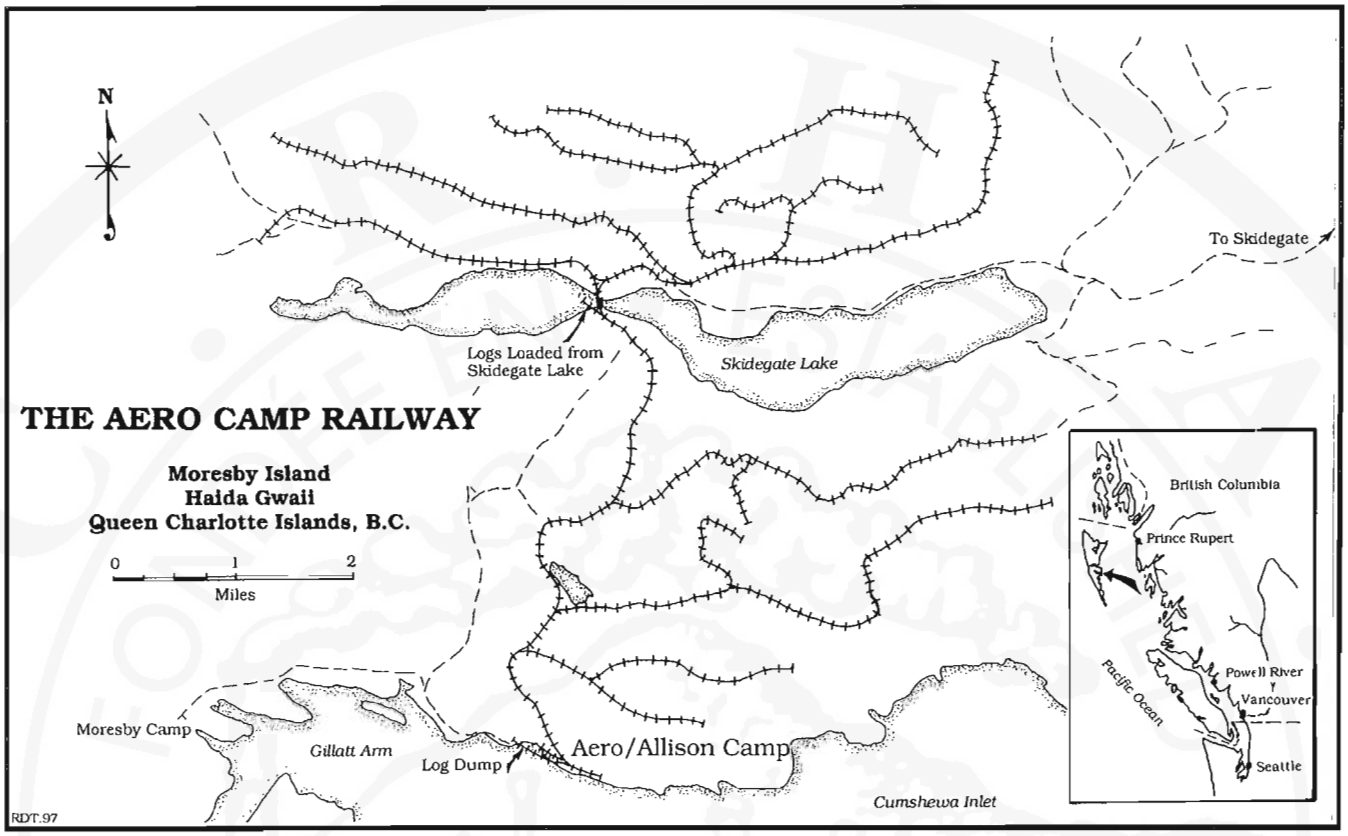
The magnificent stands of Sitka spruce brought loggers to the Queen Charlottes during both world wars because of it value in aircraft construction. It was light in weight, strong and resisted splintering. -BC Archives & Records Service, D-04659

There were many logging camps along the British Columbia coast but few were as isolated as the one on the north shore of Cumshewa Inlet on Morseby Island, one of the two major islands in the Queen Charlottes group. Even the closest rail connection, the Canadian National's line to Prince Rupert was across the stormy, exposed waters of Hecate Strait. This camp was opened in the mid-1930s by A.P. Allison who was an experienced coastal logger and who had previously operated a logging railway at Green Point Rapids. The story of the camp and the logging railway at Cumshewa Inlet illustrates both typical operations in a coastal logging camp and some additional features that were a result of its remote location, the nature of the timber being cut, the climate and topography in the area as well as the special market conditions that made the construction of the railway camp economically feasible. An additional interesting aspect of this camp is that many relics survive and of the eight locomotives used on the railway, one is preserved and the boiler from a second is used on another preserved locomotive.

The islands of Haida Gwaii are different in character from the central and southern coasts of British Columbia. Douglas-fir, the major commercial species on eastern Vancouver Island and adjacent areas of the mainland is not found on the Queen Charlottes. The forests are dominated by western hemlock, western red-cedar and Sitka spruce. In unlogged stands, the mature rain forest trees can range from four or five to ten feet in diameter and from 150 to 250 feet or more in height. Some large trees exceed even these gigantic sizes. The Haida used the forests as a source of many plant products and in particular used the cedar for building construction, canoes and for many other items essential to their daily lives.

Although the forests of the Islands have been logged commercially since the early 1900s and for local use in earlier times, the distance from major milling areas and markets restricted large scale use of the timber. During the First World War, a sudden need arose for aircraft-grade spruce that was abundant in parts of the Islands. The light weight spruce was used in aircraft construction because of its strength and resistance to splintering. Large operations, using modern steam machinery, but not railways, were established hurriedly to supply the spruce. A photo in *The Timberman* of May 1918 showed a scow loaded with 10 Willamette and Washington donkey engines being shipped to the Massett Timber Company for spruce production. Some of the first commercial logging along Cumshewa Inlet, the location of the logging railway that is the subject of this article and an area once the site of several major Haida villages, took place during the First World War. At that time, horses were used to drag the logs to beach where they were assembled into rafts. However, this burst of activity was short-lived. With the end of the First World War, the spruce market all but disappeared and most of the logging operations closed down and the loggers moved on. The remote logging camps simply could not compete with more accessible sites along the coast. After several years the Kelley Logging Company logged high-grade timber along the shores of Cumshewa using A-frames to yard the logs to the shore or log chutes to run the timber down to the inlet, where it was assembled into rafts. The logs were towed to Ocean Falls and other coastal mills.[2]

Gradually, commercial logging developed and expanded. By the late 1920s logging operations on the Charlottes had grown with the timber being sent to mills at Powell River and in the Vancouver area. The Depression of the 1930s hit coastal logging operators very hard but production continued in many camps and, as the 1930s drew to a close, there was, once again, an increase in



demand for top quality aircraft spruce particularly in England. It was not until the 1930s that an operation, large enough to support a railway, was established on Moresby Island. The 20 years of railway logging operations that followed, and the subsequent history of some of the equipment, is the basis of this article.

A.P. Allison arrived on the Queen Charlottes in 1926 and worked as a log buyer and then established his own logging operations and bought a mill at Queen Charlotte City.[3] In 1933, the A.P. Allison Logging Company moved its operations from the Queen Charlotte City area on Graham Island to the north shore of Cumshewa Inlet and in the next few years developed the only logging railway on the Islands. The camp was known as Allison Camp and later was renamed Aero Camp. Allison had about two square miles of timber and cutting arrangements for adjacent timber owned by the Powell River Company to which much of the timber was shipped on contract. The timber consisted of about 40 percent spruce, 40 percent hemlock and 20 percent cedar and Allison estimated that the timber would last 12 years. The clear, excellent spruce, used in aircraft production, was a key to making the operation economical and helped overcome the high costs of transportation.

In 1936, Allison began construction of a standard-gauge logging railroad, over a switch-backing right-of-way from the beach camp into the Spruce forests towards Skidegate Lake, 5.5 miles inland. The company purchased two Climax locomotives from Pacific Mills at Ocean Falls. Previously, the locomotives had operated at Kimsquit, north of Prince Rupert. They arrived at the camp in June 1936 and it is likely that some of the other railway and logging equipment also came from this source.[4]

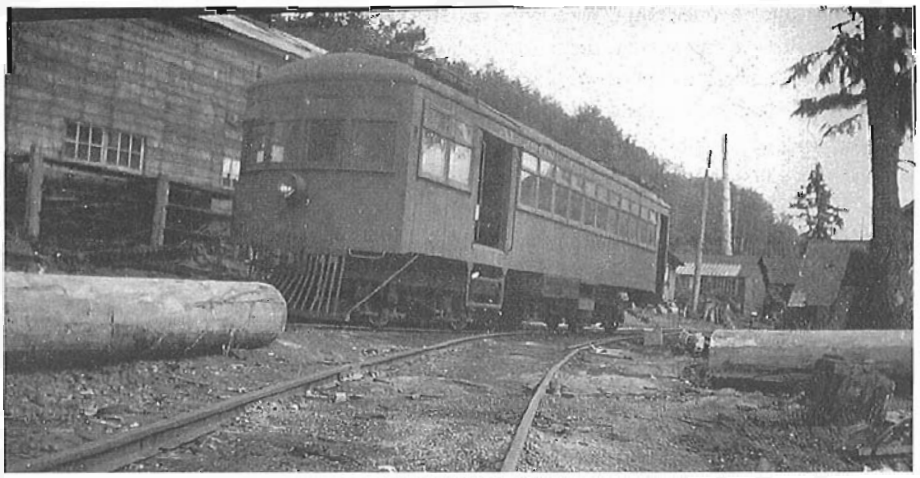
Building the railway presented unusual difficulties. Although much of Moresby Island is rugged and mountainous, the area being logged included large swampy areas in most of the lowlands through which the railway was built. The extremely high rainfall of the area contributed significantly to this problem. "The trouble with these islands is there's nothing to give a foundation," Allison told the *West Coast Lumberman*. "We have had to snake in around mountains and in many spots the grade of the... track is 6 percent. And often the ground on which the railroad is built is little more than swamp." The article noted that in several sections it was necessary to sink 25-foot piles to establish a base for the roadbed. "Much of the road had to be graded across long stretches of muskeg, and in several places bridges several hundred feet long had to be built over the unresisting ground."[5]

In 1937, Allision had about 150 men at work and living in the camp which was under the management of his son W. J. Allison. The mild, wet climate of the Islands permitted logging to proceed for most of the year. Closures due to dry weather and the danger of forest fires were very rare but snow could sometimes shut down the camp for several weeks at a time. For example, in December, 1946, 50 inches of snow brought work in the woods to a complete halt.

The company used two coal-fired, 45-ton Climax geared locomotives, a Marion steam shovel, several ballast cars, a small pile driver, and several dozen skeleton log cars operating on six miles of track.[6] The steam shovel was necessary because of the swampy nature of the ground and Allison commented, "a bulldozer wouldn't be so effective in muskeg." The shovel was used in road-building and could cover about 150 yards a day in good conditions.

Allison found a power shovel very useful in building the railway in swampy areas. This photo is behind the shop building at camp and shows the Marion shovel being loaded onto a heavy flatcar. The wooden ballast car at right was one of three used on the operation. -Stan Unsworth photo, Author's Collection

Later, the company acquired a Northwest diesel shovel and eventually a second diesel shovel and retired the Marion. For logging equipment the company used two Lidgerwood skidders operating high-lead yarding systems and three cold deck machines—a Willamette, a Washington and an Empire. All were steam-powered and coal-fired, although sometimes wood was burned. The coal was shipped in from the mines on Vancouver Island. Normally, a car of coal was spotted behind or near the donkey engine to act as a tender. It was unusual to operate coal-burning logging equipment and locomotives on the B.C. Coast, but the heavy rain fall minimized the forest fire hazards. With this equipment, Allison Logging produced about 30 carloads of logs a day but planned to increase production to about 40 carloads.



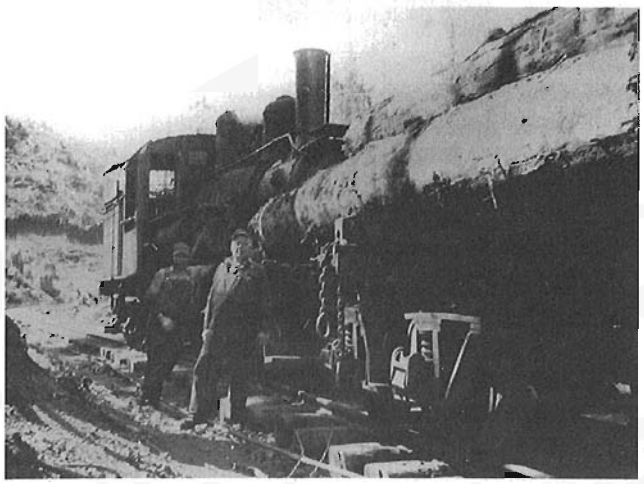
The "Green Hornet", an Edward's Motorcar used to take the loggers from the camp to the woods. It is neatly lettered for the Allision Logging Company and is numbered possibly 75 or 79, the last digit being indistinct . -Bill Robinson collection

An interesting addition to the roster was a gasoline-engined motor car, called by the loggers the "Green Hornet." Remembered by old timers as resembling an interurban with a gas engine at each end, it was actually an Edwards gas motor car, Model 20 or 25, built in 1924. This machine is believed to have been purchased from the Morrissey, Fernie & Michel Railway at Fernie, in B.C.'s Crowsnest Pass. It was the second Edwards car built for the MF&M in 1924.[7] The first, which was supplied with a trailer and was powered by a single 75-hp motor, was tested but found unsatisfactory on the grades between Fernie and the mines. A second car, larger and with two Buda, 60-hp engines was more successful. One engine was mounted on each truck. Intended to make six or more trips a day to the mines, it featured an interior finished in birch and stained mahogany. Seats were upholstered in leather. For passenger service on a mining railway and later as a logging "crummy," this was pretty elaborate accommodation.

The motor car had the advantage of being double-ended and did not need to be turned at either end of its run. The operator of the car, recalled Stan Unsworth who worked at Allison Camp in the late 1930s, shut down the engine, walked to the other end of the car and fired-up the other engine and started out again. On a heavy grade, both Budas could be operated. Allison also used a more traditional crew car, a wood-bodied car built either on a flatcar or converted from a boxcar. It was fitted with board seats for carrying the logging crews from the camp to the cutting and yarding sites in the woods.[8]

In the early operations, only the best timber was shipped because of the distance from markets, high costs and logging practices of the times. Often three logs made up a typical car load. Logging spurs were built immediately inland from the camp and eventually on the north side of Skidegate Lake. The railway crossed the lake over a low pile trestle that was filled in 1951. The lake, about six miles long and one half mile wide and situated in a deep depression, formed a focus for some of the logging operations. There, loading facilities were eventually constructed so that timber could be cut along the lake shore and moved easily to the rail line for transport to tidewater. In addition, Allision built a small sawmill on the south side of the lake to cut ties and other materials for the railway and the camp.[9]

Daily operations began at the camp with crews being taken to the woods by the "Green Hornet" or in a crew car. Usually several crews would be working in the woods at any one time. Fallers would work in one area while bucking and yarding crews would work in another. At the loading sites, logs were brought into the landings using the steam donkey engines and were loaded onto empty skeleton cars that had been brought up from the camp and spotted next to the loading machines. Depending on how much



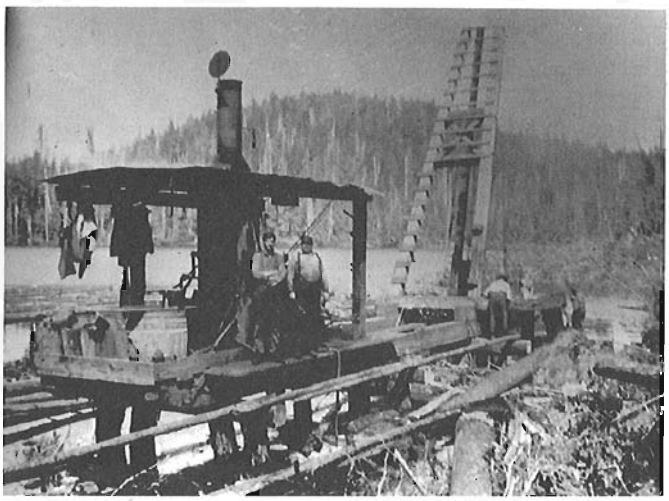
Allison's Climax No. 1 during the early years of the logging railway at Cumshewa Inlet. The track is unballasted and light rail was used. -Stan Unsworth photo, Author's collection

timber was being cut, one or two train crews could be kept busy throughout the day taking empties to the woods and returning with loads to the dump in a seemingly endless cycle. Train crews would push the loaded cars out onto the dump trestle where the logs were unloaded. At times, new spurs would be under construction and trains would be used to handle rail, ties and ballast. At the end of the day, the loggers would be taken back to camp. The last train of the day would take empties out for the loading crews to fill first thing the next morning and then return to camp with loads to be dumped that night or the next morning.

The remote location of the camp made it necessary for the operation to be largely self-sufficient. This was a price of being so far removed from mainland population centres and also from the other settlements on the islands. Allison's camp included bunkhouses, a cookhouse, office quarters, a large machine shop and engine house. Nearby was the steamer dock. The lifelines of the camp, as they were to so many other camps along the B.C. Coast, were the coastal steamships. These vessels provided a remarkably reliable service to the remote camps. They carried mail, food supplies, travelling salesmen, doctors, dentists, visiting relatives, tourists and of course, the loggers, fishermen, cannery workers and the people from the coastal communities. People in the camps could order supplies, parts, materials and day-to-day needs by mail and could have them delivered on the next sailing from Vancouver or Prince Rupert in a week or two.

The Queen Charlottes were served in earlier years by Canadian Pacific steamers but Canadian National vessels operated the subsidized service in the 1930s and early 40s. The small steamers *Prince John* and *Prince Charles* were used on the service to the Charlottes and were regular visitors to Allison Camp. *Prince John* sailed from Prince Rupert to the Charlottes and also made sailings from Vancouver. The *Prince Charles* operated on a run from Vancouver to the Queen Charlottes and Prince Rupert on a once every two week basis. On June 8, 1940 the two vessels were bought by the Union Steamship Company which took over the Queen Charlottes service. The steamers were renamed *Cassiar II* and *Camosun II* and remained in Union service until 1949 and 1945 respectively. Union maintained the Queen Charlottes run throughout the Second World War and the 1950s. The *Coquitlam* was the major vessel serving Aero Camp and other Queen Charlotte settlements after the war and normally maintained a weekly schedule.[10]

Shipping the logs to the mainland was hazardous and expensive. Flat booms of logs, which were used extensively in sheltered waters along the south coast of the mainland and along the east coast of Vancouver Island, would have broken up in bad weather in the unprotected waters of Hecate Strait. Instead, the logs were assembled into huge bundles of logs called Davis or Kelley rafts for the long tow to the mills at Powell River, Ocean Falls and Vancouver. In favourable weather, the 500-mile tow from Cumshewa Inlet to Powell River took from 10 days to two weeks, the ponderous rafts being slow and difficult to maneuver. Sometimes the tow could take as long as six weeks. Towing was usually done in the summer months when the weather was better; in winter Hecate Strait could become extremely rough. Mishaps did occur and the rafts occasionally broke up in the straits, resulting in the loss of thousands of feet of timber. Allison lost one raft in early 1937 and not a single log was retrieved. Sometimes log barges, converted from old sailing vessels, were used to carry the valuable timber. During the winter of 1935-36, for example, the Powell River Company's tug *St. Faith* towed the barge *Pacific Gatherer* with 1,250,000 feet of spruce from Allison Camp to Sitka Spruce Mills on False Creek in Vancouver. That trip took just eight days.[11]



A pile-driver was useful in extending the trackwork through the marshy areas being logged. This view is probably along the shore of Skidegate Lake. -Stan Unsworth photo, Author's collection

The log dump at Cumshewa Inlet was built on a trestle running out into deep water. Nearby, in the sheltered waters of the inlet, the logs were stored and assembled into the Davis Rafts before being towed to the mills. For work around the inlet and for moving logs locally, the company owned the small tug *Gypsy*. The company also used a steam crane on the wharf and for general duties around the camp and shops.

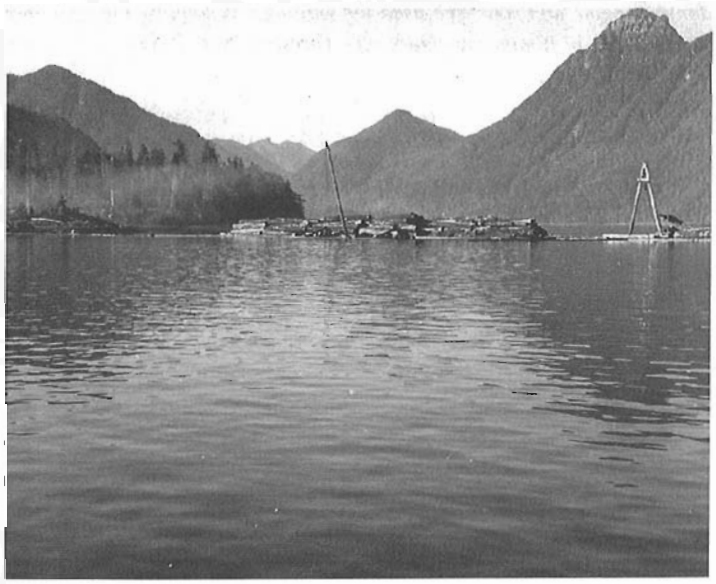
With the beginning of the Second World War in 1939, the Queen Charlotte loggers found themselves in a fortunate position. Once again, aircraft-grade spruce became a key strategic material. Just as it had over two decades before, the demand for aircraft spruce skyrocketed and the islands were the principal supplier. The light weight spruce proved to be an ideal material for use in the famous *Mosquito* fighter-bomber as well as other aircraft.

With increasing demands for timber, Allison's next purchased a three-truck, 80-ton Heisler geared locomotive. This machine came from Miller Logging at Sultan, Washington. Before being shipped to Allision Camp, the locomotive was given a complete overhaul at the Vancouver Machinery Depot between November 1939 and February 1940.[12] When placed in service as No. 3, it was used primarily on the mainline between Skidegate Lake and the log dump at the beach camp on the shore of Cumshewa Inlet.

A.P. Allison's Climax No. 2 at the Cumshewa Inlet log dump in 1938. The locomotives were coal-burners at this time. The coaling platform is just to the right of the locomotive. -B.C. Forest Service, 5328

Timber output soon reached record highs as loggers were recruited to work at the remote camps. As an illustration, in June 1941, 3,500,000 feet of cedar and 850,000 feet of airplane spruce were shipped from Allison Camp in two huge Davis rafts. Each measured 800 feet long, 80 feet wide and had a draught of about 30 feet. The tug *St. Faith* pulled them separately across Hecate Strait and then assembled them into a single tow in a sheltered mainland inlet for the remainder of the journey to Vancouver. It took nearly a month to bring the big rafts into port.

To expedite the production of the critically needed spruce, the federal government formed Aero Timber Products Ltd. in June 1942 as the war was reaching its critical stages. The new company took over Allison's camp and other operations on the Queen Charlottes including another large camp on Masset Inlet on Graham Island to the north. However, this was not a railway logging operation.



Davis rafts being assembled in Beattie Anchorage, Cumshewa Inlet on October 23, 1944. -G. Abernethy photo, B.C. Forest Service 2918/1

Allison's camp became known as Aero Camp or simply Aero and after the war even boasted its own post office. A.P. Allison reinvested some of his money in a sawmill at North Vancouver and continued logging along the coast of British Columbia. Robert J. Filberg, the highly-experienced manager of Comox Logging's operations on Vancouver Island, was assigned the wartime responsibilities of managing the spruce production on the Queen Charlottes and Bob Swanson, given leave from the Department of Railways, was assigned the job of getting the equipment running to sustain the high levels of production needed. His responsibilities took him to many camps and remote locations, often being flown in to inspect and organize repairs to equipment using the mechanical inventiveness and genius that would make him famous.

Under Aero Timber Products ownership, the 13 miles of railway was expanded and new equipment was acquired including two more Climax locomotives in 1943. Both were two-truck locomotives and were purchased from Vancouver Equipment. A 50-ton machine came from the Vancouver Bay Logging Company and became Aero Timber No. 3. The other Climax, a 55-tonner, was from Gustavson Bros. Logging at Jervis Inlet and became Aero Timber No. 4. The Heisler, which had been A.P. Allison's No. 3, was renumbered Aero Timber No. 5.

A typical landing scene from Allison's operations in 1940 shows a coal-fired donkey engine and spar tree used for yarding and loading the logs onto the logcars. -H. W. Weatherby photo, B.C. Forest Service, 2483-6

Rail logging continued at a high rate throughout 1943 and 1944 as the demand for aircraft spruce peaked. As many as 200 men were working at the camp during the busiest times. However, the following year, operations slowed down considerably. By May, 1945, only the Heisler was operating, handling 12-car trains from the Skidegate Lake reload to Aero Camp. Climax No. 4 was held serviceable as standby power and Seventeen and one half miles of trackage were in service. The end of the war in Europe came in May 1945 and Japan surrendered in August. The next month, C.D. Howe, minister of munitions announced that the Aero Timber operations would be disbanded and that all restrictions on aircraft grade Douglas-fir, Sitka spruce and Western hemlock were lifted. The holdings were offered for sale and bids from private industry were invited by the War Assets Corporation until October 15, 1945. Howe paid particular tribute to Robert Filberg, head of Aero, and to his associates Clarence R. Fraser of Vancouver and Percy Sills of Victoria. "Aircraft quality timber," noted Howe, "has always kept pace with the demand from the aircraft industries in the United Kingdom and Canada." Credit must also go, of course, to the crews who worked in the woods. In 1946, Filberg was invested as an Officer in the Order of the British Empire for his services.[13] Meanwhile, the logging operations were wound down during the fall of 1945 and the locomotives were laid up and stored. Climax No. 4 was the last serviceable locomotive, remaining operational until December 5th, when it too was stored.

The big Heisler was No. 3 on Allison's operation. These two views show the engine, with a cut of eight logcars, backing down to the log dump in July 1940. -H.W. Weatherby photos, B.C. Forest Service, 2447/28 and 2483/9.

The Powell River Company, a long-established customer for Queen Charlotte timber, purchased the Aero Timber holdings, and early in 1946, began to reopen the railway. Although the wartime requirement for aircraft grade Spruce had disappeared, the post-war period held promise of continuing high demand for quality lumber and the company was in a position to exploit the timber effectively even though handicapped by long distances from the mills. In the early 1940s, the Powell River Company had acquired the Kelley Logging Company, which had been operating in the Queen Charlottes for many years and which was credited with having supplied 55 percent of the airplane spruce produced in Canada during the war. Kelley Logging was reorganized as a wholly-owned subsidiary company and was given control over all of the Powell River Company's Queen Charlotte holdings, including the Aero Camp railway.

Under this corporate arrangement, the logging railway was revitalized. The heavy demands of the war years had left the locomotives badly in need of maintenance. No. 4 was found to be beyond economical repair and the No. 1 was salvageable only as a stationary boiler and was sold in 1948. Repairs were made to the two remaining Climaxes and the Heisler but new equipment was clearly needed. At some point after the war, likely soon after the purchase by the Powell River Company, the locomotives were converted to burn oil.

The war years had also taken their toll on docks and other facilities on the North Coast. Gerry Rushton, historian of the Union Steamship fleet, related that the Aero Camp wharf was in bad condition after the war. As the *Coquitlam* came into the wharf at Aero, Angus McNeill, the master, called out to George "Panicky" Bell the camp manager, "Why don't you get your wharf fixed?" "I'm waiting for you to knock it down!" was the response in classic west coast repartee.[14]

In July 1947, a 70-ton Shay was acquired from the Merrill & Ring Company at Pyst on Washington's Olympic Peninsula, to compensate for the loss and deterioration of the original equipment. Bob Swanson inspected several logging locomotives available at good prices in Washington and went to Pyst to examine the Merrill & Ring Shay. "I had to get them going and there was quite a to-do about that," he recalled. "The boilers didn't match the B.C. code. So I said I could fix that. I figured if it didn't blow up in the States, it wouldn't blow up here. The air was the same. So I converted those joints by putting a new outside butt strap on them. I got a slide rule sent down to me and I did the calculations and laid it all out and then we did the job [at Vancouver]. It ran 'til they scrapped them in the end."[15]

Like the Heisler acquired early in the war years, the Shay was given a thorough overhaul at the Vancouver Machinery Depot before being shipped to Moresby Island. After the overhaul was completed, the Shay was tested on the B.C. Electric Railway's trackage on March 10, 1948. The new locomotive was placed in service that spring. A small Plymouth gas-mechanical 0-6-0, a model WLG-3, also was acquired in 1948 for the operations at Cumshewa. This one, which became No. 7, was from the O'Brien Logging Co. of Stillwater near Powell River. Built in 1929 with a six-cylinder, 180-hp, Le Roi engine, it was re-engined with a model NH600 Cummins diesel before being shipped to the Queen Charlottes.[16] It was followed in 1951 by a 90-ton Pacific Coast Shay, which became the second No. 1, and also a trio of modern speeders, Nos. 104-106, all brought in from the recently closed railway of the Salmon River Logging Company on northern Vancouver Island.[17] With this new equipment, the railway continued to operate until 1955.

FOR SALE BY TENDER

CROWN ASSETS

SEALED TENDERS will be received by—

WAR ASSETS CORPORATION,
410 Seymour Street,
Vancouver, B.C.

until Noon, Monday, October 15th, 1945, for all of the assets of Aero Timber Products Limited, a Crown Company operating logging camps at Masset Inlet and Cumshewa Inlet on Queen Charlotte Islands.

Tenders should be made on the official form and enclosed in a special Tender Envelope which can be obtained from the War Assets Corporation on request. Envelope should be marked Tender No. 112.

Tenders must be accompanied by a deposit in the form of a certified cheque for 10% of the amount of the tender.

The properties consist of two separate and distinct operations.

The Masset Inlet operations consist of standing timber, logging machinery and equipment, camp buildings and equipment, machine shop equipment, tugs and barges, truck road development for logging the standing timber, wharves, docks and other miscellaneous assets.

The Cumshewa Inlet operations consist of a logging railroad, steel rails, locomotives, logging cars, logging machinery and equipment, machine shop equipment, camp buildings and equipment, tugs, wharves, docks, Davis rafting gear, sawmill machinery, and other miscellaneous assets.

Particulars are available at the office of Aero Timber Products Limited, Marine Building, Vancouver. The Company does not guarantee the accuracy of equipment

The assets are available for inspection at Masset Inlet and Cumshewa Inlet and can be viewed at any time.

Tenders must be for the assets in total for both operations or for the assets in total for each operation separately.

Offers for portions of the property will not be considered.

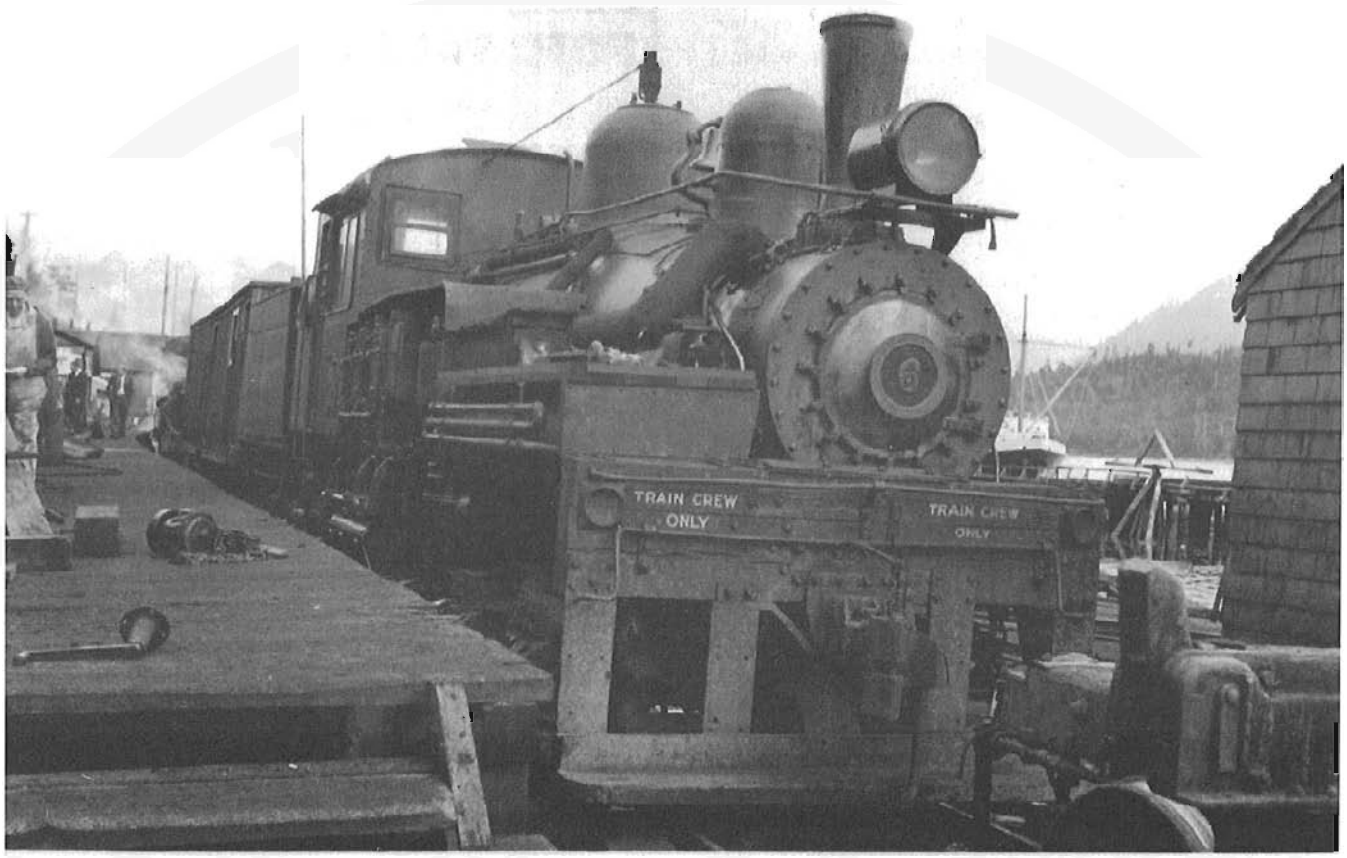
Tenders received after closing time cannot be considered. The highest or any tender may not necessarily be accepted. The War Assets Corporation reserves the right to reject all tenders if no satisfactory offer is received

WAR ASSETS CORPORATION

410 Seymour Street,
VANCOUVER, B.C.

In August 1945 the war was over, so the assets of Aero Timber Company were put up for sale by the War Assets Corporation. -British Columbia Lumberman, August 1945, page 4.

The Pacific Coast Shay adds an interesting dimension to the story. It was typical of 17 similar locomotives which operated in British Columbia, but what set it apart from the others was the installation of a welded boiler in 1949, just a few months before the railway was phased out. The boiler was designed in accordance with a new Boiler Code developed by the Department of Railways in 1947 and was the first all-welded locomotive boiler built in Canada. Constructed by the Vancouver Iron Works in August and September 1949, it was X-rayed, stress-relieved and hydrostatically tested. "We consider this new all-welded design of locomotive boiler," noted Bob Swanson in the 1949 *Annual Report* of the Department of Railways, "a landmark in the progress of locomotive-boiler construction and a tribute to research in the field of mechanical engineering."[18]



Three-truck Shay No.6 with a crew car at Aero Camp. The Union Steam Ship Company's Coquitlam (II) is in the background. -Maurice Chandler Collection

The three-truck Heisler became No. 5 for Aero Timber Company and often was used on the mainline between Skidegate Lake and the log dump. -MacMillan Bloedel Collection

The last loads of logs being brought down to the dump by Shay No. 1 on August 31, 1955. Note that the long log ahead of the locomotive is spanned across two skeleton logcars. -MacMillan Bloedel Collection

By the mid-1950s, after nearly 20 years of rail logging, the easily accessible timber was virtually exhausted and truck logging was becoming highly competitive with the aging railway technology. All along the coast, the logging railways were being dismantled as trucks took over nearly all log hauling operations. The stands of spruce and cedar had not been infinite, and the wartime demands had hastened their depletion. In all, nearly 800,000,000 feet of timber had been carried over the railroad to Cumshewa Inlet since the mid-1930s.

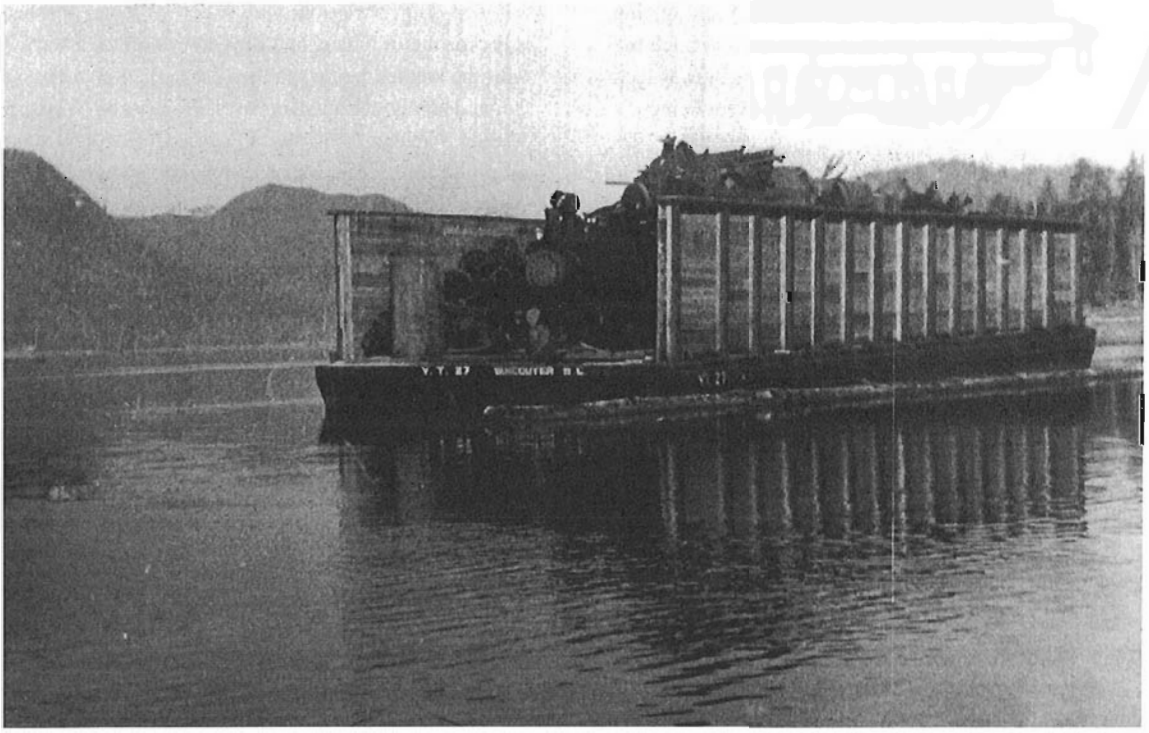
The last run on the railway was made on August 31, 1955, using Pacific Coast Shay No. 1 as the road engine. At that time, the Department of Railways reported that there were 8 miles of main line and 12 miles of sidings and logging spurs on the railway. A ceremonial last run with corporate officials in attendance marked the final log hauling day on the railway.

A clean up of remaining timber using trucks, tractors and A-frames was planned before the camp was abandoned.[19] Dismantling followed soon after with most of the salvageable railway equipment and steel being towed away on a barge for scrap or resale. There was little demand for steam locomotives and equipment at that time, and that same year, the Powell River Company also closed its logging railway operations in the Powell River area. These had been operated under the charter of the Eagle River & Northern Railway.[20]

Bob Swanson, who was then Chief Inspector of Railways for the province, had kept an eye on the Pacific Coast Shay with the welded boiler that he had worked on a few years earlier. Coincidentally, at Canadian Forest Products on Northern Vancouver Island, Shay No. 115 , also a Pacific Coast Shay, was running out of boiler time. This was a comparatively new Shay, having been built in 1938 long after production of most steam logging locomotives had ended. "When they finished up on the Queen Charlotte Islands, they were loading all this crap out and it was going for scrap. So ... I said, 'Look, when that boiler comes down on the barge, I want it to call in at Beaver Cove. When it comes in there on the barge, get them together and switch boilers, because that's a brand new boiler. The one you've got there's worn out. Put the other one on and then the old one can go to the scrap heap.' 'Okay Bob, we'll do it.' So they did it." The boiler, at least, of Kelley Logging No. 1 continued in service at yet another coastal logging operation. The remainder of the Shay was scrapped soon after.

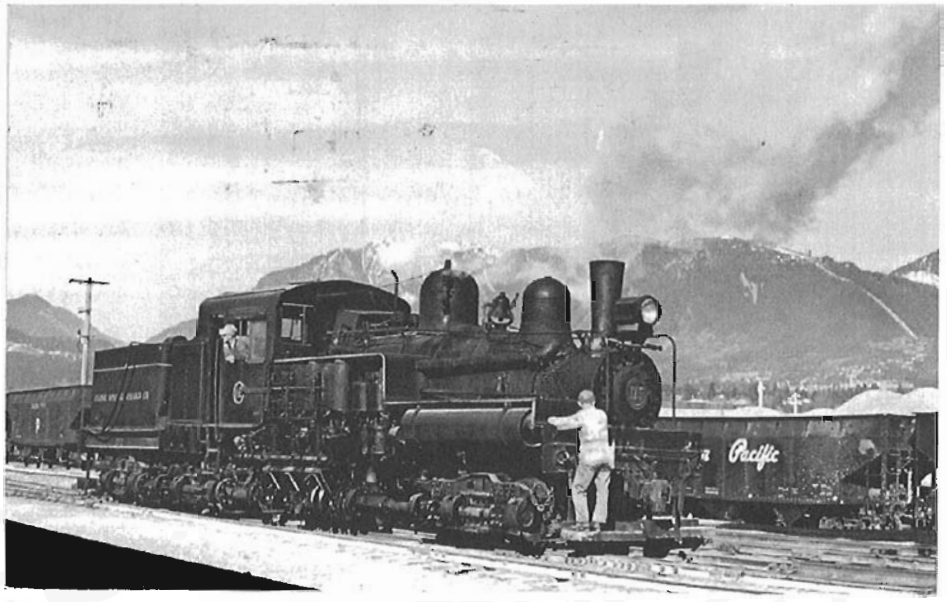
The story of the Pacific Shay was far from over. Bob Swanson continued to keep an eye on the Shay with the innovative all-welded boiler. Within the next few years Canfor dieselized its logging railway and phased out nearly all of its steam equipment, including Shay 115. Although no longer needed by Canfor, the locomotive and its boiler was still in good condition. Meanwhile, Bob Swanson had been approached to provide locomotives to switch

On the last log hauling day, August 31, 1955, Pacific Coast Shay No. 1 was in use. The generally rainy conditions on Morseby Island often made the use of the spark arrestor on the locomotive unnecessary. -MacMillan Bloedel Collection



Most of the railway equipment was loaded onto a barge and towed away for scrap. The front of Shay No. 1, which was to be unloaded on Vancouver Island, is visible ahead of the scrap pile. -MacMillan Bloedel Collection

the bulk terminal at Vancouver Wharves in North Vancouver. Swanson still had the Shay in mind. "That's a damn good locomotive, I thought, Jesus, that's a nice looking locomotive." A solution fell into place. Swanson acquired the Shay in 1962 but had to remove it from Beaver Cove on Northern Vancouver Island. "I paid $1700 for the thing and they said 'You load it!' So I had a barge go up... and got the engine down. I got it on the barge on the rising tide, instead of the falling tide. That was my only mistake. I got the engine down there steaming, got it on the barge, and the damn barge floated off—and the Shay ran forward. But I had air on it and I set the air and caught it. I was drifting out in the bay hollering my bloody guts out and they came out and towed me in again! I unloaded it in Vancouver...and three days later I had it running on Vancouver Wharves."[21]



The boiler of Kelley Logging's Pacific Coast Shay survived to be used on Canadian Forest Product's No. 115 which later worked at Vancouver Wharves in North Vancouver before being donated to Fort Steele Heritage Park near Cranbrook, B.C. -Robert D. Turner

The Shay, and another acquired in 1964 from Western Forest Industries at Honeymoon Bay on Vancouver Island, provided switching service at Vancouver Wharves and at the same time kept two steam locomotives in operation that otherwise would have gone to scrap. Operating under Swanson's Railway Appliance Research Limited, the locomotives worked for several years at North Vancouver. In 1970, No. 115 was donated to Fort Steele Heritage Park near Cranbrook in southeast British Columbia. The second was sold to the Cass Scenic Railroad in West Virginia. As of 1997 both locomotives are have not been moved again. No. 115 is presently not in service but is being repaired as funding permits.

Locomotive remains at Aero Camp, 1971. The boiler was thought to be from Climax No. 4, however, the shape of the cab window frame in the collapsed steel cab, upside down in the foreground, suggests that the cab at least is probably from Heisler No. 5. -Robert D. Turner

The Plymouth diesel, Kelley Logging No. 7, was sold to Western Forest Industries at Honeymoon Bay, west of Lake Cowichan, on Vancouver Island. WFI used the locomotive to switch cars around its mill and take cars to the interchange with the CPR at Lake Cowichan. After the mill was closed in 1977, the engine was sold to Westcan Terminals and Stevedoring Ltd., in Victoria where it received little use before being donated to the Ladysmith Railway Historical Society in 1987. Recently, it was transferred to the Kaatza Historical Society and moved to Lake Cowichan for display next to their restored CPR station.

All of the facilities at Aero Camp were abandoned within a few years of the closing of the railway. Some camp facilities and building were salvaged and moved to other locations but others were simply left to deteriorate. Two locomotives remained on the Queen Charlottes. Climax No. 3 was left derelict at Skidegate Lake where it was partly buried by road construction following removal of the trackage at the loading site. It remained there until 1961, when it was shipped to Vancouver as scrap. The remains of another locomotive, possibly No. 4 on which repairs were abandoned in 1948, is still at Aero Camp, where it appears to have been used for parts before the end of operations. Only the firebox, tank and a selection of miscellaneous parts remain. A steel cab, probably from Heisler No. 5 is also abandoned at the camp and it may be that the other locomotive parts are also from this machine.[22] A steam crane was also left behind. Once used at Aero, it was inadvertently driven off the end of the wharf and was not salvaged. For several years it remained partly exposed at low tide, but by 1971, no trace of it was apparent.

The body from a crew car remained at Aero Camp along with other equipment in 1971. This is probably the car shown in the photo of Shay No. 6. It was built either on the frame of a flatcar or from an old boxcar. -Robert D. Turner

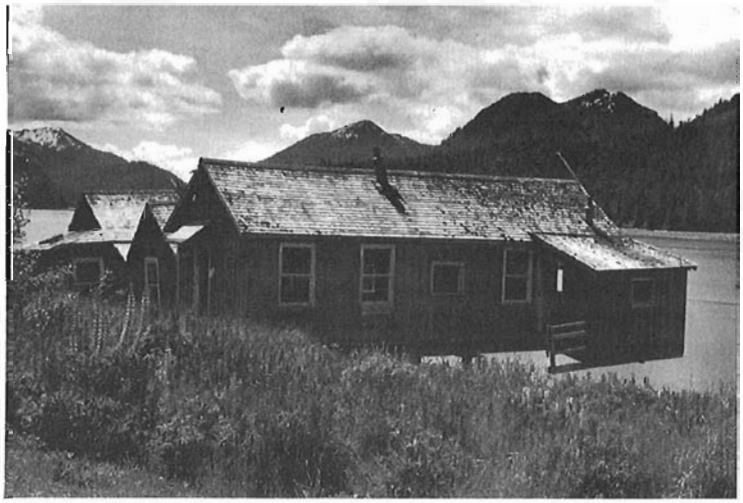
Aero in Retrospect

The railway at Aero was an unusual coastal logging operation on a remote part of the west coast. Initially it was economically justified by the demand, caused by aircraft construction in the late 1930s and through the Second World War, for the fine quality, lightweight spruce found in the area. After the war the demand for quality timber continued and the logging railway remained economically viable for another decade.

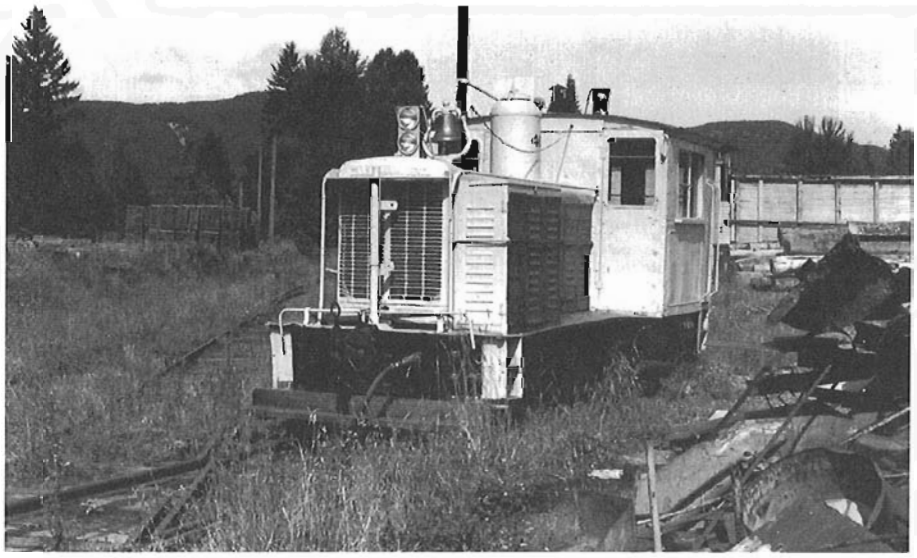
The remote location and climatic conditions compounded problems of operations at Aero Camp. Access to the camp was by coastal steamship and in later years by infrequent air craft services. The isolated nature of the camp required the company to have well-equipped shops and to be more independent of suppliers than if located closer to major population and industrial centres. Equipment brought to the camp was normally given a major overhaul before delivery to Aero to minimize maintenance problems once at the camp. The shipment of the logs encountered problems of weather and distance not faced by logging companies operating along the protected south coast of mainland British Columbia and on eastern Vancouver Island. The use of Davis Rafts or log barges and long tows to market made production feasible but added to the costs and risks involved.

Although the geographic setting of the camp complicated the supply and operations of the camp, the day-to-day use of the railway was generally typical of logging railways all along the coast. A notable exception was caused by the wet and boggy nature of the area which required

Aero Camp slowly faded into the second growth forest, the buildings and structures rotting away in the Islands' rain and mist. In the early 1970s, the log dump and several buildings were still standing, the remains of a scrapped steam donkey, the body of a speeder, and numerous centre sills from the skeleton log cars were all evident. Some rails were still in place over the rotting ties and a switch stand stood partly covered with moss. Through the rapidly growing alders, the general arrangements of the camp could still be determined. By the mid-1990s, the forests had overgrown much more of the site and little of the original camp, except for the larger steel artifacts, was evident as Steve Walbridge records from his 1994 visit to Aero Camp.



Some camp buildings survived long after the camp was abandoned. This photo was taken in August 1971. -Robert D. Turner



Plymouth No. 7 went to work for Western Forest Industries at Honeymoon Bay on Vancouver Island. It is now preserved at Lake Cowichan. -Robert D. Turner

the use of extensive low trestles and pilings for roadbed construction; a problem not normally faced on south coast logging railways. However, the rail equipment used was of the same types common to operators in other parts of British Columbia, Washington and Oregon. Geared locomotives and skeleton cars were the main types of equipment found on the railway.

The survival of many relics in the camp make it an interesting site to visit and the preservation of the small diesel locomotive and the boiler from the Pacific Coast Shay add an important dimension to the heritage of preserved equipment in British Columbia.

Aero Camp and with its logging railway was one of hundreds of now abandoned logging camps along the British Columbia coast but its location on Haida Gwaii, the Queen Charlotte Islands, and the history that surrounds it, makes it in many ways a unique and unusual logging railway. Moreover, its remote location and the lack of subsequent developments in the area have left the site an interesting and unusual industrial archaeological site.

Acknowledgments: My sincere thanks to the late Charlie Hartie, Tom Murphy, the late Robert E. Swanson, Sonny Toleman, and Stan Unsworth for their recollections of Allison Camp, the operations of Aero Timber, and of Kelley Logging. Bob Swanson also recalled his experiences as Chief Inspector for the Department of Railways. Thanks also to Maurice Chandler, Bill Robinson, Nancy Turner and Peter Corley-Smith and to Fran Fowler and the late Del Fowler for their friendship and help on the Queen Charlottes particularly during our visits in 1970 and 1971. I am also grateful to MacMillan Bloedel's corporate archives and to the staff of the Provincial Department of Commercial Transport who, in 1971, gave me access to the old files relating to the railway. Doug Richter provided additional roster information. Further research was carried out in the BC Archives, the BC Legislative Library and at the University of British Columbia Library. I would also like to acknowledge the Royal B.C. Museum and, finally, my thanks to Steve Walbridge for rekindling my interest in the Aero Camp railway and for bringing the story up to date with his accompanying article.

NOTES

[1] This article is based on a shorter article, " Logging in the Queen Charlottes" that appeared in the January 1973 issue of *Pacific News*. Additional information is drawn from *Logging by Rail, The B.C. Story* , Sono Nis Press, 1991, and further interviews and archival research.

[2] *Pacific Coast Lumberman*, December 1922.

[3] The early background on Allision is from Kathleen Dalzell's *The Queen Charlotte Islands, Vol.1*, Dalzell Books, Prince Rupert, B.C., 1968.

[4] 1937 was the first year the operation was included in the *Annual Report* of the British Columbia Department of Railways.

[5] *The West Coast Lumberman*, July 1937, pp. 58.

[6] Most details of equipment are taken from the files dealing with equipment inspections of the Department of Railways. These were made available to me in Vancouver in 1971.

[7] See *Canadian Railway & Marine World*, June 1924, December 1924 and January 1925. For further information on the Edwards Railway Motor Car Co, see Edmund Keilty's *Interurbans Without Wires*, 1979, Interurban Press, Glendale, CA., pp., 105-108.

[8] Stan Unsworth, interview with Robert Turner, August, 1971.

[9] The sawmill is noted in Kathleen Dalzell's *The Queen Charlotte Islands, Vol. 2*, Harbour Publishing, Madeira Park, B.C., 1989.

[10] Gerald Rushton, 1974, *Whistle Up the Inlet, The Union Steamship Story*, 1974, J. J. Douglas Ltd., Vancouver, B.C.

[11] *British Columbia Lumberman*, February 1936.

[12] It is unclear if Allison purchased the machine from Miller Logging or from Vancouver Machinery Depot.

[13] *British Columbia Lumberman*, September, 1945, pp. 35 and July 1946, pp.

[14] This story is recounted in Gerald Rushton's book *Whistle up the Inlet.*

[15] Robert E. Swanson, interview with Robert Turner, November 10, 1989.

[16] Some records noted 250 hp as the original equipment specification, Douglas Richter, personal communication.

[17] The date of arrival of the Salmon River Logging equipment at Aero Camp has not been determined. Salmon River Logging was owned by the British Columbia Manufacturing Co. and Westminster Shook Mills of New Westminster (controlled by R. L. Cliff, J. H. McDonald and associates) which acquired it from the Timberland Lumber Co. of New Westminster and Green Point Logging owned by P. B. Anderson and his son Dewey in 1945. See *British Columbia Lumberman*, September 1945, p. 36. The railway was phased out in 1950 and the operation was converted to truck hauling by June 1950. In December 1950 the company was acquired by the Powell River Company and it is most probable that the railway equipment was transferred early the next year. See also Rene Harding and Frances Duncan, 1979, *Sayward for Kelsey Bay*, published by the authors, Kelsey Bay, B.C., pp. 76-77 and Department of Railways, *Annual Reports*, 1949 and 1950. It is interesting to note that the Department of Railways' *Annual Report* for 1949 reports Salmon River Logging having a No. 8 gas locomotive (JJ28); the same year an inspection is also reported for Powell River Co.'s (Kelley Logging) diesel. Could these be the same locomotive being reported in two locations that year and on Salmon River before its reconstruction with the Cummins diesel?

[18] Department of Railways, *Annual Report*, 1949, pp. JJ 9.

[19] *British Columbia Lumberman*, October 1955, pp. 32-33.

[20] See R. Ken Bradley, 1982, *Historic Railways of the Powell River Area*, B.C. Railway Historical Association, Victoria, B.C.

[21] Robert E. Swanson, interview with Robert Turner, November 10, 1989.

[22] I had originally identified the remains of this machine as No. 4 but the shape of the cab near the boiler suggests that it is more likely from No.5. So little remains that I have not been able to confirm the identification of the parts. It is possible that there are the remains of two locomotives there.

Roster of Locomotives and Motor Cars

Number	Type	Builder/No.	Date	Dimensions or Engine	Tons	Notes
1	2-Truck	Climax/1491	1918	12 x 14, 33"	45	1
1 (2nd)	3-Truck	Lima/3344	2/1930	13 x 15, 36"	90	2
2	2-Truck	Climax/1511	6/1918	12 x 14, 33"	45	3
3	2-Truck	Climax/1547	1/1920	12.5 x 14, 33"	50	4
4	2-Truck	Climax/ 1539	1919	13.25 x 14, 33"	55	5
5	3-Truck	Heisler/ 1487	7/1923	17.25 x 15, 38"	80	6
6	3-Truck	Lima/ 3285	12/1925	12 x 15, 36"	70	7
7	0-6-0	Plymouth /3365	11/1929	Cummins Diesel	20	8
75 or 79?	Gas Motorcar	Edwards	1924	Buda	19.5	9
104-106	Enclosed gas crew speeders					10

NOTES: This roster was published in simplified form in *Logging by Rail, The B.C. Story*. All equipment operated at Allison/Aero Camp. Dimensions shown are cylinder bore and stroke and driver diameter for steam equipment. Dates of changes in ownership are mostly taken from Department of Railway inspection records but should be considered approximate. The primary source was the inspection files and reports of the Department of Railways and Department of Commercial Transport. Additional information was drawn from: Mervyn T. Green, *British Columbia Industrial Locomotives* (second edition); Benjamin Kline (publisher) *The Heisler Locomotive*; Michael Koch, *The Shay Locomotive*; Dan Ranger, Jr., *Pacific Coast Shay*; Thomas Taber and Walter Casler, *Climax, An Unusual Locomotive;* and interviews, forestry trade journals and other sources noted in the following notes. Abbreviations: Allison Logging Company (ALCo.), 1936-1942; Aero Timber Products (ATP), 1942-1945; Powell River Company (PRCo.); Kelley Logging Co. (KLCo.), 1946-1955 .

1. Pacific Mills Ltd., No. 1 (Ocean Falls, Camp 17); Owens Logging Co., No. 1 (Green Bay) 1927; ALCo., No. 1, 1936; ATCo., No. 1; PRCo. (KLCo.) No. 1; Sold 1948 for stationary boiler having been out of service for some time.

2. Pacific Coast Shay. Merrill-Ring-Wilson Ltd., No. 4 (Rock Bay); Salmon River Logging Co., No. 5 (Kelsey Bay), rebuilt with new welded boiler in 1949; PRCo (KLCo) 2nd. No. 1; Canadian Forest Products Ltd., for parts (Englewood) 1956, boiler to CFP No. 115. No. 115 to Railway Appliance Research Ltd. operating for Vancouver Wharves, (North Vancouver) 1962; Fort Steele Heritage Park (Fort Steele) 1970.

3. Pacific Mills Ltd., No. 2 (Ocean Falls); lease, Owens Logging Co., No. 2 (Green Bay); ALCo., No. 2, 1936; ATP No. 2; Sold 1952 for stationary boiler to Patterson Boiler Works (Vancouver).

4. Timberland Development Co., No. 3 (Ladysmith); Booth Logging Co. No. 1 (Goliath Bay), ca 1924; Vancouver Bay Logging Co. Ltd., No. 2; ATP No. 3, 1943; PRCo., No. 3; abandoned 1955, sc. 1961.

5. Vancouver Lumber Co. No. 2 (Port Neville); Mainland Cedar Co., No. 2 (Port Neville) 1922; Mainland Tbr. Co., No. 2 (Port Neville) 1923; Bernard Timber & Logging No. 4 (Oxford Bay) 1924; Fulmore Lake Logging No. 3, 1929; Gustavson Bros. Logging No. 2 (Jervis Inlet), 1936; ATP No. 4, 1943; PRCo (KLCo) No. 4. Out of service by late 1948, later partly scrapped. Boiler may be abandoned at Aero Camp.

6. Miller Logging Co., No. 5 (Sultan, WA); overhauled at Vancouver Machinery Depot, Nov. 1939, to ALCo. No. 3, Feb. 1940 (uncertain if purchased by Allison before or after overhaul); ATP No. 5; PRCo. (KLCo.) No. 5. Last known inspection at Aero, May 28, 1952. Cab and some other components may be abandoned at Aero Camp.

7. Merrill & Ring Lumber Co., No. 6 (Pysht, WA); PRCo. (KLCo.) No. 6, 1947. Overhauled at Vancouver 1947-48. Last known inspection at Aero, Feb. 1951.

8. Plymouth Model WLG3, gas-mechanical, built with 6-cylinder 180-hp (also reported as 250-hp) Le Roi gas engine. Merrill & Ring Lumber Co., No. 8 (either Squamish or Theodosia Arm); O'Brien Logging Co., (Stillwater); PRCo (KLCo) No. 7, rebuilt with Cummins Diesel engine, model NH 600 of 200-hp.; Western Forest Industries Ltd., No. 7, in 1973 No. 40 (Honeymoon Bay); Westcan Terminals and Stevedoring Ltd., No. 40, (Ogden Point, Victoria, B.C.), 1978; Ladysmith Railway Historical Society (Ladysmith), August 1987; Kaatza Historical Society (Lake Cowichan) 1996.

9. Believed to be from the Morrissey, Fernie & Michel Ry. (Fernie); to ALCo.; ATP; later details unknown. The car had two Buda 4-cylinder, 60-hp, engines, one mounted on each truck, to provide extra power for steep grades. Seating capacity, 41. Baggage compartment 17 feet long. Stan Unsworth, who worked at Allison Camp, referred to the gas engines as "Continentals" and it may be that it was re-engined by the time it was in use at the camp. Information here is taken from *Canadian Railway & Marine World*, January 1925. However, Keity's *Interurbans without Wires* gives details of cars under Crows Nest Pass Coal Company and Morrissey, Fernie & Michel Railway. One is given as a Model 20 at 17 tons, the other as a Model 25 at 32.5 tons. Both cars have the same length and power plant and are likely differing listings for the same car; the MF&M was owned by the Crow's Nest Pass Coal Company. The car is numbered 75 or perhaps 79 in a photo of the car at Allison Camp but the last number is indistinct.

10. Three enclosed, centre-cupola, gas-engined, speeders acquired from Salmon River Logging at Kelsey Bay on Vancouver Island, late 1940s. Probably all were scrapped after the end of logging railway service in 1955. One speeder body remains at Aero Camp.

South Morseby Island Tramway Sites

By Robert Turner

Light railways or tramways, often operated without mechanical motive power, were a common feature of mining and other industrial facilities. They provided a cheap and effective means of moving heavy ore concentrates, coal and other materials. Several were used on the Queen Charlotte Islands including one at a coal mine on Graham Island and others at mining developments. Two were located near the southern tip of Moresby Island where a copper mine and an iron ore mine were developed, half a century apart. The tramways carried the ore to shipping docks located in sheltered bays, just a few miles apart, separated by a heavily forested peninsula. Like the logging railway at Aero Camp farther north on Moresby Island, these mining operations were remote and dependent on coastal shipping and, in later years, air services for there connections with mainland British Columbia. The tramways and the railway were all associated with temporary, resource extraction communities built with no intention that they would become established towns or cities. When the resource base was depleted, the camps and transportation systems were closed and dismantled. Information for these sketches is drawn primarily from British Columbia Department of Mines *Annual Reports* and Department of Mines and Petroleum Resources *Annual Reports.*

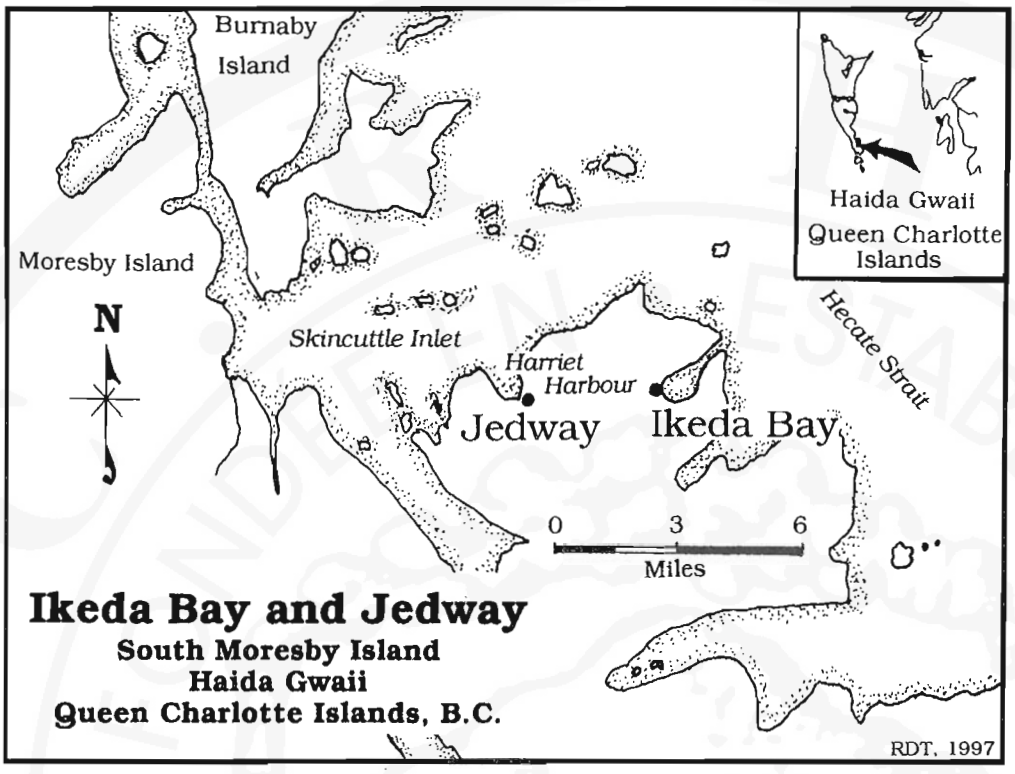
The Ikeda Bay Copper Mine

Ikeda Bay, now called Ikeda Cove, at the southern end of Morseby Island was the site of a well-developed copper mine in the early 1900s. It was developed by the firm of Awaya, Ikeda & Company of Vancouver and by 1907 was in full production with more than 100 men, mostly Japanese, working on developing the site and in active mining. The copper ore also contained recoverable amounts of silver and gold. The mine, which in 1907 had three Adit levels and one vertical shaft was located on the Lily group of claims. The mine workings and the shipping wharf were connected by a three-foot gauge tramway. It was approximate one and a half miles long and descended a steep grade from the ore bins to the coast and then ran along the shoreline to the ore bins. Horses were used for moving the ore cars Few details of the tramway have been recorded but photographs taken before 1910 for the B.C. Department of Mines show a well developed system using steel rails spiked to evenly spaced ties. Some trackage, presumably of a temporary nature near the mines, was much more crudely built with the rails spiked down the length of logs with a few cross timbers placed underneath. A double-tracked incline tramway, with what appears to be wooden rails, was used to lower cars carrying sacked ore over a section of the route from the mine workings to the wharf. Had the mine prospered, a small tank locomotive would have been a useful addition to the tramway operation.

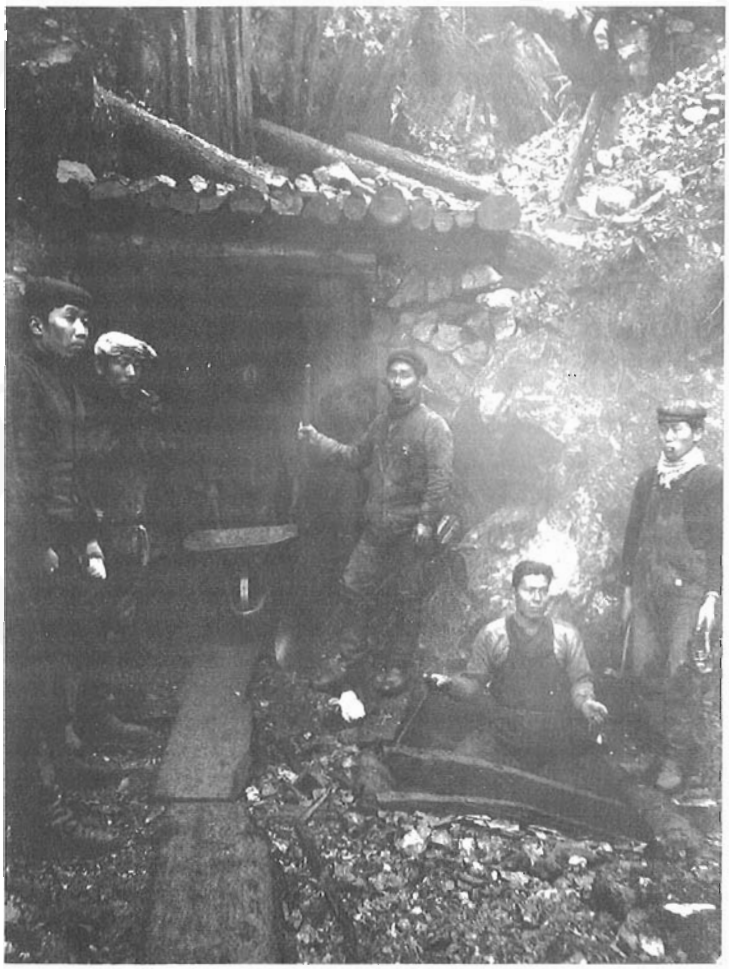
The Ikeda Mines on Morseby Island during the construction of the camp buildings probably in 1907-08. The view is from the upper tunnel. In the foreground is the wooden-tracked incline system used to transport sacked ore. Note the tramway trackage beyond the ore. -BC Archives & Records Service, H-04582

The ore bins and wharf were substantial structures and large coastal steamships could dock easily. The ore bins had a capacity of 1000 tons and the facilities were modern and efficient, permitting 1000 tons of ore to be loaded into a steamer in 10 hours. Passenger, mail and freight services were provided by the Canadian Pacific's British Columbia Coast Steamship Service using such steamers as the *Princess Beatrice* and *Princess Ena.* In addition cargo vessels came into Ikeda Bay to take on cargoes of copper ore.

An interesting aspect of the mine, reflecting the cultural background of its owners, was choice of names given to the copper claims; as well as the Lily, there were the Sweet Pea, Apple, Carnation, Orchid, Lemon, Peach Pansy and others. They provided an interesting contrast to the more typical names for mineral claims in the west, such as Last Chance, Bonanza, Hercules or Hope.



The company acquired the hulk of the sternwheeler *G.M. Dawson* for use as a bunkhouse for the miners at Ikeda Bay. This sternwheeler was originally a CPR vessel built in Vancouver in 1898 as part of its short-lived service on the Stikine River in connection with the Klondike Gold Rush. The plan was to operate a fleet of twelve sternwheelers between Wrangell, Alaska, and Glenora near Telegraph Creek, B.C., near the head of navigation on the Stikine River. From there a trail ran north to the headwaters of the Yukon River. Originally plans were made to build a railway northward from Glenora to Teslin Lake to provide a fast route to the Yukon but the scheme fell apart in the summer of 1898 and the routes from Skagway over the White and Chikoot passes became the preferred routes to the Klondike. The railway from Glenora was never built and the CPR, and many other operators, had numeous sternwheelers with little use for them. The *G.M. Dawson* was not yet finished when the service was cancelled and later it was sold to the British Yukon Navigation Company (the White Pass & Yukon Route). Components of the vessel were used in new White Pass steamers built at Whitehorse and the hull was sold. Eventually, it was used as a bunkhouse at Ikeda Bay where it was abandoned after the mine closed. (See Robert Turner, 1984. *Sternwheelers & Steam Tugs, An Illustrated History of the Canadian Pacific Railway's British Columbia Lake & River Service*, pp. 68-97.)

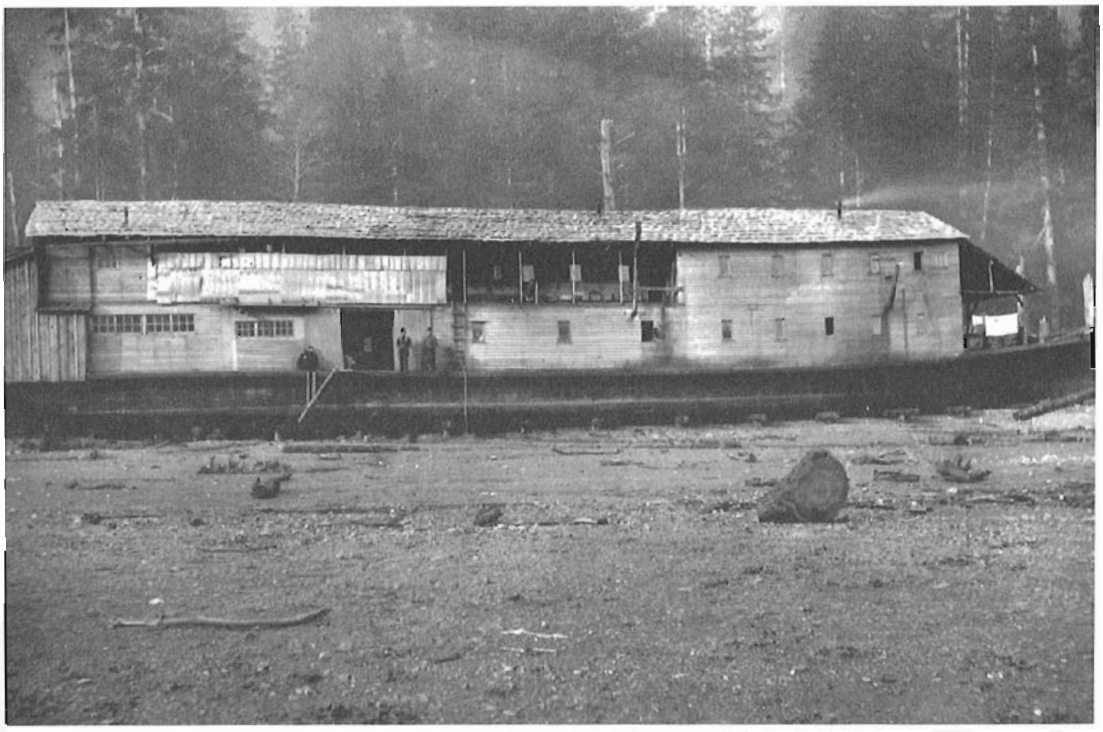


Japanese miners at one of the adits at the Ikeda Mines. -BC Archives & Records Service, H-04580

Of the CPR's Stikine fleet the only SS *Moyie* survives intact as an outstanding National Historic Site at Kaslo on Kootenay Lake in southeastern British Columbia. *Moyie* and her sistership *Minto* were both destined for service on the Stikine but their unassembled hulls and machinery were diverted to the Kootenays where they were placed in service late in 1898. The decaying remains of the steamer *Schwatka* and the hull of the *Tyrrell*, both part of the CPR's Stikine fleet, are abandoned at the old White Pass shipyard across the Yukon River from Dawson City, Yukon.

At the time the Ikeda Bay mine went into production, the B.C. Department of Mines reported that it was practically the only mine shipping ore on the Queen Charlottes. In 1908, the mine shipped 6,000 tons to the Tyee Smelter at Crofton on Vancouver Island. Development work continued and an eight-drill compressor was added along with a 25-h.p. stationary steam engine to haul the empty ore cars, probably on the incline system and steeper sections of the tramway shown in

one of the photos. However, the mine was only worked for about six months in 1909 before closing although 4,000 tons of ore was shipped. Apparently, the property came under the control of other Van-couver interests about 1910 but Mr. Ikeda remained the manager. For the next few years very little work was done on the property. In 1914, Ikeda reopened the mine with eight or ten men working. The next year 355 tons of first-class ore was shipped to the Granby smelter at Anyox north of Prince Rupert. This ore yielded 15.87 percent copper, 4.28 oz. of silver per ton and .28 oz. of gold per ton of ore. In addition, 400 tons of lower grade ore was produced. Production continued through the war years at varying levels with 1050 tons of ore being shipped in 1918. Much of the ore was low grade and needed hand sorting before shipment.



For a bunkhouse, the Ikeda Mines utilized the hulk of the Canadian Pacific sternwheeler G.M. Dawson. Many additions were made to the cabins and it is difficult to determine, in some parts of the vessel, which sections were original sternwheeler and how much was added on although there appear to be original sections of the saloon deck still more or less intact behind the newer planking. -BC Archives & Records Service, H-04587

By 1919, little work was being done and only 150 tons of ore was shipped to the Granby smelter. Mining engineers from Japan visited the property but it required a concentrating plant and extensive development to be made profitable. Some work was done the next year and 141 tons of ore was produced before the mine closed at the end of July. During the last months, as few as three men were working with Mr. J. Togunaga in charge. Apparently, financing was not forthcoming and the mine was closed and the property abandoned. Several thousand tons of low grade ore, unprofitable to ship, remained in the ore dumps.

The camp, viewed from the upper tunnel, in 1907 or 1908 after additional development work had been done. The incline appears to have been removed or at least relocated. -BC Archives & Records Service, B-03126

The Ikeda Mines tramway along the shore. The horse-drawn tramway car is loaded with sacked ore. In the distance is the steamer dock. BC Archives & Records Service, H-04581

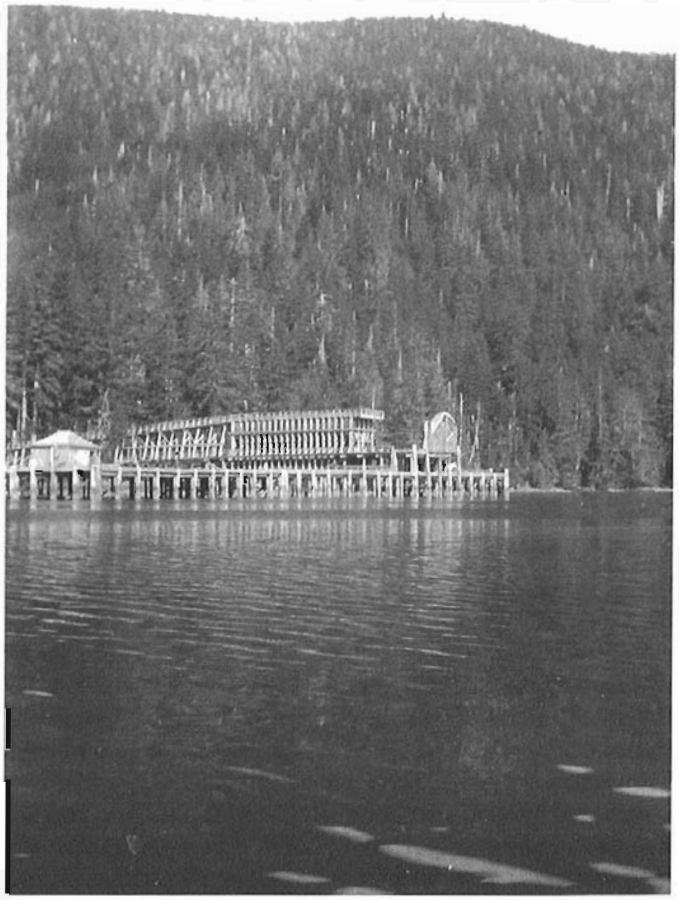
The Jedway Iron Mines

The Jedway Iron Mines were located on a number of claims on Harriet Harbour not far from Ikeda Cove on south Moresby Island. Exploration work and some limited copper mining had been carried out around Harriet Harbour in the early 1900s but no large scale development came for many years. Eventually, on the east side of the harbour, extensive drilling and testing was carried out in the late 1950s and through 1960 under the ownership of Silver Standard Mines Limited of Vancouver. In 1961, the property was taken over for development by Jedway Iron Ore Limited, a subsidiary of the Granby Mining Company, and a contract was secured with Shoji Kaisha Ltd. of Tokyo to supply 2,000,000 long tons of iron ore concentrates over five years. (Department of Mines and Petroleum Resources, *Annual Report* 1961, p. 13).

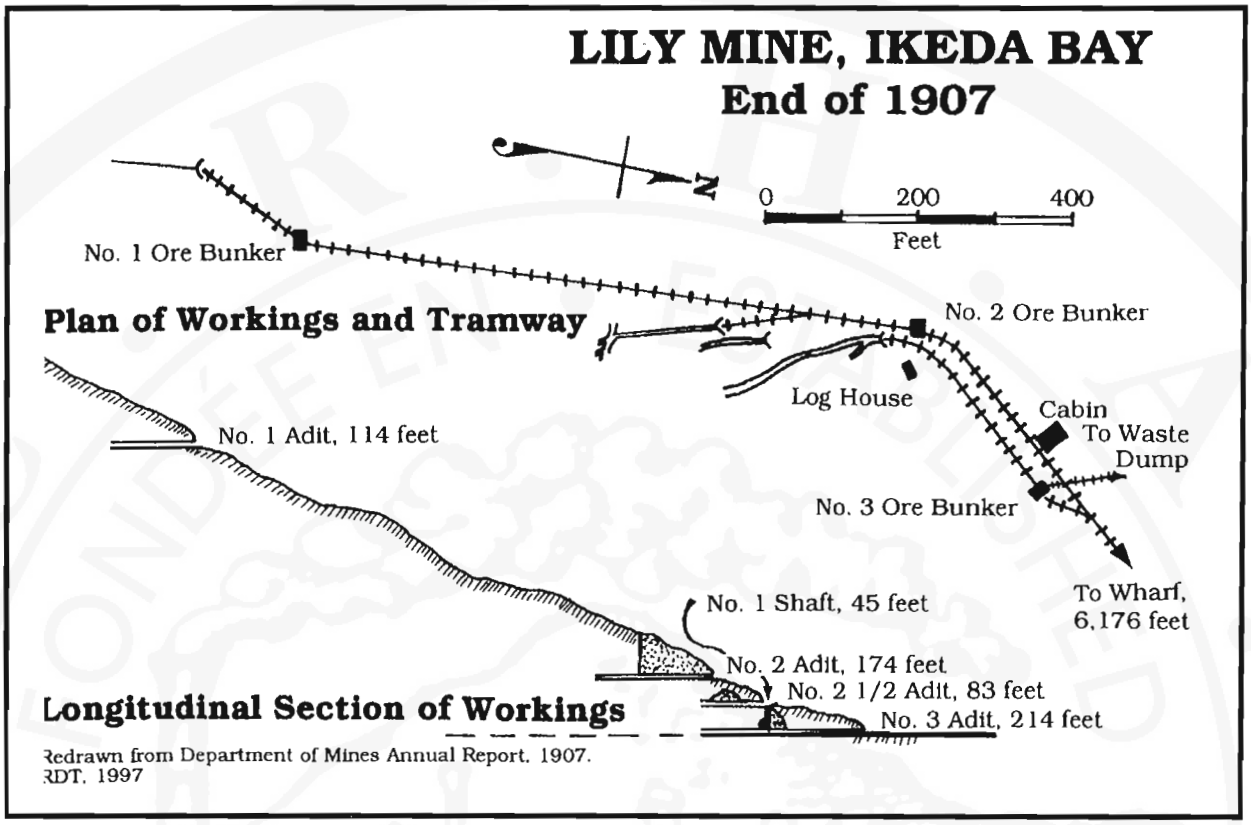
Through 1961 the site was developed for an open pit operation and a townsite was built. Like the mine at Ikeda Bay half a century before, the mine had to be self-sufficient. The townsite, albeit, more modern and with much higher standards of accommodations than those provided on the old sternwheeler *Dawson*, was intended to survive only for the planned five-year life of the mine. It comprised three bunkhouses, including one with sleeping for 60 men, a store, school, office, staff-house, and at least ten residences. By the time the mine was in full production, the labour force had increased to average 142 men working for the mine, 20 employed by the trucking contractor and another 13 in the staff of the catering company. The remote mining camp could be reached by coastal freighters operated by Northland Navigation, which had taken over some of the services once offered by the Union Steamship Company, barges, and by B.C. Airlines or charter aircraft from Sandspit at the north end of Moresby Island.

By mid-1962, full production was underway. At the surface mining pits, Northwest shovels were used to load the ore into 20-ton Euclid trucks which delivered the ore to a crusher. Ore from the crusher was delivered for concentration to the mill, located near the ship-loading terminal, by trains of eight 10-ton ore cars operating on a surface railway powered by an overhead trolley system. Details of the rail operation and the types of equipment used are scanty but the Department of Mines & Petroleum Resources noted in 1962 that "two trolley locomotives and one battery locomotive," were in use.

The bulk carrier *Harriet Maru* left Jedway with the first shipment of ore concentrates on October 27, 1962. Over the next few years three open pits were worked including properties close to Ikeda Cove owned by Falconbridge Nickel Mines which were mined under a royalty agreement. The railway was used



Large ore bunkers were built next to the steamer dock to store the ore between shipments and to facilitate loading the vessels. -BC Archives & Records Service, D-00554

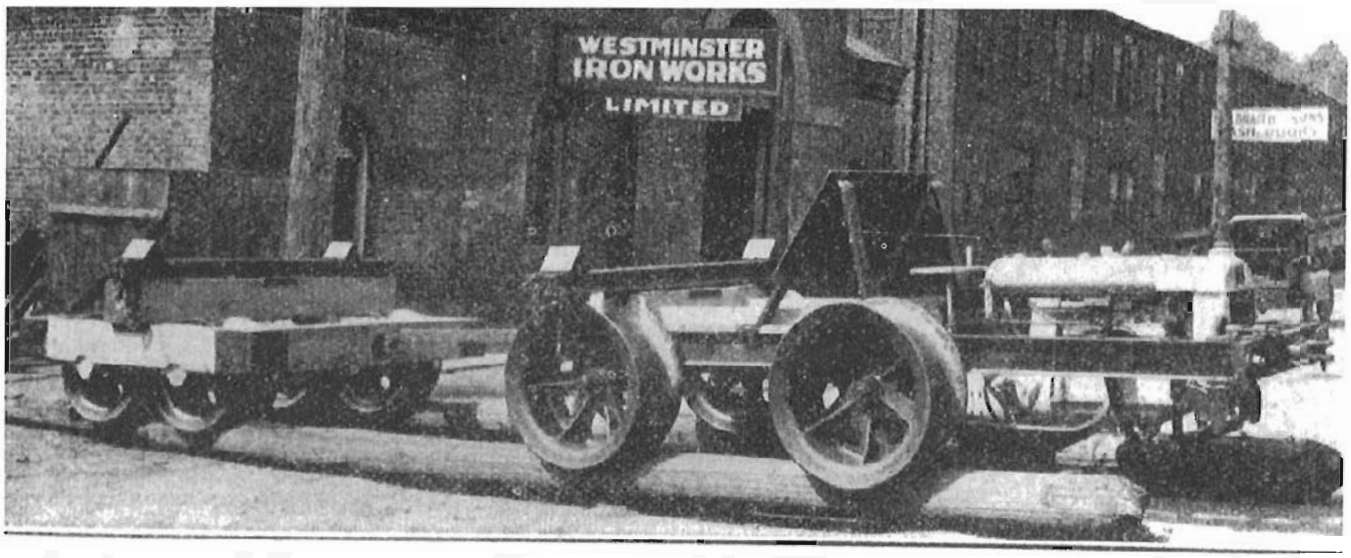


until early 1967 when it was bypassed and crushed ore was hauled by truck to the mill for concentration. The mine closed on February 29, 1968, plant and townsite were dismantled and the last employees left the site on August 12th. Total production of concentrates shipped was 2,282,835 tons from 4,341,676 tons of ore milled. A number of the building were sold and taken by barge to other communities on the Queen Charlottes and the townsite of Jedway became little more than a memory. However, evidence of the mines, the haulage roads, the loading dock, waste rock fills and the townsite remain at Jedway.

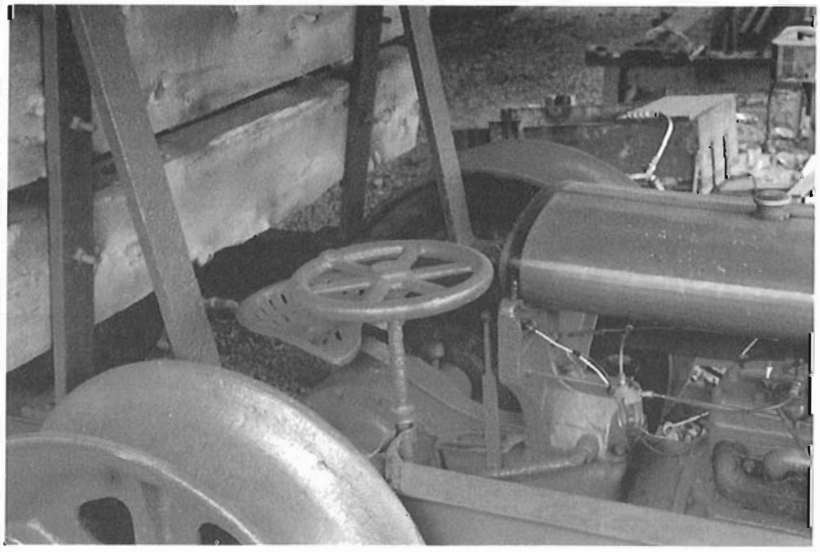
The Princess Ena, shown at the Ikeda Mines ore bunkers, was a small coastal freighter operated by the Canadian Pacific Railway. The Ena was built in 1907 and served many of the mining and logging camps along the British Columbia coast. -BC Archives & Records Service, H-04584

Baxter Pole Company, Port Clements

By Robert Turner



Westminster Iron Works "Tugaway" tractor from an advertisement in the British Columbia Lumberman in 1927. This is similar to the machines operated by the Baxter Pole Company near Port Clements. This machine is not identified but may well be the one sold to the Lee Hand Logging Company. -Robert Turner collection.

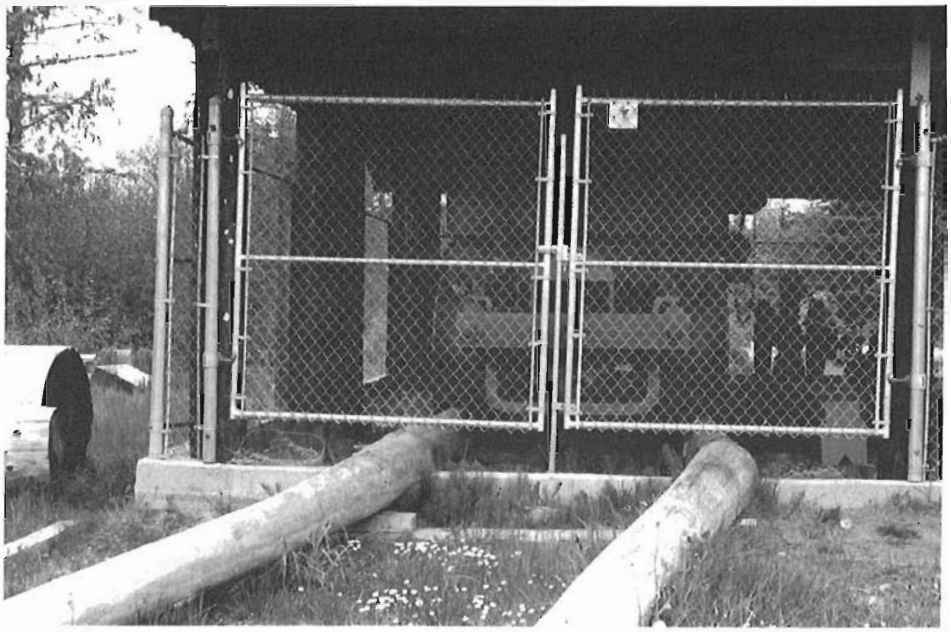


The Port Clements Historical Society on Graham Island, largest of the Queen Charlotte Islands, has restored a logging tractor built to run on pealed wooden poles. This vehicle, called a "Tugaway" was manufactured by the Westminster Iron Works in New Westminster, B.C., in 1927. The machine is one of three operated in the 1920s and early Depression years by the J. H. Baxter Pole Company. In 1988 the society salvaged two vehicles, unused since the early 1930s, from Kumdis Island in Masset Inlet and has reconstructed one from the components. It is an excellent restoration and is displayed, under cover, at Port Clements and is an admirable example of preserving industrial equipment. Because of its enclosed storage, photography is difficult.

The area around Port Clements is generally flat and marshy and pole railways were built to make operating the Tugaway vehicles feasible over the soft ground. Wooden poles, 12 to 16 inches in diameter, were pealed of their bark and laid end to end over widely-spaced ties to function as track. This produced an economical track structure that could be built over very soft ground. The vehicles had large wheels with flanges on both sides so that they could roll safely over the rough wooden trackage. The Baxter Pole Company used three Tugaway tractors on a two-mile-long pole line at Ferguson Bay, a four-mile operation at Mayer Lake and finally on a two-mile line at Kumdis Island all in the vicinity of Port Clements. In 1933, Baxter closed the pole cutting operations and sold the two operational Tugaways and a third one being used for parts to a local group but they were not used again. Information on the history of the Baxter Pole Company is drawn from Kathleen Dalzell's, 1989, *The Queen Charlotte Islands*, Vol. 2, Harbour Publishing, Madeira Park, B.C. and from Fred Ward's article, "Cedar Pole Making and Handing in 1929," in *The Charlottes, A Journal of the Queen Charlotte Islands, Vol. 1.*

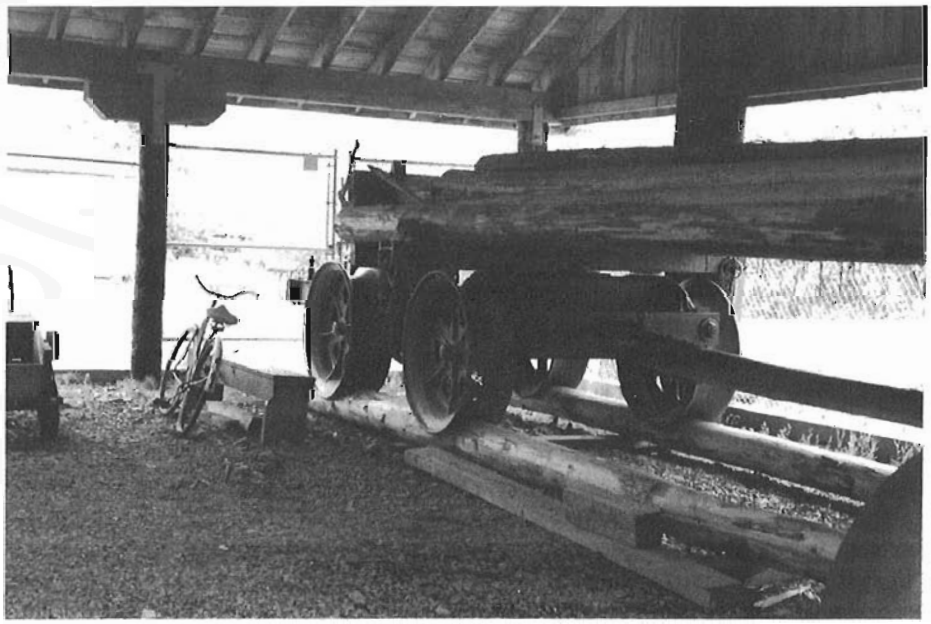
Westminster Iron Works was a well-established manufacturer of iron castings, logging machinery and general foundry products. They expanded their production in the 1920s to include a line of small industrial locomotives, speeders and the Tugaway tractors. The Tugaway utilized a Fordson engine for power and had a log bunk mounted over the rear axle of the tractor. On some models, the forward axle of the tractor was connected directly to the drive train and the second axle was connected by side rods but on others, including the Baxter machines, a chain drive was used. A third set

of wheels, or a pair of wheels, supported a second log bunk which was pulled as a trailer. The logs were spanned across the two log bunks. Photos show one Baxter machine, probably their first, with a single rear axle. The Tugaway preserved at Port Clements has two. Westminster Iron Works rated the Tugaways at a capacity of 6000 feet of timber on grades up to three percent and 3,000 feet on grades to six percent. Another advertisement for an "improved" Tugaway claimed a hauling capacity of 5000 feet on a five percent grade.



The weight was given as seven tons but was also noted at eight tons with trailer and nine tons for a model with a steel framed trailer. With three speeds in forward and reverse, advertised speeds of two to ten miles an hour were claimed, although Fred Ward, in an article, "Cedar Pole Making and Handling in 1929," suggests that speeds of 20 miles an hour were possible. Large drum brakes were provided for safety. Advertisements showed Tugaways designed for either steel rail or pole road operation. As with logging trucks of the period, the Tugaways offered no protection for the operator. Just how many were built by Westminster Iron Works is uncertain but four types are known from advertisements or photos and in 1926 the Lee Hand Logging Company, operating at Bute Inlet, was noted as acquiring the first machine produced by the company. See for example, *British Columbia Lumberman*, May 1926, pp. 101, January 1927, pp. 85 and February 1927, pp. 87.

One other Westminster Iron Works locomotive has been preserved. This is a Buda-engined switcher that was purchased by the McLean Mill near Port Alberni and has been beautifully restored by the Western Vancouver Island Industrial Heritage Society in cooperation with the Alberni Valley Museum and the R.B. McLean Mill National Historic Site. The R.B. McLean Mill as a National Historic Site, is undergoing restoration and development on Vancouver Island.



THREE PHOTOS ON THIS PAGE AND ONE ON PRECEDING PAGE: Details of the restored Baxter Pole Company Tugaway tractor at the Port Clements Historical Society's museum. -Nancy Turner

The Queen Charlottes Revisited

By A. Stephen Walbridge

Before reading this, I will presume you have read Robert Turner's articles, on railways in the Queen Charlotte Islands, in this issue.

In July 1995, five members of my family chartered a sailboat, the TAKULI III, for a week's sailing in the Queen Charlotte Islands. We took advantage of the occasion to visit the camp site, railway terminal and loading dock site of this railway - quiet since 1955.

After visiting the site of the steam logging railway at Aero, we sailed southamong the islands for two days, and overnighted on board at Ikeda Cove. Strolling on the shore, we came across the remains of the horse-drawn carts used to bring the bags of copper ore from mine to dock. It was a very pleasant surprise, as we had no previous knowledge of this tramway, or of the Ikeda Bay Copper Mine.

Later that same day we sailed into Harriet Harbour, on the opposite side of the nameless peninsula from the Ikeda Bay Copper Mine. The remains of a ship-loading facility attracted our attention, so we landed to explore. A pair of 85-lb. rails crossed the beach to the water's edge. Also, three 85-lb. crossovers lay on the beach. A long walk on the bare roadbed did not increase our knowledge of the area. Robert Turner's research and map tells all of the story that is available about the mine and the railway.

Walking in the area involves losing sight of your feet in inches of moss. One of the relics found under the moss was a 14-inch piece of water glass from a locomotive or boiler, intact after all these years.

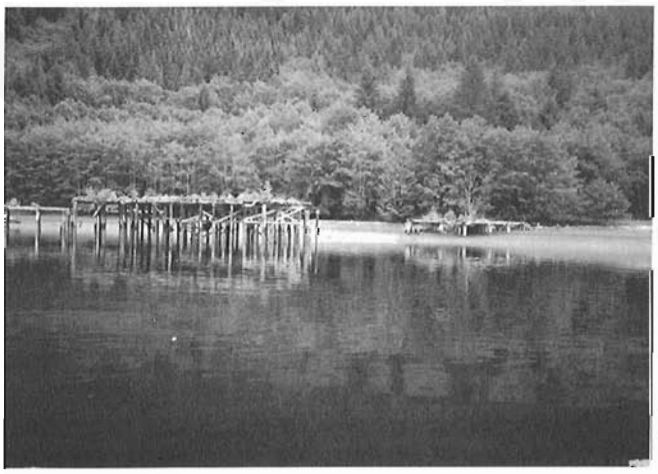
I invite you to enjoy comparing the following photos with the views of the "living" scenes which are printed with Robert Turner's article.

LEFT: The boiler, probably of Climax No. 4, remains in 1995, with the roof of the cab nearby. The green board lining of the cab clearly identifies the cab, protected by inches of moss. Compare with the photo on page 41, taken in 1971.

BELOW: Two views of the remains of the log-unloading pier at Aero Camp. Oddly, a section in the middle has completely disappeared, even the part of the piles which were under water.

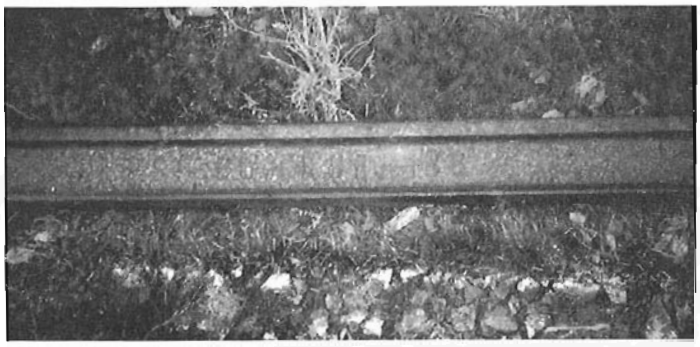
Photos on these two pages are taken at the site of Aero Camp.

The 1995 photos on these four pages are all by A.S.Walbridge.



The frame of 2-truck 1919 Climax No. 4. It is lying on its side, partly covered by moss. No wheels or running gear could be found.

A manually-operated rail bender slowly rusts away. This is like the one used for many years by the volunteers at the Canadian Railway Museum.



"C.P.R. STEEL KRUPP 1881"

"CAMMEL SHEFFIELD TOUGHENED STEEL, SEC. 186. 1885 CANADIAN PACIFIC"

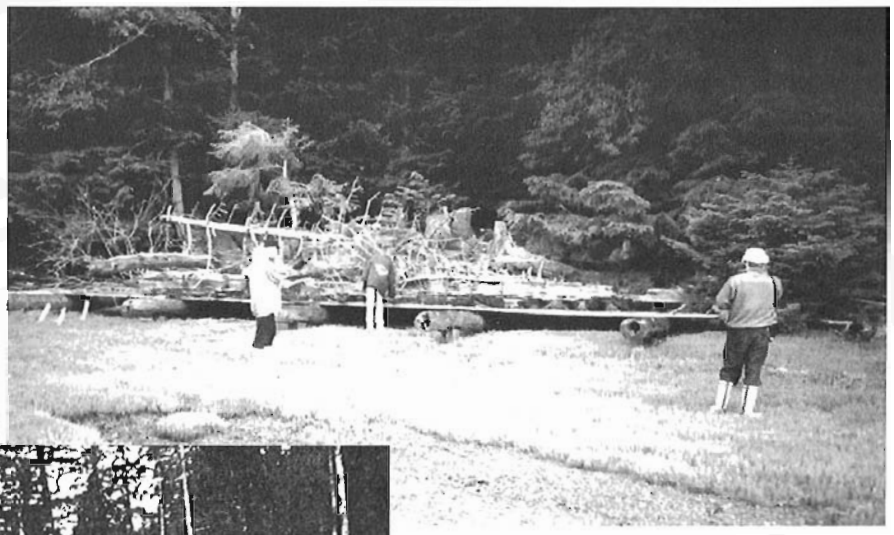
Two abandoned rails at Aero Camp in 1995. It may be reasonable to assume that these rails were first used on Canadian Pacific's first transcontinental line, and were later used at Aero between 1930 and 1955.

Two views of parts of numerous wood-silled logging cars, spending their last days protected by inches of moss.

The tramway used to haul copper ore from the IKEDA BAY MINE was 3-foot gauge. These photos of the remains of the frame of one of the ore cars gives an idea of the load that the horse pulled from mine to dock.

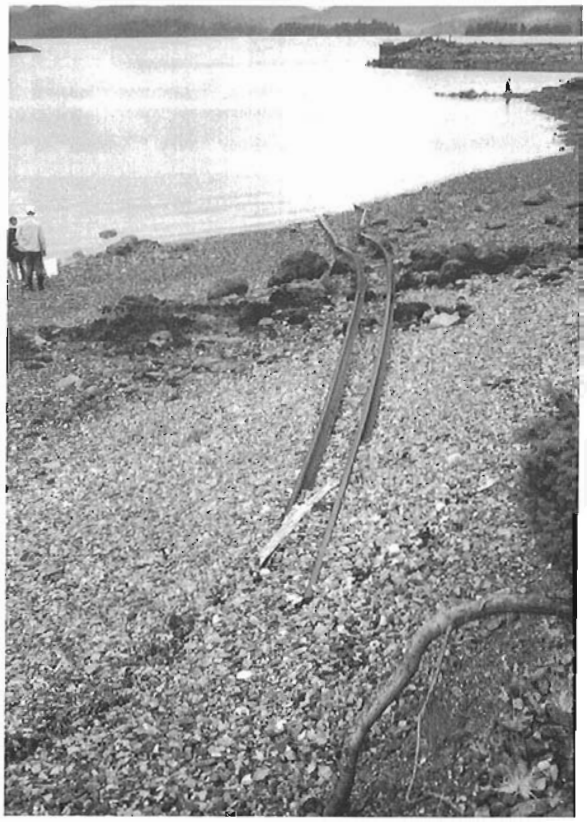
Copper ore, hauled by horse-drawn tram from open pit mines, was loaded onto ships from the bunkers at the end of the pier in Ikeda Cove. These two views show the little that remains in 1995. Compare these with the photo at the bottom of page 48 which shows the facility in action in 1913.

In 1907 The sternwheeler "Dawson" was beached on timbers and used as a bunk house. The photo below shows how it appeared at that time, while the picture at right reveals that only the barest outline of the vessel remains.



BELOW: On the opposite side of a nameless peninsula from the Ikeda Copper Mine, the Jedway Iron Ore open pit mine is visible at a few hundred feet elevation. The ballasted roadbed is in excellent condition in 1995. Switchbacks took care of the elevation. The only tracks to be seen lead to the beach, and may have been used in the salvage of railway and mining equipment.

ABOVE: For some unexplained reason, three rail frogs from the Jedway Iron Ore Company's 85-lb. track remain in very good condition on the beach at Harriet Bay.



BACK COVER: The Canadian Pacific coastal steamer Princess Beatrice at Ikeda Bay, in the Queen Charlotte Islands, in 1907. -B.C. Archives & Records Service, A-05222

Canadian Rail

120, rue St-Pierre, St. Constant, Québec
Canada J5A 2G9