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Statutes at Large

AND

PROCLAMATIONS

OF THE

UNITED STATES OF AMERICA,

FROM MARCH 1871 TO MARCH 1873,

AND

TREATIES AND POSTAL CONVENTIONS

Arranged in Chronological Order and carefully collated with the Originals at Washington,

WITH

REFERENCES TO THE MATTER OF EACH ACT AND TO THE SUBSEQUENT ACTS ON THE SAME SUBJECT.

EDITED BY

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VOL. XVII.

BOSTON:
LITTLE, BROWN, AND COMPANY.
1873.

Treaty between the United States and Great Britain. Claims, Fisheries, Navigation of the St. Lawrence, &c.; American Lumber on the River St. John; Boundary. Concluded May 8, 1871; Ratifications exchanged June 17, 1871; Proclaimed July 4, 1871.

May 8, 1871.

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA:

A PROCLAMATION.

Preamble.

WHEREAS a treaty, between the United States of America and her Majesty the Queen of the United Kingdom of Great Britain and Ireland, concerning the settlement of all causes of difference between the two countries, was concluded and signed at Washington by the high commissioners and plenipotentiaries of the respective governments on the eighth day of May last; which treaty is word for word, as follows: —

Contracting parties.

The United States of America and her Britannic Majesty, being desirous to provide for an amicable settlement of all causes of difference between the two countries, have for that purpose appointed their respective plenipotentiaries, that is to say: The President of the United States has appointed, on the part of the United States, as Commissioners in a Joint High Commission and Plenipotentiaries, Hamilton Fish, Secretary of State; Robert Cumming Schenck, Envoy Extraordinary and Minister Plenipotentiary to Great Britain; Samuel Nelson, an Associate Justice of the Supreme Court of the United States; Ebenezer Rockwood Hoar, of Massachusetts; and George Henry Williams, of Oregon; and her Britannic Majesty, on her part, has appointed as her High Commissioners and Plenipotentiaries, the Right Honourable George Frederick Samuel, Earl de Grey and Earl of Ripon, Viscount Goderich, Baron Grantham, a Baronet, a Peer of the United Kingdom, Lord President of her Majesty's Most Honourable Privy Council, Knight of the Most Noble Order of the Garter, etc., etc.; the Right Honourable Sir Stafford Henry Northcote, Baronet, one of her Majesty's Most Honourable Privy Council, a Member of Parliament, a Companion of the Most Honourable Order of the Bath, etc., etc.; Sir Edward Thornton, Knight Commander of the Most Honourable Order of the Bath, her Majesty's Envoy Extraordinary and Minister Plenipotentiary to the United States of America; Sir John Alexander Macdonald, Knight Commander of the Most Honourable Order of the Bath, a member of her Majesty's Privy Council for Canada, and Minister of Justice and Attorney-General of her Majesty's Dominion of Canada; and Mountague Bernard, Esquire, Chichele Professor of International Law in the University of Oxford.

And the said plenipotentiaries, after having exchanged their full powers, which were found to be in due and proper form, have agreed to and concluded the following articles: —

ARTICLE I.

Alabama claims to be referred to arbitration.

Whereas differences have arisen between the government of the United States and the government of her Britannic Majesty, and still exist, growing out of the acts committed by the several vessels which have given rise to the claims generically known as the "Alabama claims:"

And whereas her Britannic Majesty has authorized her high commissioners and plenipotentiaries to express, in a friendly spirit, the regret felt

by her Majesty's government for the escape, under whatever circumstances, of the Alabama and other vessels from British ports, and for the depredations committed by those vessels:

Arbitrators, and how to be named.

Now, in order to remove and adjust all complaints and claims on the part of the United States, and to provide for the speedy settlement of such claims, which are not admitted by her Britannic Majesty's government, the high contracting parties agree that all the said claims, growing out of acts committed by the aforesaid vessels, and generically known as the "Alabama claims," shall be referred to a tribunal of arbitration to be composed of five arbitrators, to be appointed in the following manner, that is to say: One shall be named by the President of the United States; one shall be named by her Britannic Majesty; his Majesty the King of Italy shall be requested to name one; the President of the Swiss Confederation shall be requested to name one; and his Majesty the Emperor of Brazil shall be requested to name one.

Vacancies how filled.

In case of the death, absence, or incapacity to serve of any or either of the said arbitrators, or, in the event of either of the said arbitrators omitting or declining or ceasing to act as such, the President of the United States, or her Britannic Majesty, or his Majesty the King of Italy, or the President of the Swiss Confederation, or his Majesty the Emperor of Brazil, as the case may be, may forthwith name another person to act as arbitrator in the place and stead of the arbitrator originally named by such head of a state.

And in the event of the refusal or omission for two months after receipt of the request from either of the high contracting parties of his Majesty the King of Italy, or the President of the Swiss Confederation, or his Majesty the Emperor of Brazil, to name an arbitrator either to fill the original appointment or in the place of one who may have died, be absent, or incapacitated, or who may omit, decline, or from any cause cease to act as such arbitrator, his Majesty the King of Sweden and Norway shall be requested to name one or more persons, as the case may be, to act as such arbitrator or arbitrators.

ARTICLE II.

Arbitrators to meet when and where; their powers; a majority to decide.

The arbitrators shall meet at Geneva, in Switzerland, at the earliest convenient day after they shall have been named, and shall proceed impartially and carefully to examine and decide all questions that shall be laid before them on the part of the governments of the United States and her Britannic Majesty respectively. All questions considered by the tribunal, including the final award, shall be decided by a majority of all the arbitrators.

Agent of each party.

Each of the high contracting parties shall also name one person to attend the tribunal as its agent to represent it generally in all matters connected with the arbitration.

ARTICLE III.

Case of each party, &c., when to be given to arbitrators.

The written or printed case of each of the two parties, accompanied by the documents, the official correspondence, and other evidence on which each relies, shall be delivered in duplicate to each of the arbitrators and to the agent of the other party as soon as may be after the organization of the tribunal, but within a period not exceeding six months from the date of the exchange of the ratifications of this treaty.

ARTICLE IV.

Counter case, &c.

Within four months after the delivery on both sides of the written or printed case, either party may, in like manner, deliver in duplicate to each

of the said arbitrators, and to the agent of the other party, a counter case and additional documents, correspondence, and evidence, in reply to the case, documents, correspondence, and evidence so presented by the other party.

Time may be extended.

The arbitrators may, however, extend the time for delivering such counter case, documents, correspondence, and evidence, when, in their judgment, it becomes necessary, in consequence of the distance of the place from which the evidence to be presented is to be procured.

Documents and papers to be produced.

If in the case submitted to the arbitrators either party shall have specified or alluded to any report or document in its own exclusive possession without annexing a copy, such party shall be bound, if the other party thinks proper to apply for it, to furnish that party with a copy thereof; and either party may call upon the other, through the arbitrators, to produce the originals or certified copies of any papers adduced as evidence, giving in each instance such reasonable notice as the arbitrators may require.

ARTICLE V.

Arguments and briefs.

It shall be the duty of the agent of each party, within two months after the expiration of the time limited for the delivery of the counter case on both sides, to deliver in duplicate to each of the said arbitrators and to the agent of the other party a written or printed argument showing the points and referring to the evidence upon which his government relies; and the arbitrators may, if they desire further elucidation with regard to any point, require a written or printed statement or argument, or oral argument by counsel upon it; but in such case the other party shall be entitled to reply either orally or in writing, as the case may be.

ARTICLE VI.

Rules, &c., to govern the arbitrators in their decisions.

In deciding the matters submitted to the arbitrators, they shall be governed by the following three rules, which are agreed upon by the high contracting parties as rules to be taken as applicable to the case, and by such principles of international law not inconsistent therewith as the arbitrators shall determine to have been applicable to the case.

RULES.

A neutral government is bound —

Obligations of neutral government to use due diligence to prevent the fitting out, &c., within, &c., of vessels, &c.;

First, to use due diligence to prevent the fitting out, arming, or equipping, within its jurisdiction, of any vessel which it has reasonable ground to believe is intended to cruise or to carry on war against a power with which it is at peace; and also to use like diligence to prevent the departure from its jurisdiction of any vessel intended to cruise or carry on war as above, such vessel having been specially adapted, in whole or in part, within such jurisdiction, to warlike use.

not to permit its ports, &c., to be used for certain purposes;

Secondly, not to permit or suffer either belligerent to make use of its ports or waters as the base of naval operations against the other, or for the purpose of the renewal or augmentation of military supplies or arms, or the recruitment of men.

to use due diligence within, &c., to prevent violation of obligations.

Thirdly, to exercise due diligence in its own ports and waters, and, as to all persons within its jurisdiction, to prevent any violation of the foregoing obligations and duties.

These rules not admitted to have been in force when the Alabama claims arose, but to govern in future cases.

Her Britannic Majesty has commanded her high commissioners and plenipotentiaries to declare that her Majesty's government cannot assent to the foregoing rules as a statement of principles of international law which were in force at the time when the claims mentioned in Article I. arose, but that her Majesty's government, in order to evince its desire of strengthening the friendly relations between the two countries and of

making satisfactory provision for the future, agrees that in deciding the questions between the two countries arising out of those claims, the arbitrators should assume that her Majesty's government had undertaken to act upon the principles set forth in these rules.

And the high contracting parties agree to observe these rules as between themselves in future, and to bring them to the knowledge of other maritime powers, and to invite them to accede to them.

ARTICLE VII.

Decision to be made when and in what form;

The decision of the tribunal shall, if possible, be made within three months from the close of the argument on both sides.

It shall be made in writing and dated, and shall be signed by the arbitrators who may assent to it.

to be made as to each vessel separately.

The said tribunal shall first determine as to each vessel separately whether Great Britain has, by any act or omission, failed to fulfil any of the duties set forth in the foregoing three rules, or recognized by the principles of international law not inconsistent with such rules, and shall certify such fact as to each of the said vessels. In case the tribunal find that Great Britain has failed to fulfil any duty or duties as aforesaid, it

If Great Britain is found in fault, a gross sum may be awarded;

when to be paid.

may, if it think proper, proceed to award a sum in gross to be paid by Great Britain to the United States for all the claims referred to it; and in such case the gross sum so awarded shall be paid in coin by the government of Great Britain to the government of the United States, at Washington, within twelve months after the date of the award.

Award to be in duplicate, and to whom delivered.

The award shall be in duplicate, one copy whereof shall be delivered to the agent of the United States for his government, and the other copy shall be delivered to the agent of Great Britain for his government.

ARTICLE VIII.

Expenses of the arbitration, how to be defrayed.

Each government shall pay its own agent and provide for the proper remuneration of the counsel employed by it and of the arbitrator appointed by it, and for the expense of preparing and submitting its case to the tribunal. All other expenses connected with the arbitration shall be defrayed by the two governments in equal moieties.

ARTICLE IX.

Arbitrators to keep a record.

The arbitrators shall keep an accurate record of their proceedings, and may appoint and employ the necessary officers to assist them.

ARTICLE X.

If Great Britain is found in fault and a gross sum is not awarded, a board of assessors to be appointed to determine claims, &c.;

In case the tribunal finds that Great Britain has failed to fulfil any duty or duties as aforesaid, and does not award a sum in gross, the high contracting parties agree that a board of assessors shall be appointed to ascertain and determine what claims are valid, and what amount or amounts shall be paid by Great Britain to the United States on account of the liability arising from such failure, as to each vessel, according to the extent of such liability as decided by the arbitrators.

how to be constituted.

The board of assessors shall be constituted as follows: One member thereof shall be named by the President of the United States, one member thereof shall be named by her Britannic Majesty, and one

Vacancies.

member thereof shall be named by the representative at Washington of his Majesty the King of Italy; and in case of a vacancy happening from any cause, it shall be filled in the same manner in which the original appointment was made.

Board to meet when.

As soon as possible after such nominations the board of assessors

shall be organized in Washington, with power to hold their sittings there, or in New York, or in Boston. The members thereof shall severally subscribe a solemn declaration that they will impartially and carefully examine and decide, to the best of their judgment and according to justice and equity, all matters submitted to them, and shall forthwith proceed, under such rules and regulations as they may prescribe, to the investigation of the claims which shall be presented to them by the government of the United States, and shall examine and decide upon them in such order and manner as they may think proper, but upon such evidence or information only as shall be furnished by or on behalf of the governments of the United States and of Great Britain, respectively. They shall be bound to hear on each separate claim, if required, one person on behalf of each government, as counsel or agent. A majority of the assessors in each case shall be sufficient for a decision.

Members to subscribe a declaration; their powers and duties; a majority to decide.

The decision of the assessors shall be given upon each claim in writing, and shall be signed by them respectively and dated.

Decision when and how given.

Every claim shall be presented to the assessors within six months from the day of their first meeting, but they may, for good cause shown, extend the time for the presentation of any claim to a further period not exceeding three months.

Claims to be presented within what time.

The assessors shall report to each government at or before the expiration of one year from the date of their first meeting the amount of claims decided by them up to the date of such report; if further claims then remain undecided, they shall make a further report at or before the expiration of two years from the date of such first meeting; and in case any claims remain undetermined at that time, they shall make a final report within a further period of six months.

Report of assessors;

The report or reports shall be made in duplicate, and one copy thereof shall be delivered to the secretary of state of the United States, and one copy thereof to the representative of her Britannic Majesty at Washington.

how to be made and to whom delivered.

All sums of money which may be awarded under this article shall be payable at Washington, in coin, within twelve months after the delivery of each report.

Awards when and where to be paid.

The board of assessors may employ such clerks as they shall think necessary.

Clerks.

The expenses of the board of assessors shall be borne equally by the two governments, and paid from time to time, as may be found expedient, on the production of accounts certified by the board. The remuneration of the assessors shall also be paid by the two governments in equal moieties in a similar manner.

Expenses.

ARTICLE XI.

The high contracting parties engage to consider the result of the proceedings of the tribunal of arbitration and of the board of assessors, should such board be appointed, as a full, perfect, and final settlement of all the claims hereinbefore referred to; and further engage that every such claim, whether the same may or may not have been presented to the notice of, made, preferred, or laid before the tribunal or board, shall, from and after the conclusion of the proceedings of the tribunal or board, be considered and treated as finally settled, barred, and thenceforth inadmissible.

Decisions of the arbitrators and assessors to be final.

Claims not presented to be deemed finally settled.

ARTICLE XII.

The high contracting parties agree that all claims on the part of corporations, companies, or private individuals, citizens of the United States, upon the government of her Britannic Majesty, arising out of acts committed against the persons or property of citizens of the United States during the period between the thirteenth of April, eighteen hundred and

Certain claims (other than the Alabama claims) against either government to be referred to

three commissioners; sixty-one, and the ninth of April, eighteen hundred and sixty-five, inclusive, not being claims growing out of the acts of the vessels referred to in Article I. of this treaty, and all claims, with the like exception, on the part of corporations, companies, or private individuals, subjects of her Britannic Majesty, upon the government of the United States, arising out of acts committed against the persons or property of subjects of her Britannic Majesty during the same period, which may have been presented to either government for its interposition with the other, and which yet remain unsettled, as well as any other such claims which may be presented within the time specified in Article XIV. of this treaty, shall be referred to three commissioners, to be appointed in the following manner, that is to say: One commissioner shall be named by the President of the United States, one by her Britannic Majesty, and a third by the President of the United States and her Britannic Majesty conjointly; and in case the third commissioner shall not have been so named within a period of three months from the date of the exchange of the ratifications of this treaty, then the third commissioner shall be named by the Representative at Washington of his Majesty the King of Spain. In case of the death, absence, or incapacity of any commissioner, or in the event of any commissioner omitting or ceasing to act, the vacancy shall be filled in the manner hereinbefore provided for making the original appointment; the period of three months in case of such substitution being calculated from the date of the happening of the vacancy.

See *Ante*, p. 422.

their appointment;

vacancies;

their powers and duties. The commissioners so named shall meet at Washington at the earliest convenient period after they have been respectively named; and shall, before proceeding to any business, make and subscribe a solemn declaration that they will impartially and carefully examine and decide, to the best of their judgment, and according to justice and equity, all such claims as shall be laid before them on the part of the governments of the United States and of her Britannic Majesty, respectively; and such declaration shall be entered on the record of their proceedings.

See *Post*, p. 947.

ARTICLE XIII.

Claims to be investigated. The commissioners shall then forthwith proceed to the investigation of the claims which shall be presented to them. They shall investigate and decide such claims in such order and such manner as they may think proper, but upon such evidence or information only as shall be furnished by or on behalf of the respective governments. They shall be bound to receive and consider all written documents or statements which may be presented to them by or on behalf of the respective governments in support of, or in answer to, any claim, and to hear, if required, one person on each side, on behalf of each government, as counsel or agent for such government, on each and every separate claim. A majority of the commissioners shall be sufficient for an award in each case. The award shall be given upon each claim in writing, and shall be signed by the commissioners assenting to it. It shall be competent for each government to name one person to attend the commissioners as its agent, to present and support claims on its behalf, and to answer claims made upon it, and to represent it generally in all matters connected with the investigation and decision thereof.

A majority to decide.

Award in each claim.

Agent of each government.

Decisions to be final. The high contracting parties hereby engage to consider the decision of the commissioners as absolutely final and conclusive upon each claim decided upon by them, and to give full effect to such decisions without any objection, evasion, or delay whatsoever.

See article xvii.

ARTICLE XIV.

Claims when Every claim shall be presented to the commissioners within six months

from the day of their first meeting, unless in any case where reasons for delay shall be established to the satisfaction of the commissioners, and then, and in any such case, the period for presenting the claim may be extended by them to any time not exceeding three months longer. to be presented to the commissioners;

The commissioners shall be bound to examine and decide upon every claim within two years from the day of their first meeting. It shall be competent for the commissioners to decide in each case whether any claim has or has not been duly made, preferred, and laid before them, either wholly or to any and what extent, according to the true intent and meaning of this treaty. when to be decided. Commissioners to decide if any case is properly before them.

ARTICLE XV.

All sums of money which may be awarded by the commissioners on account of any claim shall be paid by the one government to the other, as the case may be, within twelve months after the date of the final award, without interest, and without any deduction save as specified in Article XVI. of this treaty. Awards when to be paid.

ARTICLE XVI.

The commissioners shall keep an accurate record, and correct minutes or notes of all their proceedings, with the dates thereof, and may appoint and employ a secretary, and any other necessary officer or officers, to assist them in the transaction of the business which may come before them. Records. Secretary.

Each government shall pay its own commissioner and agent or counsel. All other expenses shall be defrayed by the two governments in equal moieties. Expenses;

The whole expenses of the commission, including contingent expenses, shall be defrayed by a ratable deduction on the amount of the sums awarded by the commissioners, provided always that such deduction shall not exceed the rate of five per cent. on the sums so awarded. to be charged upon awards; not over five per cent.

ARTICLE XVII.

The high contracting parties engage to consider the result of the proceedings of this commission as a full, perfect, and final settlement of all such claims as are mentioned in Article XII. of this treaty upon either government; and further engage that every such claim, whether or not the same may have been presented to the notice of, made, preferred, or laid before the said commission, shall, from and after the conclusion of the proceedings of the said commission, be considered and treated as finally settled, barred, and thenceforth inadmissible. Decisions of commissioners to be final upon all claims that might have been presented.

ARTICLE XVIII.

It is agreed by the high contracting parties that, in addition to the liberty secured to the United States fishermen by the convention between the United States and Great Britain, signed at London on the 20th day of October, 1818, of taking, curing, and drying fish on certain coasts of the British North American Colonies therein defined, the inhabitants of the United States shall have, in common with the subjects of her Britannic Majesty, the liberty, for the term of years mentioned in Article XXXIII. of this treaty, to take fish of every kind, except shell-fish, on the sea-coasts and shores, and in the bays, harbors, and creeks, of the provinces of Quebec, Nova Scotia, and New Brunswick, and the colony of Prince Edward's Island, and of the several islands thereunto adjacent, without being restricted to any distance Right of the inhabitants of the United States in certain sea fisheries in common. Vol. viii. p. 248. See articles xxxii. & xxxiii.

from the shore, with permission to land upon the said coasts and shores and islands, and also upon the Magdalen Islands, for the purpose of drying their nets and curing their fish; provided that, in so doing, they do not interfere with the rights of private property, or with British fishermen, in the peaceable use of any part of the said coasts in their occupancy for the same purpose.

Salmon and shad fisheries exclusively for British fishermen.

It is understood that the above-mentioned liberty applies solely to the sea fishery, and that the salmon and shad fisheries, and all other fisheries in rivers and the mouths of rivers, are hereby reserved exclusively for British fishermen.

ARTICLE XIX.

Rights in common of British subjects in certain sea fisheries, on certain coasts of the United States.

It is agreed by the high contracting parties that British subjects shall have, in common with the citizens of the United States, the liberty, for the term of years mentioned in Article XXXIII. of this treaty, to take fish of every kind, except shell-fish, on the eastern sea-coasts and shores of the United States north of the thirty-ninth parallel of north latitude, and on the shores of the several islands thereunto adjacent, and in the bays, harbors, and creeks of the said sea-coasts and shores of the United States and of the said islands, without being restricted to any distance from the shore, with permission to land upon the said coasts of the United States and of the islands aforesaid, for the purpose of drying their nets and curing their fish; provided that, in so doing, they do not interfere with the rights of private property, or with the fishermen of the United States in the peaceable use of any part of the said coasts in their occupancy for the same purpose.

See articles xxxii. & xxxiii.

Proviso.

Salmon and shad fisheries.

It is understood that the above-mentioned liberty applies solely to the sea fishery, and that salmon and shad fisheries, and all other fisheries in rivers and mouths of rivers, are hereby reserved exclusively for fishermen of the United States.

ARTICLE XX.

Certain places reserved from the common right of fishing.

Vol. x. p. 1089.

It is agreed that the places designated by the commissioners appointed under the first article of the treaty between the United States and Great Britain, concluded at Washington on the 5th of June, 1854, upon the coasts of her Britannic Majesty's dominions and the United States, as places reserved from the common right of fishing under that treaty, shall be regarded as in like manner reserved from the common right of fishing under the preceding articles. In case any question should arise between the governments of the United States and of her Britannic Majesty as to the common right of fishing in places not thus designated as reserved, it is agreed that a commission shall be appointed to designate such places, and shall be constituted in the same manner, and have the same powers, duties, and authority as the commission appointed under the said first article of the treaty of the 5th of June, 1854.

See articles xxxii. & xxxiii.

Commission to designate such places, if, &c.

ARTICLE XXI.

Certain fish oil and fish to be free of duty.

See articles xxxii. & xxxiii.

It is agreed that, for the term of years mentioned in Article XXXIII. of this treaty, fish oil and fish of all kinds (except fish of the inland lakes, and of the rivers falling into them, and except fish preserved in oil), being the produce of the fisheries of the United States, or of the Dominion of Canada, or of Prince Edward's Island, shall be admitted into each country, respectively free of duty.

ARTICLE XXII.

Commissioners

Inasmuch as it is asserted by the government of her Britannic Majesty

that the privileges accorded to the citizens of the United States under Article XVIII. of this treaty are of greater value than those accorded by Articles XIX. and XXI. of this treaty to the subjects of her Britannic Majesty, and this assertion is not admitted by the government of the United States, it is further agreed that commissioners shall be appointed to determine, having regard to the privileges accorded by the United States to the subjects of her Britannic Majesty, as stated in Articles XIX. and XXI. of this treaty, the amount of any compensation which, in their opinion, ought to be paid by the government of the United States to the government of her Britannic Majesty in return for the privileges accorded to the citizens of the United States under Article XVIII. of this treaty; and that any sum of money which the said commissioners may so award shall be paid by the United States government, in a gross sum, within twelve months after such award shall have been given.

to determine the compensation, if any, to be paid by the United States for privileges granted by article xviii. of this treaty.

Award when to be paid.

ARTICLE XXIII.

The commissioners referred to in the preceding article shall be appointed in the following manner, that is to say: One commissioner shall be named by the President of the United States, one by her Britannic Majesty, and a third by the President of the United States and her Britannic Majesty conjointly; and in case the third commissioner shall not have been so named within a period of three months from the date when this article shall take effect, then the third commissioner shall be named by the representative at London of his Majesty the Emperor of Austria and King of Hungary. In case of the death, absence, or incapacity of any commissioner, or in the event of any commissioner omitting or ceasing to act, the vacancy shall be filled in the manner hereinbefore provided for making the original appointment, the period of three months in case of such substitution being calculated from the date of the happening of the vacancy.

Commissioners, how to be appointed;

vacancies;

The commissioners so named shall meet in the city of Halifax, in the province of Nova Scotia, at the earliest convenient period after they have been respectively named, and shall, before proceeding to any business, make and subscribe a solemn declaration that they will impartially and carefully examine and decide the matters referred to them to the best of their judgment, and according to justice and equity; and such declaration shall be entered on the record of their proceedings.

when and where to meet;

their powers and duties.

Each of the high contracting parties shall also name one person to attend the commission as its agent, to represent it generally in all matters connected with the commission.

Agent for each government.

ARTICLE XXIV.

The proceedings shall be conducted in such order as the commissioners appointed under Articles XXII. and XXIII. of this treaty shall determine. They shall be bound to receive such oral or written testimony as either government may present. If either party shall offer oral testimony, the other party shall have the right of cross-examination, under such rules as the commissioners shall prescribe.

Proceedings before these commissioners, how to be conducted.

If in the case submitted to the commissioners either party shall have specified or alluded to any report or document in its own exclusive possession, without annexing a copy, such party shall be bound, if the other party thinks proper to apply for it, to furnish that party with a copy thereof; and either party may call upon the other, through the commissioners, to produce the originals or certified copies of any papers adduced as evidence, giving in each instance such reasonable notice as the commissioners may require.

Documents and papers.

The case on either side shall be closed within a period of six months

Cases to be

closed in six months. Awards.

from the date of the organization of the commission, and the commissioners shall be requested to give their award as soon as possible thereafter. The aforesaid period of six months may be extended for three months in case of a vacancy occurring among the commissioners under the circumstances contemplated in Article XXIII. of this treaty.

ARTICLE XXV.

Records, secretary, &c.

The commissioners shall keep an accurate record and correct minutes or notes of all their proceedings, with the dates thereof, and may appoint and employ a secretary and any other necessary officer or officers to assist them in the transaction of the business which may come before them.

Expenses.

Each of the high contracting parties shall pay its own commissioner and agent or counsel; all other expenses shall be defrayed by the two governments in equal moieties.

ARTICLE XXVI.

Navigation of the St. Lawrence to be free;

The navigation of the river St. Lawrence, ascending and descending, from the forty-fifth parallel of north latitude, where it ceases to form the boundary between the two countries, from, to, and into the sea, shall forever remain free and open for the purposes of commerce to the citizens of the United States, subject to any laws and regulations of Great Britain, or of the dominion of Canada, not inconsistent with such privilege of free navigation.

of other rivers.

The navigation of the rivers Yukon, Porcupine, and Stikine, ascending and descending, from, to, and into the sea, shall forever remain free and open for the purposes of commerce to the subjects of her Britannic Majesty and to the citizens of the United States, subject to any laws and regulations of either country within its own territory, not inconsistent with such privilege of free navigation.

ARTICLE XXVII.

The use on terms of equality of certain canals by citizens of both countries, to be urged.

The government of her Britannic Majesty engages to urge upon the government of the dominion of Canada to secure to the citizens of the United States the use of the Welland, St. Lawrence, and other canals in the dominion on terms of equality with the inhabitants of the dominion; and the government of the United States engages that the subjects of her Britannic Majesty shall enjoy the use of the St. Clair Flats canal on terms of equality with the inhabitants of the United States, and further engages to urge upon the State governments to secure to the subjects of her Britannic Majesty the use of the several State canals connected with the navigation of the lakes or rivers traversed by or contiguous to the boundary line between the possessions of the high contracting parties, on terms of equality with the inhabitants of the United States.

ARTICLE XXVIII.

Navigation of Lake Michigan.

The navigation of Lake Michigan shall also, for the term of years mentioned in Article XXXIII. of this treaty, be free and open for the purposes of commerce to the subjects of her Britannic Majesty, subject to any laws and regulations of the United States or of the States bordering thereon not inconsistent with such privilege of free navigation.

ARTICLE XXIX.

Provisions for

It is agreed that, for the term of years mentioned in Article XXXIII.

of this treaty, goods, wares, or merchandise arriving at the ports of New York, Boston, and Portland, and any other ports in the United States which have been or may, from time to time, be specially designated by the President of the United States, and destined for her Britannic Majesty's possessions in North America, may be entered at the proper custom-house and conveyed in transit, without the payment of duties, through the territory of the United States, under such rules, regulations, and conditions for the protection of the revenue as the government of the United States may from time to time prescribe; and under like rules, regulations, and conditions, goods, wares, or merchandise may be conveyed in transit, without the payment of duties, from such possessions through the territory of the United States for export from the said ports of the United States.

the conveyance in transit through territory of the United States of certain merchandise imported at certain ports of the United States, and of goods intended for export.

It is further agreed that, for the like period, goods, wares, or merchandise arriving at any of the ports of her Britannic Majesty's possessions in North America, and destined for the United States, may be entered at the proper custom-house and conveyed in transit, without the payment of duties, through the said possessions, under such rules and regulations, and conditions for the protection of the revenue as the governments of the said possessions may from time to time prescribe; and, under like rules, regulations, and conditions, goods, wares, or merchandise may be conveyed in transit, without payment of duties, from the United States through the said possessions to other places in the United States, or for export from ports in the said possessions.

Reciprocal provisions as to conveyance in transit through British territory.

ARTICLE XXX.

It is agreed that, for the term of years mentioned in Article XXXIII. of this treaty, subjects of her Britannic Majesty may carry in British vessels, without payment of duty, goods, wares, or merchandise from one port or place within the territory of the United States upon the St. Lawrence, the great lakes, and the rivers connecting the same, to another port or place within the territory of the United States as aforesaid: *Provided*, That a portion of such transportation is made through the dominion of Canada by land carriage and in bond, under such rules and regulations as may be agreed upon between the government of her Britannic Majesty and the government of the United States.

British subjects may carry in British vessels goods free of duty from certain ports of the United States to other such ports, if part of such carriage is through Canada by land and in bond.

Citizens of the United States may for the like period carry in United States vessels, without payment of duty, goods, wares, or merchandise from one port or place within the possessions of her Britannic Majesty in North America to another port or place within the said possessions: *Provided*, That a portion of such transportation is made through the territory of the United States by land carriage and in bond, under such rules and regulations as may be agreed upon between the government of the United States and the government of her Britannic Majesty.

Reciprocal privileges granted to citizens of the United States.

The government of the United States further engages not to impose any export duties on goods, wares, or merchandise carried under this article through the territory of the United States; and her Majesty's government engages to urge the parliament of the dominion of Canada and the legislatures of the other colonies not to impose any export duties on goods, wares, or merchandise carried under this article; and the government of the United States may, in case such export duties are imposed by the dominion of Canada, suspend, during the period that such duties are imposed, the right of carrying granted under this article in favor of the subjects of her Britannic Majesty.

Provision as to export duties on goods carried under this article.

The government of the United States may suspend the right of carrying granted in favor of the subjects of her Britannic Majesty under this article, in case the dominion of Canada should at any time deprive the citizens of the United States of the use of the canals in the said dominion on terms of equality with the inhabitants of the dominion, as provided in Article XXVII.

Privileges granted by this article may be suspended by the United States, if, &c.

ARTICLE XXXI.

Provision as to duty on lumber cut in Maine, floated down the St. John and shipped to the United States from New Brunswick.

The government of her Britannic Majesty further engages to urge upon the parliament of the dominion of Canada and the legislature of New Brunswick, that no export duty, or other duty, shall be levied on lumber or timber of any kind cut on that portion of the American territory in the State of Maine watered by the river St. John and its tributaries, and floated down that river to the sea, when the same is shipped to the United States from the province of New Brunswick. And, in case any such export or other duty continues to be levied after the expiration of one year from the date of the exchange of the ratifications of this treaty, it is agreed that the government of the United States may suspend the right of carrying hereinbefore granted under Article XXX. of this treaty for such period as such export or other duty may be levied.

ARTICLE XXXII.

Provisions of articles xviii. to xxv. to extend to Newfoundland.

It is further agreed that the provisions and stipulations of Articles XVIII. to XXV. of this treaty, inclusive, shall extend to the colony of Newfoundland, so far as they are applicable. But if the imperial parliament, the legislature of Newfoundland, or the Congress of the United States, shall not embrace the colony of Newfoundland in their laws enacted for carrying the foregoing articles into effect, then this article shall be of no effect; but the omission to make provision by law to give it effect, by either of the legislative bodies aforesaid, shall not in any way impair any other articles of this treaty.

Proviso.

ARTICLE XXXIII.

Articles xviii. to xxv. and article xxx. when to take effect;

how long to continue.

The foregoing Articles XVIII. to XXV., inclusive, and Article XXX. of this treaty, shall take effect as soon as the laws required to carry them into operation shall have been passed by the imperial parliament of Great Britain, by the parliament of Canada, and by the legislature of Prince Edward's Island on the one hand, and by the Congress of the United States on the other. Such assent having been given, the said articles shall remain in force for the period of ten years from the date at which they may come into operation; and further until the expiration of two years after either of the high contracting parties shall have given notice to the other of its wish to terminate the same; each of the high contracting parties being at liberty to give such notice to the other at the end of the said period of ten years or at any time afterward.

ARTICLE XXXIV.

The decision as to a portion of the boundary line between the United States and British possessions west of the Rocky Mountains under the first article of the treaty of June 15, 1846, to be left to the arbitration of the Emperor of Germany.

Vol. ix. p. 869.

Whereas it was stipulated by Article I. of the treaty concluded at Washington on the 15th of June, 1846, between the United States and her Britannic Majesty, that the line of boundary between the territories of the United States and those of her Britannic Majesty, from the point on the forty-ninth parallel of north latitude up to which it had already been ascertained, should be continued westward along the said parallel of north latitude "to the middle of the channel which separates the continent from Vancouver's Island, and thence southerly, through the middle of the said channel and of Fuca Straits, to the Pacific Ocean;" and whereas the commissioners appointed by the two high contracting parties to determine that portion of the boundary which runs southerly through the middle of the channel aforesaid, were unable to agree upon the same; and whereas the government of her Britannic Majesty claims that such boundary line should, under the terms of the treaty above recited, be run through the Rosario Straits, and the government of the United States claims that it

should be run through the Canal de Haro, it is agreed that the respective claims of the government of the United States and of the government of her Britannic Majesty shall be submitted to the arbitration and award of his Majesty the Emperor of Germany, who, having regard to the above-mentioned article of the said treaty, shall decide thereupon, finally and without appeal, which of those claims is most in accordance with the true interpretation of the treaty of June 15, 1846.

ARTICLE XXXV.

Award of the Emperor of Germany; its form and effect, and how delivered.

The award of his Majesty the Emperor of Germany shall be considered as absolutely final and conclusive; and full effect shall be given to such award without any objection, evasion, or delay whatsoever. Such decision shall be given in writing and dated; it shall be in whatsoever form his Majesty may choose to adopt; it shall be delivered to the representatives or other public agents of the United States and of Great Britain, respectively, who may be actually at Berlin, and shall be considered as operative from the day of the date of the delivery thereof.

ARTICLE XXXVI.

The case of the two parties to be laid before the arbitrator: how and within what time.

The written or printed case of each of the two parties, accompanied by the evidence offered in support of the same, shall be laid before his Majesty the Emperor of Germany within six months from the date of the exchange of the ratifications of this treaty, and a copy of such case and evidence shall be communicated by each party to the other, through their respective representatives at Berlin.

The high contracting parties may include in the evidence to be considered by the arbitrator such documents, official correspondence, and other official or public statements bearing on the subject of the reference as they may consider necessary to the support of their respective cases.

After the written or printed case shall have been communicated by each party to the other, each party shall have the power of drawing up and laying before the arbitrator a second and definitive statement, if it think fit to do so, in reply to the case of the other party so communicated, which definitive statement shall be so laid before the arbitrator, and also be mutually communicated in the same manner as aforesaid, by each party to the other, within six months from the date of laying the first statement of the case before the arbitrator.

ARTICLE XXXVII.

Papers and documents.

Further evidence.

If, in the case submitted to the arbitrator, either party shall specify or allude to any report or document in its own exclusive possession without annexing a copy, such party shall be bound, if the other party thinks proper to apply for it, to furnish that party with a copy thereof, and either party may call upon the other, through the arbitrator, to produce the originals or certified copies of any papers adduced as evidence, giving in each instance such reasonable notice as the arbitrator may require. And if the arbitrator should desire further elucidation or evidence with regard to any point contained in the statements laid before him, he shall be at liberty to require it from either party, and he shall be at liberty to hear one counsel or agent for each party, in relation to any matter, and at such time, and in such manner, as he may think fit.

ARTICLE XXXVIII.

Agents of each government be-

The representatives or other public agents of the United States and of Great Britain at Berlin, respectively, shall be considered as the agents of

fore the arbitrator. their respective governments to conduct their cases before the arbitrator, who shall be requested to address all his communications, and give all his notices to such representatives or other public agents, who shall represent their respective governments generally, in all matters connected with the arbitration.

ARTICLE XXXIX.

Arbitrator to proceed in said arbitration in person, or, &c. It shall be competent to the arbitrator to proceed in the said arbitration, and all matters relating thereto, as and when he shall see fit, either in person, or by a person or persons named by him for that purpose, either in the presence or absence of either or both agents, and either orally or by written discussion or otherwise.

ARTICLE XL.

Secretary or clerk. The arbitrator may, if he think fit, appoint a secretary, or clerk, for the purposes of the proposed arbitration, at such rate of remuneration as he shall think proper. This, and all other expenses of and connected with the said arbitration, shall be provided for as hereinafter stipulated.

ARTICLE XLI.

Costs and expenses and how to be paid. The arbitrator shall be requested to deliver, together with his award, an account of all the costs and expenses which he may have been put to in relation to this matter, which shall forthwith be repaid by the two governments in equal moieties.

ARTICLE XLII.

Form of award and when and how to be delivered. The arbitrator shall be requested to give his award in writing as early as convenient after the whole case on each side shall have been laid before him, and to deliver one copy thereof to each of the said agents.

ARTICLE XLIII.

Ratification. The present treaty shall be duly ratified by the President of the United States of America, by and with the advice and consent of the Senate thereof, and by her Britannic Majesty; and the ratifications shall be exchanged either at Washington or at London within six months from the date hereof, or earlier if possible.

Signature. In faith whereof, we, the respective plenipotentiaries, have signed this treaty and have hereunto affixed our seals.

Done in duplicate at Washington the eighth day of May, in the year of our Lord one thousand eight hundred and seventy-one.

[L. S.]	HAMILTON FISH.
[L. S.]	ROBT. C. SCHENCK.
[L. S.]	SAMUEL NELSON.
[L. S.]	EBENEZER ROCKWOOD HOAR.
[L. S.]	GEO. H. WILLIAMS.
[L. S.]	DE GREY & RIPON.
[L. S.]	STAFFORD H. NORTHCOTE.
[L. S.]	EDWD. THORNTON.
[L. S.]	JOHN A. MACDONALD.
[L. S.]	MOUNTAGUE BERNARD.

Proclamation. And whereas the said treaty has been duly ratified on both parts, and the respective ratifications of the same were exchanged in the city of London, on the seventeenth day of June, 1871, by Robert C. Schenck,

Envoy Extraordinary and Minister Plenipotentiary of the United States, and Earl Granville, her Majesty's Principal Secretary of State for Foreign Affairs, on the part of their respective governments:

Now, therefore, be it known that I, ULYSSES S. GRANT, President of the United States of America, have caused the said treaty to be made public, to the end that the same, and every clause and article thereof, may be observed and fulfilled with good faith by the United States and the citizens thereof.

In witness whereof, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington this fourth day of July, in the year of our Lord one thousand eight hundred and seventy-one, and of the Independence of the United States the ninety-sixth.

[SEAL.]

U. S. GRANT.

By the President:

HAMILTON FISH, *Secretary of State.*

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Stikine River Region Access Study

REPORT TO CONGRESS
SECTION 1113
ALASKA NATIONAL INTEREST LANDS CONSERVATION ACT

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REPARED BY:
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EGION 10
ONGASS NATIONAL FOREST
TIKINE AREA

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STIKINE RIVER REGION ACCESS STUDY

REPORT TO CONGRESS

Section 1113
Alaska National Interest Lands Conservation Act

U.S.D.A Forest Service
Region 10
Tongass National Forest
Stikine Area

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PREFACE

OVERVIEW: On December 2, 1980, Congress enacted Public Law 96-487, the Alaska National Interest Lands Conservation Act. The purpose of the Act was to set aside certain lands in Alaska of national significance. Section 1113 of this Act addresses the Stikine River Region, an area located in Alaska's central panhandle and encompassing the Stikine-LeConte Wilderness Area which was established by section 703(a)(10) of the Act. Section 1113 directs the President to study, and report back to Congress, his recommendations concerning the effect of the Act upon the ability of the Government of Canada to obtain access in the Stikine River Region.

The report, in addition to the following recommendations, reviews the current transportation needs of the Government of Canada; the physical, biological, social and economic conditions; existing transportation corridors; alternative corridors, and the scope of possible effects should actual development be required.

RECOMMENDATIONS: The Government of Canada's need for access to tidewater is dependent on future economic development within its interior regions. Although the potential exists for growth, current economic conditions are such that few projects are expected to proceed in the next 5 to 10 years. For example, planned completion of resource management objectives for the Canadian forest products industry will not occur until spring of 1986. Second, extraction of the mineral resources in northwest Canada will depend, to a large extent, on improved world markets. Operation of Stikine Copper would require prices to reach the $1.00 per-pound-range (1982 dollars) - not likely in the near future. Lastly, the construction of hydroelectric facilities on the upper reaches of the Stikine and Iskut Rivers has been deferred due to a reduction in forecasted demand of electrical energy. On-line service may not begin until the year 2000.

Information provided by the Government of Canada, the State of Alaska and local communities suggest a reasonable probability that some type of surface access will be needed in the Stikine River Region during the next 15 to 25 years. While there are no immediate surface access demands for this area, all available engineering reconnaissance data demonstrates that when surface access is needed through the Stikine River Region, the most economic and feasible alternative is to cross some portion of the Stikine-LeConte Wilderness Area. However, identification and reservation of a specific route or routes should be deffered until such time as actual or planned development in the region has progressed to the point that access design requirements and objectives can be formulated.

On the basis of these considerations, we believe special consideration and treatment is warranted to ensure a fair and responsive means to pursue specific surface access requests that may arise for this area. One possible solution would be to adopt a proposal put forth by the State of Alaska to amend ANILCA at some appropriate time in the future to include an access arrangement similar to the provisions currently available in Section 201(4) of the Act for the Kobuk unit of the Gates of Arctic National Park and Preserve. The effect of a Section 201(4) type of amendment would be to authorize the Secretary of Agriculture, subject to specific procedural requirements, to grant access in the Stikine River Region, including access across designated Wilderness if there is no feasible or prudent alternative, without further action by the Congress. An actual legislative amendment should only be pursued if Congress decides to consider other general access changes in ANILCA, or if the specific need for access in this area becomes more definitive.

It is further recommended that the following process be utilized to analyze and develop appropriate recommendations at such time as access in the Stikine River Region is actually requested by the Government of Canada.

STIKINE ACCESS STUDY
RECOMMENDED EVALUATION PROCESS

1. The Government of Canada shall notify the U.S. Department of State of its desire to open formal negotiations with the Government of the United States for the purpose of obtaining transportation or utility system access through the Stikine River Region of Southeast Alaska. Such notification is required only for Canadian access needs not provided for under the provisions of existing Treaties. Notification should include the information requested in appendix "C" (Standard Form 299(11-83)) Application for Transportation and Utility Systems and Facilities on Federal Lands.

2. The U.S. Department of State upon receipt of notification under 1 above will request that the Chief, USDA, Forest Service provide the Secretary of State with an analysis and recommendation with respect to the requested access. Such analysis and recommendation is to be prepared in accordance with the provisions of Title XI of PL 96-487 and will be provided to the Secretary for use in the negotiations initiated under section 1 above. The Chief, USDA, Forest Service in preparing the analysis and recommendations shall solicit and consider the views of other Federal agencies, the Alaska Land Use Council, the State of Alaska, local communities, and affected corporations formed pursuant to the Alaska Native Claims Settlement Act, and, after public notice, shall receive and consider statements and recommendations regarding the request for access submitted by interested individuals and organizations. Subject to Congressional approval, the granting of access across the Stikine-LeConte Wilderness if required, will be under the authority of the Secretary of Agriculture and subject to such reasonable terms and conditions as he may prescribe to minimize the impact of the access on the purposes for which the Stikine-LeConte Wilderness was established.

STIKINE ACCESS STUDY

THE PURPOSE

On December 2, 1980, Congress enacted Public Law 96-487, the Alaska National Interest Lands Conservation Act (ANILCA). The intent was to provide for the designation and conservation of certain lands and waters in the State of Alaska. Section 703 (A)(10) of ANILCA further designated the Stikine-LeConte Wilderness. This area, nearly 443,000 acres in size, is located northeast of the community of Wrangell within the Tongass National Forest.

Prior to the passage of Public Law 96-487, the Government of Canada formally expressed its concern that this legislation might restrict transportation access across the panhandle of Alaska. The result was Section 1113 of ANILCA, which states:

> "Congress finds that there is a need to study the effect of this Act upon the ability of the Government of Canada to obtain access in the Stikine River region of southeast Alaska. Accordingly, within five years from the date of enactment of this Act, the President shall consult with the Government of Canada, and shall submit a report to the Congress containing his findings and recommendations concerning the need, if any, to provide for such access. Such report shall include, among other things, an analysis of the need for access and the social, environmental, and economic impacts which may result from various forms of access including, but not limited to, a road along the Stikine and Iskut Rivers, or other alternative routes, should such access be permitted."

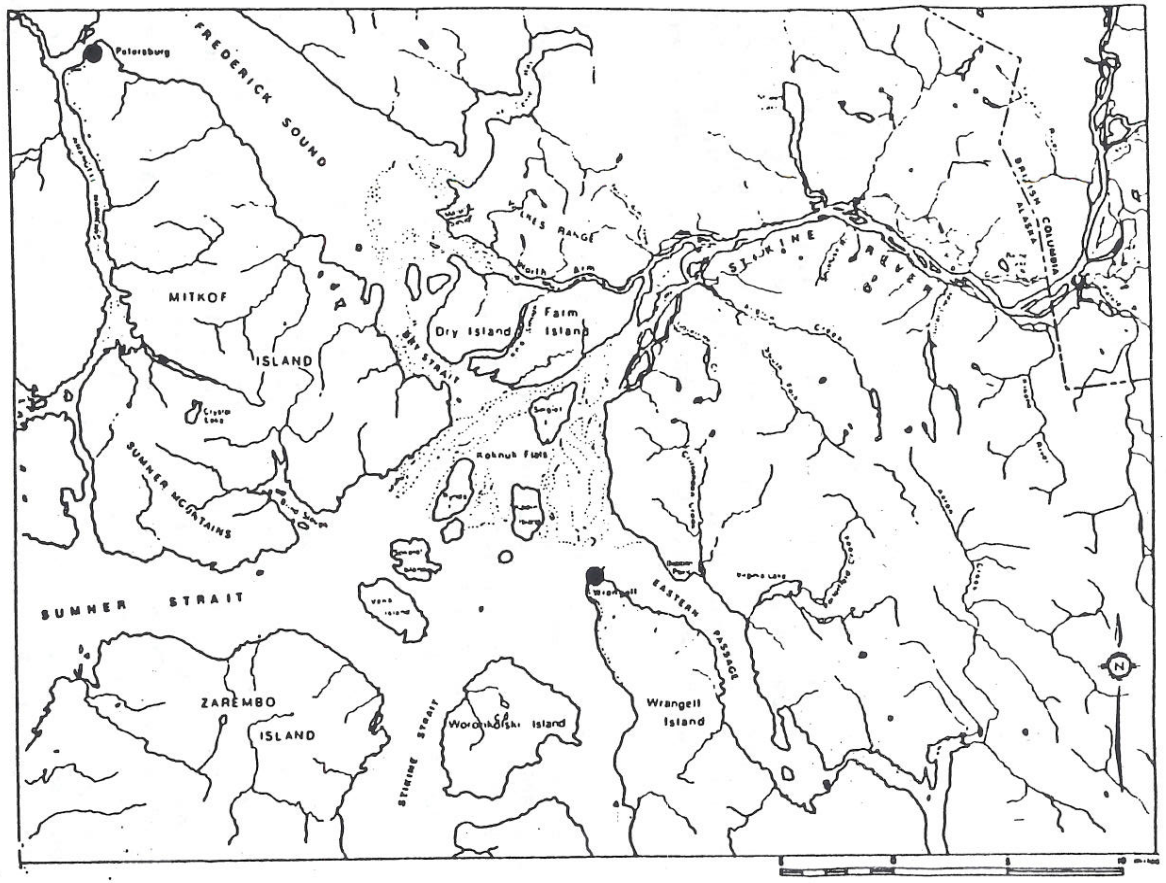
Relationship of the Study to Existing Treaties: The Government of Canada was guaranteed navigation privileges on the Stikine River by treaty provisions which predate the passage of the Alaska National Interest Lands Conservation Act. Navigation privileges on the Stikine River accrue to the Government of Canada through Article XXVI of the Treaty of May 8, 1871 between the United States and Great Britain (The Treaty of Washington). Article XXVI of the Treaty provides that:

> The navigation of the rivers Yukon, Porcupine, and Stikine ascending and descending, from, to, and into the sea, shall forever remain free and open for the purpose of commerce to the subjects of her Britanic Majesty and to the citizens of the United States, subject to any laws and regulations of either country within its own territory, not inconsistent with such privilege of free navigation.

STIKINE RIVER REGION

VICINITY MAP - ALASKA

LOCATION MAP



The fundamental principles that must guide analysis of the relationship between ANILCA, other Acts, and the obligation set forth in the Treaty of Washington are:

-- United States domestic law should be interpreted consistent with the international legal obligations of the United States (Restatement (Second) of Foreign Relations Law of the United States S3 (3)), and

-- an Act of Congress enacted after an international agreement supersedes that agreement only if it was the clear purpose of the Congress to do so (Restatement (Second) S145 (1)).

The Congress, in enacting ANILCA and other applicable law, expressed no intent to supersede Article XXVI of The Treaty of Washington. On the contrary, Section 1113 strongly implies that Congress was concerned that the relevant international obligations of the United States not be interfered with by the Act. The Treaty provisions, however, only provide the Government of Canada with the "privilege of free navigation" on the Stikine; the Treaty provisions do not appear to grant the Government of Canada any surface access privileges.

This report therefore, acknowledges the Government of Canada's continued navigation privileges on the Stikine River as provided by treaty and focuses instead, on the question of the effect of ANILCA on the ability of the Government of Canada to obtain surface access in the region, and the need, if any, to provide for such access.

EXISTING CONDITIONS

The Stikine River Region is located on the mainland of North America in the southeastern panhandle of Alaska. The study area includes parts of the Stikine-LeConte Wilderness, and public lands east of Wrangell in the Aaron Creek drainage. A large part of the region is covered by icefields. Currently the Stikine River provides water access under Treaty to British Columbia, Canada, through the Coast Range Mountains for shallow draft boats and barges (see appendix for discussion). The primary land use in this region of Alaska is for recreation-oriented activities.

Physical and Biological Environment: The Stikine River region supports a full range of life zones, from the estuarine to the alpine. These zones all occur close to saltwater due to a rapid rise in land elevation.

Most of the land north of the Stikine River and above timberline is steep glacial-worn rock, with some peaks reaching 10,000 feet. From sea level to an elevation of 2,000 feet, the area consists of steep slopes and deep valleys covered with dense forests of spruce and hemlock.

The area south of the Stikine River contains steep, sparsely-vegetated mountains, averaging 3,000 feet in elevation. Higher land forms contain hanging glaciers. Two large stream systems, Andrews Creek and Kikahe River, originate within the area. The lower 2-1/2 miles of Andrews Creek is navigable.

The Stikine River is a U-shaped valley with forests of spruce and hemlock along the valley wall, giving way to alder, willow, cottonwood, and occasional spruce in the valley bottom and surrounding islands. Muskeg vegetation is predominant in many locations. On the tideflats, the vegetation is primarily rushes and sedges proceeding to grasses, forbs, wildflowers, and shrubs in the more upland areas. The Stikine River begins as one basic channel at the Canadian border, but develops into three braided channels 30 miles downriver. In between, navigable waterways split off and rejoin the main river course, forming an intricate system of sloughs, tributaries, islands, and tideflats. Alluvial deposits consisting of stratified gravels, sand, silt, and clay, occur along the river's floodplain.

Precipitation at higher elevations falls as snow, producing icefields and glaciers. The remaining areas receive the typical wet weather of southeast Alaska, averaging 90 inches of rain annually. The presence of the glaciers and icefields has an effect on local weather in the form of winds, temperature, and the amount and kind of precipitation.

Wildlife includes big game species such as mountain goat, black bear, brown bear, moose, and a minor population of Sitka black-tailed deer. The mountain goat are primarily at the higher elevations (steep rocks). Moose and bear are found along the Stikine River valley. Beaver, mink, land otter, weasel, martin, wolverine, and wolf are representative of the smaller furbearing animals.

The Stikine River tideflats are one of the major resting and feeding areas for waterfowl along the Pacific Flyway. Waterfowl are abundant during the spring and fall migrations. Primary species include mallards, pintails, Canadian geese, snow geese, sandhill cranes, and green-winged teal. Shore birds and sea ducks may be found in abundance along the tideland waters. Barnes Lake and smaller ponds along the river bottom are home to the trumpeter swan during their migration period. Game birds include the blue grouse and ptarmigan. These species rarely attain high populations except for isolated areas in the Wilkes Range and in the Andrews Creek drainage. The region is home to a wide variety of other bird life (bald eagle, varied thrush, Rufus hummingbird, snipe, yellowlegs, gulls, arctic tern, Stellar jay, robin, woodpeckers, crows, ravens, warblers, sparrows and juncos).

Coho, chum, pink, sockeye, king salmon, and eulachon can be found in the Stikine River or tributary stream systems. Cutthroat trout and Dolly Varden occur in clearwater streams where they join the silty river water. The fishery resource is used for commercial, sport, and subsistence purposes. A potential for fishery enhancement exists. Work is currently being done by the Alaska Department of Fish and Game with king salmon stocks. Scientific studies continue on salmon runs in the main river channel.

No species of plants or animals presently listed by the Federal Government or the State as threatened or endangered in Alaska are known to exist within the region.

Social and Economic: The study area is close to the communities of Wrangell and Petersburg. However, the small quantity of readily useable area, limited aircraft access to lakes, and tide fluctuations that restrict boat access limit man's intrusion. Developments are relatively simple and located near the main river channel. The majority of the region remains in its natural condition. Persons using the area can expect a moderate to high probability of experiencing isolation from the sights and sounds of humans. Independence, closeness to nature, tranquility, and self-reliance are the demands of the environment.

Historically, the Stikine River has been an important transportation corridor for residents of the coastal communities. At the time of the European contact, the Tlingits had many seasonal hunting and fishing camps on the islands between the mouth of the river and Telegraph Creek, British Columbia. In the early 1800's, the river provided access to Russian and British fur trappers and traders. The mid 1800's produced the first gold rush along the Stikine route. Later, in 1871, an international treaty was signed by Great Britian and the United States to allow free and open navigation for purposes of commerce. During the late 1800's and early 1900's, the river provided one of the main access routes for miners and others on their way to the gold fields of the Yukon and Northwest Territories.

The Stikine continues to provide access to Telegraph Creek, the only large permanent community on the river. Telegraph Creek is often the starting point for a 150 mile float/kayak trip downriver to saltwater. Today no major mining activity occurs within the region. Geothermal resources are present, but have not been used as an energy source.

The Canadian portion of the Stikine River is utilized for commercial fishing. The primary use on the American side is for recreational activities. Access to sites on the river is by boat, float plane, and/or snowmobile during the winter.

Fifteen Forest Service public recreation cabins are located within the study area; six on the tideflats, five near the main river, and four scattered along the mainland coast. These cabins serve as a base camp for waterfowl and moose hunting, sportfishing, boating, trapping, picnicking, water and snow skiing, recreational prospecting, and general recreation outings. In addition, Chief Shakes Hot Spring provides facilities for hot tubbing.

Several short developed trails are within or closely associated with recreation sites. These lead to boat landings or address dispersed recreation opportunities. Trails also follow both Aaron and Berg Creeks.

Many areas and sites are used for dispersed recreation. The north arm of the Stikine, Mallard Slough, and the tideflat areas are popular for waterfowl and moose hunting. Fishing occurs at the mouth of several streams. Picnicking and camping is common on Limb Island and the Desert. Float and kayak trip participants enjoy the many side sloughs and tributaries. The exact number of visitors and the time spent is not known, but use has not been enough to cause user conflict.

Twelve special use permit cabins may be found along the river. Permittees use these as base camps for dispersed recreation. In addition, fourteen tent platforms are located along the upper and middle river areas.

The Alaska Department of Fish and Game maintains four administrative cabins along the Stikine. One is located on the tideflats and three along the main river. These facilities are used for scientific study of fish and wildlife resources. The department also maintains a weir and two sonar counting sites.

The United States Geological Survey maintains two stream gauges and an administrative cabin under a Memorandum of Understanding.

Commercial uses of the river include: recreational charter boat and aircraft services, freight operations, snag clearing to remove hazards to navigation, aquaculture activities, and sand/gravel removal. These activities are generally well received by the public due to their direct recreational benefits.

The towns of Petersburg and Wrangell lie west of the study area. Petersburg's population numbers approximately 3,200. The economy is supported by several cold storage plants, canneries, and a sawmill operation.

Wrangell, 7 miles from the river's mouth, is one of the oldest communities in southeast Alaska, with a population of 2,400. The town's development was strongly influenced by the Stikine and its role as a transportation corridor. Not until after the last gold rush in the late 1800's did fishing and timber begin to assume more of a role in the community's daily life. Today, these industries remain the dominant livelihood of Wrangell's residents. However, the river has not lost its influence. The town's deepwater port facilities, providing sea access, continue to encourage not only minor logging operations in the upper reaches of the Stikine, but also a renewed interest in tourism.

Yet, the Stikine's primary use by community residents remains outdoor recreation.

The role of subsistence in the lifestyles of Wrangell and Petersburg residents is moderate. Residents acquire moose, waterfowl, and fish. Many plan on these resources to supplement their store-bought provisions. However, relatively few are totally dependent on subsistence for a livelihood or existence.

THE NEED FOR ACCESS

The Government of Canada's position concerning the need for access is based on the assumption that both British Columbia and the Yukon Territory will in the future experience economic growth which will require access through the Stikine River Region as well as other areas of the Alaskan Panhandle. The projected growth can be tied to three major industries: mining, timber, and hydroelectric.

Mining: Recent studies indicate potential mineral development in the Stikine region of British Columbia. Areas of interest include copper mining at Galore Creek and a precious metal property located at Johnny Mountain near the Iskut River. Both could be best served via access roads through the Alaska panhandle. Other sites have also been identified, but current economic conditions do not permit profitable operation. As the price of copper and other extractive minerals climbs, so will the need to find viable transportation routes.

Timber: Currently, timber production within British Columbia is constrained by difficult access and various environmental concerns. Access through Alaska to tidewater would appear attractive. The Ministry of Forests, British Columbia, is completing a resource plan that will address harvesting activities in the Stikine River Valley from Andi-Smith Creek to the American border, and the Iskut Valley from the Stikine River to the Johnson River.

Hydroelectric: Extensive studies have been completed on the construction of generation facilities on the upper reaches of the Stikine and in the Iskut Basin. Construction would consist of four dams with a total capacity of 15 billion kwh/year. Major transmission lines would be required to connect this to the grid system in British Columbia and potentially to other areas of northern Canada and Alaska.

Concerns for an access corridor in the Stikine River Region have also been expressed by the State of Alaska and the communities of Petersburg and Wrangell. Economic growth and development along the southeastern coast depends on timber, fishing, and the visitor industries. Historically, this limited economic base has resulted in radical changes in employment and commerce expansion. Residents feel that a secure future entails plans for hard surface transportation facilities. Interest in a Stikine access corridor is not new. Plans to address these concerns began in the early 1940's.

EXISTING TRANSPORTATION CORRIDORS

Three major road systems currently serve British Columbia and the Yukon with southeastern Alaska. All provide access to only the northern and southern extremes of the panhandle.

1. Highway 37 - connecting Stewart, British Columbia; Hyder, Alaska; and the interior. Sea access via the Portland Canal.

2. Haines Highway - connecting Haines, Alaska, with Haines Junction on the Alaska Highway.

3. Klondike Highway - connecting Skagway, Alaska, with Whitehorse on the Alaskan Highway.

Transportation to the central panhandle is provided by air service, the Alaska State Ferry System, or other marine carriers.

ALTERNATE TRANSPORTATION CORRIDORS

The Government of Canada has identified seven potential travel corridors which may be needed in the future. Two of these involve the Stikine River area and the central panhandle region.

During the fall of 1978 the British Columbia Ministry of Highways completed an analysis involving the Cassiar Highway and the United States border via the Iskut River. A preferred connection with Alaska was identified as the south side of the Stikine River in the vicinity of the Kikake River on the West Fork of the Katete River.

In order to evaluate and link up with this proposal, the Alaska Department of Transportation and Public Facilities conducted a reconnaissance of alternative routes using Wrangell and Petersburg as deepwater ports. The work was completed and published in November 1984. A supplemental report, dated January 1986, further identified another alternative in the vicinity of the Bradfield Canal.

This work may be summarized as follows:

Access to Wrangell Using Pats Creek

1. Alternative A: This route connects to the Canadian border along the West Fork of the Katete River. Total distance is approximately 50 miles. Existing logging roads would be used from Pats Creek to the Narrows Crossing at the northwestern end of the Blake Channel. From this point new construction would follow Aaron Creek to its crossing at milepost 13.7. Tending in an easterly direction, it climbs to West Fork Pass where it finally turns north and descends to the Katete River.

Numerous river crossings would be required (a 1,000-foot span at the Narrows) along with construction of snowshed structures for avalanche prone areas. Tunnel building was also investigated. The entire route would remain outside the Stikine-LeConte Wilderness.

2. Alternative B: This route begins at the Aaron Creek Crossing (Alternative A) and proceeds in a northerly direction along Aaron Creek to its headwaters and the Andrews Creek drainage. It connects with Alternative D near the Stikine River and Andrew Island. Total distance to the Canadian border is approximately 68 miles. The terrain in many areas is steep and rugged. Avalanche hazard is considered to be severe. Most of the route is within the designated Wilderness.

3. Alternative C: This corridor begins at the northwest side of the Narrows Crossing and for the most part parallels the Eastern Passage to the mouth of Mill Creek. Here the alignment swings northeast using the Crittenden Creek Valley and the South Fork of Andrews Creek to the Stikine River. It also connects with Alternative D. Total distance - 61 miles. The most northern portion of the route is within the Wilderness area.

4. Alternative D: Alignment along this route begins at Mill Creek. The road would cross Crittenden Creek and follow northward along the eastern passage to the mouth of the Stikine River. At this point, it turns northeastward following the south bank of the river along timbered slopes to the United States/Canadian border. Total distance from Pats Creek is approximately 65 miles. Most of the construction would occur within the Stikine-LeConte Wilderness.

Several major stream structures would be required in addition to numerous small stream crossings. Most of the alignment, in the latter part of the route, would be in rock.

Access to Petersburg

5. Alternative E: Access to Mitkof Island and the community of Petersburg would require the crossing of Dry Straits with a bridge and causeway totaling 4,500 feet in length. This route traverses the northern banks of Knig Slough, Farm Island, and the Stikine River. At Kakwan Point, the road follows the base of the mountains to Shakes Slough and then in a southeasterly direction to the Canadian line. Distance from the end of the Mitkof Highway to the border is approximately 34 miles. The project would bisect the Stikine-LeConte Wilderness. Additional bridge construction in British Columbia may be required to recross the Stikine River.

6. Alternative F: Access to Petersburg via proposed alignments on the south side of the Stikine requires a river crossing in the vicinity of Limb Island. This road location would tie with that proposed under Alternative D, near the mouth of Andrews Creek. Two bridge spans, totaling 3,000 feet in length, would be constructed. Total distance to the Canadian border is approximately 34 miles. The entire planned route is within the designated Wilderness.

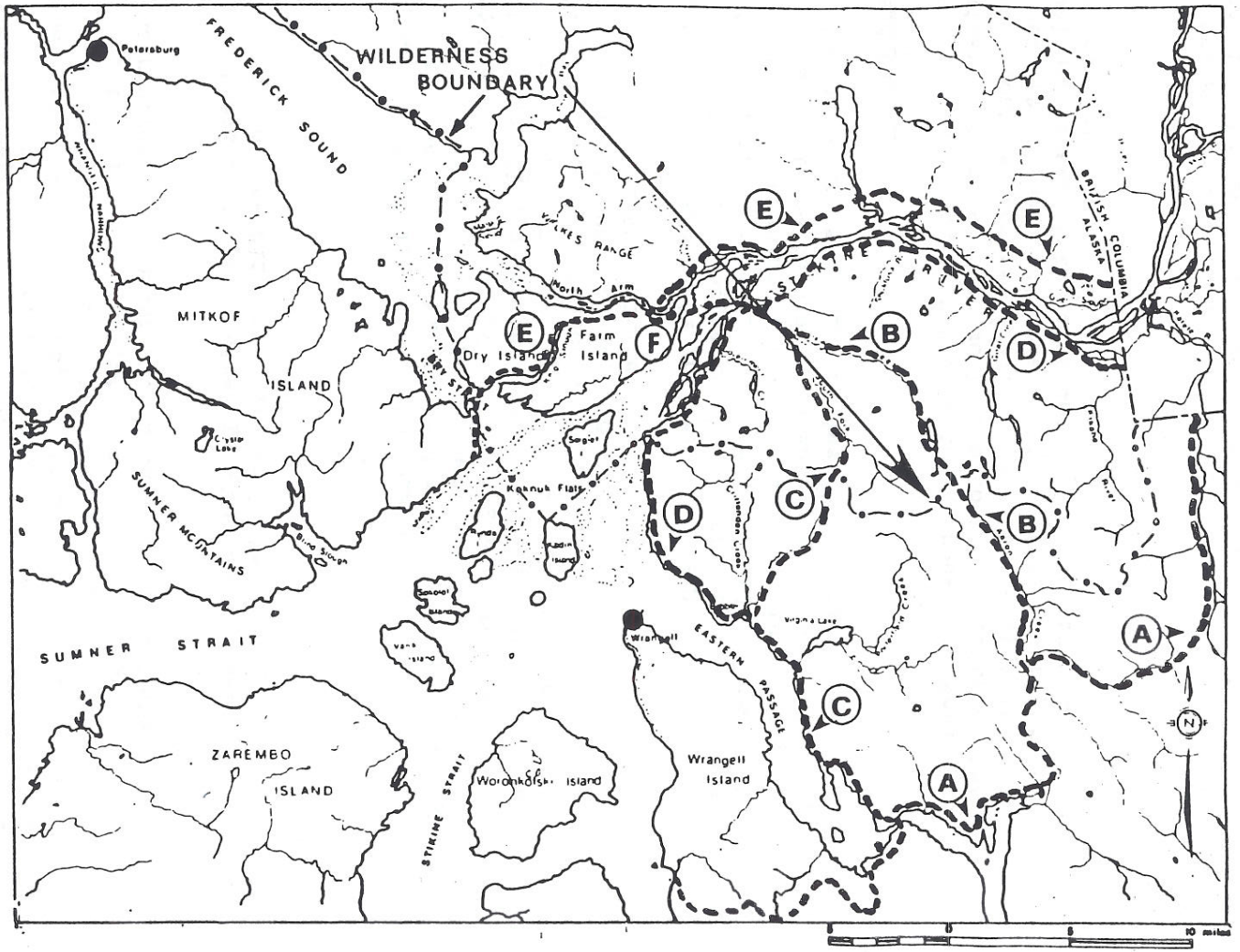
Wrangell Using Bradfield Canal

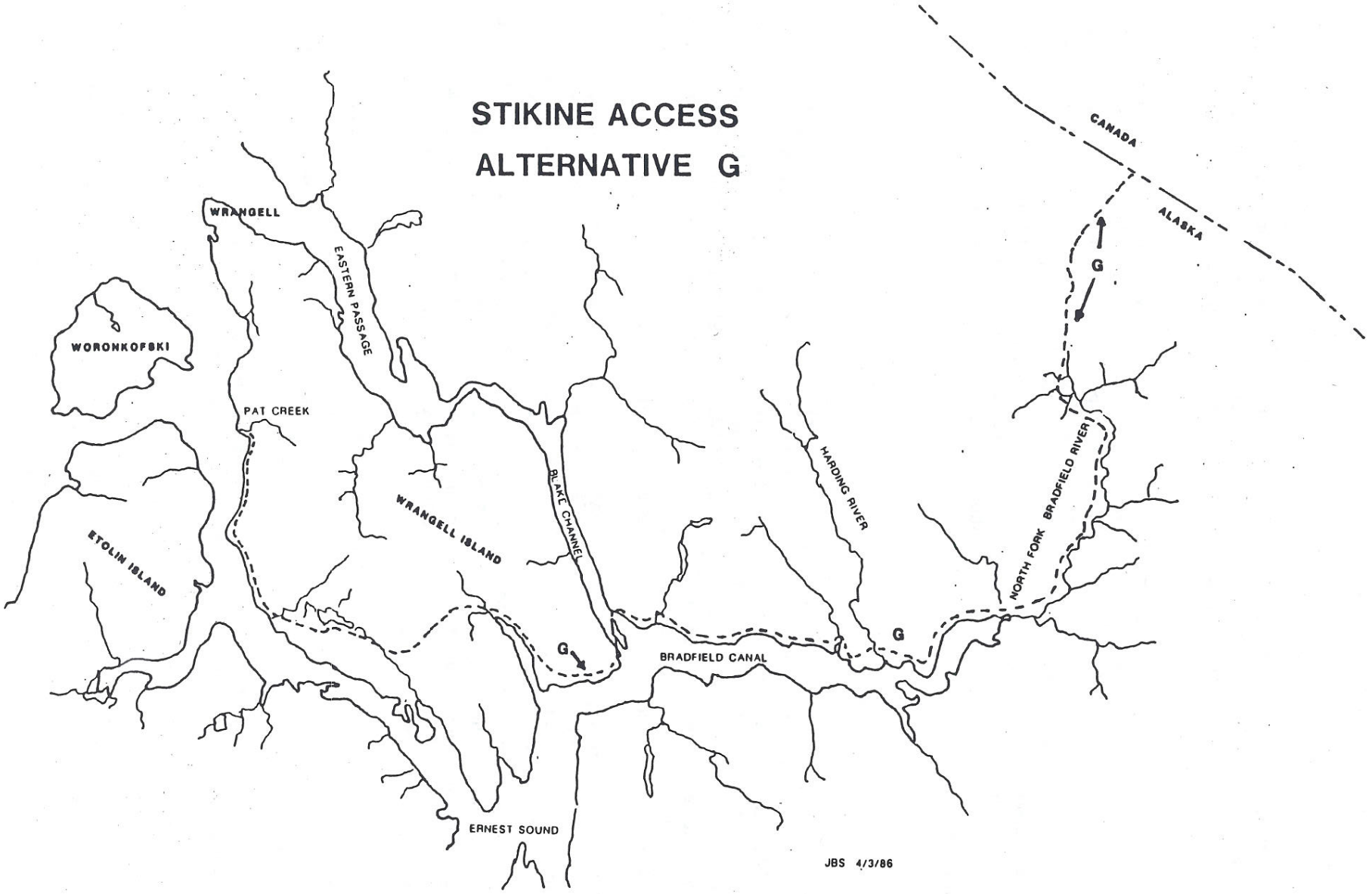
7. Alternative G: This alternative would provide access through the Bradfield Canal area. The approximately 83 mile route would lie totally outside of the boundary of the Stikine-LeConte Wilderness Area. This route, though longer than the Aaron Creek route described in alternative A, differs in that it has far fewer difficult avalanche areas to traverse and could be constructed to more acceptable design standards.

Cost estimates for all roadway construction alternatives were developed considering various terrains, bridges and snowshed structures. Anticipated expenditures ran from a low of $139 million to a high of $260 million. Maintenance and operation cost for each alternative were estimated.

STIKINE RIVER REGION

HIGHWAY ACCESS ALTERNATIVES




STIKINE ACCESS
ALTERNATIVE G
CANADA
ALASKA
G
WRANGELL
EASTERN PASSAGE
WORONKOFSKI
PAT CREEK
WRANGELL ISLAND
BLAKE CHANNEL
HARDING RIVER
NORTH FORK BRADFIELD RIVER
ETOLIN ISLAND
G
G
BRADFIELD CANAL
ERNEST SOUND
JBS 4/3/86

Other Types of Access

Investigation on other forms of transportation has been limited. Analysis of surface access routes for rail or other specialized systems would require specific information regarding system requirements and limitations beyond the scope of this analysis.

Use of the Stikine River as an expanded water travelway may also be a feasible alternative. Historically, the river has supported a significant amount of commerce and trade. The first boats were log canoes belonging to the Tlingits who traded with the Tahltans. Later, gold brought the first steampower to the Stikine. From the spring of 1862 to the end of the era, August 1916, boats were a common sight delivering men and materials to Telegraph Creek. This small British Columbia community is historically considered the head of navigation on the Stikine. More study is needed on this aspect of transportation.

ENVIRONMENTAL CONSIDERATIONS

No attempt will be made to analyze, in depth, the environmental impacts that could result with the implementation of the proposed alternatives. A more detailed investigation of road/rail alignment would be required. Environmental considerations have been recognized as an important issue in the overall question of access through the Stikine River Region, but past analysis in the subject area has been limited. Nevertheless, some general conclusions may be drawn from the data already at hand (See Bibliography). This review is an attempt to define the scope of possbile effects.

Physical and Biological: Road or rail construction will create ground disturbance. When ground disturbance occurs, the potential for soil erosion increases. The result may be a deterioration of water quality in streams and rivers. Sediment may occur from simple surface erosion of exposed material, from mass soil movement caused by undercutting of unstable slopes, or by the uncontrolled channeling of water. Road surfaces concentrate runoff. Not only would these problems be expected durng the construction phase, but road use during periods of high precipitation and soil saturation may also result in a degradation of water quality.

A change in water quality could affect the fishery resource. All five species of Pacific salmon are found in the Stikine River or its connnecting tributaries. Research has shown that sediments on the streambed may reduce the early survival of fish and other aquatic life.

Potential water quality impacts can be minimized with proper site selection and design criteria. Nevertheless, impacts may not be completely eliminated.

In addition to changes in soil and water, some increase can be expected in both air and noise pollution.

The effect of opening up access to a remote wildlife area is another important consideration. Two items of major concern include the loss of habitat with

road and associated facility construction, and wildlife dispersion due to increased human activity. The proposed transportation corridors follow, to a large extent, streams or major drainage patterns in mountaineous areas. Affected habitats include timber areas, alpine/subalpine, estuarine, streamside/riparian, and inland wetlands.

With an increased presence of man, some stress to the existing wildlife populations can be expected. Traditional use patterns may be influenced as access corridors bisect the land. Equally important, as the opportunities for taking game improve, harvest rates would likely go up with the potential existing for an increase in unregulated or illegal kills. The Stikine River region is currently a prime habitat for waterfowl and other big game species.

On the other hand, easier access to the region may allow more opportunities for habitat manipulation, including fishery enhancement. Further study is needed.

Road access may also benefit Canadian timber management programs. The Canadian Government feels that stands of interior spruce and lodgepole pine could be more economically reached.

Social/Economic: Several of the proposed transportation corridors lie within the Stikine-LeConte Wilderness. Implementation of these alternatives, including further expansion of commerce on the river, would in general shift recreation opportunities from primitive/semi-primitive to motorized forms. Users would view these impacts differently. Some would see improved access as advantageous. Recreational use opportunities would be more diverse. Less strenuous forms of activities would be possible. On the other extreme, some people would be displaced by man's presence and seek the experience of "solitude" elsewhere. Futhermore, as use increased, the potential for conflict between users would be greater.

Impacts resulting from increased visitor use and road construction could significantly affect the areas cultural resources. Proposed corridors appear, in some areas, to overlay known prehistoric sites. The coastal areas of this region were Tlingit territory of the Stikine Clan. The interior regions of British Columbia were home to the Tahltans. Development would require an intensive inventory in order to adequately protect this heritage.

The coastal communities may also benefit economically from expanded commerce. Increased tourism and expansion of port facilities could reduce the current isolation, contributing to more stability within the work force. New business opportunities may also arise. A new access route to Canada would open the possibilities for other utility ties. Population increases could be expected with associated growth impacts. Adequate housing, schools, and health facilities would all be concerns.

A secondary benefit of better access would be increased opportunities to engage in subsistence activities such as hunting, trapping, stream fishing, berry picking, and wood gathering.

Cumulative Impacts: The opening of a hard surface transportation facility would likely result in other construction projects. Transmission lines originating in British Columbia and rail services or utility pipelines may follow road development.

The environmental issues dealing with road construction should be assessed as to there overall effect in relation to other developments occurring in interior Canada. For example, the construction of hydro facilities in the Stikine-Iskut Basin could result in water quality changes in the Alaskan floodplain and estuary. River flows would be regulated, sediment supply to the delta reduced, and an eventual change in streamside vegetation could occur. What effect this would have on the fish and wildlife habitat, and how these changes would influence wildlife populations are some of the questions which will require further analysis and research at such time as the Government of Canada has specific access needs in the region. In such case, the specific requirements in terms of traffic volumes, kind of traffic, purpose of access, support requirements and other factors could be reasonably estimated and would provide the basis for evaluating expected social, economic and environmental effects.

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1. The intent of this reference list is to provide the reader with additional sources of information, should he or she desire more research. The list is not all inclusive. New publications may be forthcoming. Most of the material pertains to B.C. Hydro projects on the Stikine-Iskut Rivers. Nevertheless, it may be used to assess potential impacts of downstream projects. Brief descriptions follow some of the references.

MAY 2, 1985

ALASKA PANHANDLE TRANSPORTATION ACCESS

Canadian Position Paper

Introduction

On December 2, 1980, the United States Congress passed the Alaska National Interests Lands Conservation Act (ANILCA), Public Law 96-487. The Act reserves from development and in some cases limits access to certain tracts of land in Alaska. Some of these tracts are near the Canada/U.S. border or lie among possible transportation corridors across the Panhandle (e.g. the Stikine River Valley).

Prior to passage of this legislation, the Canadian Government, after consultation with provincial authorities, formally expressed its concern through the State Department that ANILCA might restrict Canadian transportation access across the Panhandle. This position was based in part on treaty rights acquired in the nineteenth century.

In response, the U.S. legislators inserted Section 1113 of ANILCA, which directed the President to report within five years on "....the need, if any" to provide access across the Panhandle. In the course of conducting this study, the Administration is to consult with the Canadian Government.

This paper sets out in a preliminary fashion the Canadian position on the question of transportation access across the Alaska Panhandle.

Basic Approach

Canada's position is based on the assumption that north-western British Columbia and Yukon will in the years ahead become an area of significant economic development. Similarly, it is expected that Alaska, particularly the south-eastern part (the Panhandle), will participate directly or indirectly in such activity. Accordingly, the Canadian side believes that an agreed system for dealing with probable requirements for transportation access across the Panhandle would be mutually beneficial to both countries.

International Legal Considerations

Canada's rights of access through the Alaska Panhandle rest on or are affected by three factors.

1. An 1825 treaty between Russia and Great Britain which guaranteed the subject of his Britannic Majesty "the right of navigating freely, and without any hindrance whatever, all the rivers and streams which, in their course towards the Pacific Ocean (cross through the Panhandle)".

2. The 1871 Treaty of Washington, Article XXVI, which provided that navigation of the "Stikine, ascending and descending from, to, and into the sea, shall forever remain free and open for the purposes of commerce to the subjects of her Britannic Majesty...subject to any laws and regulations...not inconsistent with such privilege of free navigation".

3. The 1909 Boundary Waters Treaty, Article I, which provides that "navigation of all navigable boundary waters shall forever continue free and open for the purposes of commerce...".

4. Section 1113 of the 1980 Alaska National Interests Lands Conservation Act mandates a presidential study of "the effect of this Act upon the ability of the Government of Canada to obtain access in the Stikine River region of southeast Alaska". The Section goes on to call for examination of the impact of "various forms of access including, but not limited to, a road along the Stikine and Iskut Rivers, or other alternative routes, should such access be permitted.

Canada has existing navigation rights under the 1825 treaty between Russia and Great Britain, the Treaty of Washington of 1871 and the Boundary Waters Treaty of 1909. The practical effect of the legal situation governing these navigation access rights, in conjunction with the provisions of the 1980 U.S. Alaska National Interests Lands Conservation Act (ANILCA), is potentially to inhibit mutually beneficial economic development and resource management on both sides of the border. In the interests of both countries, Canada would therefore be interested in exploring with the USA the possibilities of establishing a process for the provision of additional transportation access through the Panhandle which would be consistent with both the economic development requirements of the region and the environmental objectives of the ANILCA.

Economic Development Considerations

Northern British Columbia and Yukon is a region of considerable economic potential. The sector which will eventually drive economic development in the area is mining. Forest based resource development may also take place, but probably on a limited scale. Finally, the possibility exists for major hydro-electric projects on the Stikine and Iskut Rivers. Broadly speaking, significant economic activity in this region is not likely to get underway for ten to fifteen years.

APPENDIX A

Views of the Government of Canada on Access Needs Through Panhandle of Alaska

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Preliminary consideration of the transportation requirements which may be generated suggests that there may be seven main potential access corridors across the Panhandle. Those corridors are described in an Appendix, together with an indication of the resource values in their immediate vicinity.

A. Mining

Recent studies by the B.C. Government (available on request) conclude that access through the Panhandle may be economically attractive in the Stikine region. This particularly the case for one project, Stikine Copper, a potential copper mine requiring copper prices in the U.S. $1.00/lb. range (constant 1982 dollars) and, therefore, not likely to be developed until the next decade or beyond. Nevertheless, the property may in the end be best served via an access road along the Stikine to the Iskut and then west along the Iskut through Alaska.

For several other potential mines in the area studied in the Government's reports, access to tidewater would probably be via Highway 37 to Stewart. Analysis showed that new road construction costs in this region were high and unless there was a very significant haul cost saving to be obtained from a shorter route to tidewater, it would not be economical to incur new capital costs. Further, the existing port infrastructure in Stewart favours it as an export point over other potential ports with no existing infrastructure.

Since the Northwest studies were completed, a number of other potential mineral properties have been identified and three of these could benefit from direct access to tidewater leading through the Panhandle. One of these is a precious metal property owned by Skyline Resources. The property is located at Johnny Mt. near the Iskut River and could be served via a road from the Wrangell, Alaska area along the Iskut.

A second major property not fully discussed in the Northwest reports is Windy Craggy. This property is located in the most extreme northwest corner of B.C. Access from Windy Craggy could be gained through Alaska via the Alsek River. This property is situated in an extremely isolated area and would require a huge investment (company officials have estimated over $1 billion) to bring on stream. The timing of this property is unknown at this time.

The Tulsequah mineral area up the Taku River, north of Juneau, also has excellent potential. The zone contains both massive sulphide and gold deposits. There have been three operating mines in the area. Transportation in the past has been by barge up the Taku River.

The northwest region also contains other mineral properties, but little information is available on their viability, timing or scale. Generally, the corridors most likely to be affected are - Tatshenshini River to Dry Bay, Taku River to Taku Inlet, and the routes along the Stikine and Iskut Rivers.

The extractive industries in Yukon depend entirely on existing access routes through the Panhandle to get their products to market. The major producer, the Cyprus Anvil Mining Corporation lead-zinc mine at Faro, Yukon, has access to tidewater at Skagway, Alaska via the Whitehouse-Skagway corridor. There are numerous known mineral properties throughout Yukon which will depend on existing or new routes to tidewater when conditions are right to bring them into production.

B. Forests

All seven possible access corridors across the Panhandle originate within the provincial Cassiar Timber Supply Area (TSA) - the largest supply area in B.C. (14.5 million hectares). Currently, the availability of timber in the TSA is constrained by difficult access and environmental considerations. The allowable annual cut of 140,000 cubic metres per year, set in 1984 and reviewed every five years, reflects the presently operable land base. Access through the Panhandle may enable the use of interior spruce and lodgepole pine stands as well as the coastal Sitka spruce, hemlock and cottonwood stands accessible from the developed corridors.

Notes on the forest values in the seven corridors appear in the Appendix. Two contain usable resources. The Stikine River to Stikine River Estuary route contains a moderate amount of potentially merchantable timber. There is currently one active Timber Sale near the junction of the Stikine and Iskut Rivers, involving 50,000 cubic metres of cottonwood and 10,000 cubic metres of sitka spruce. This timber will be bundle-boomed down the Stikine for export. In the area served by the Iskut River to Wrangell/Stikine Estuary corridor, there is also a considerable volume of merchantable timber, although much of it is poor quality hemlock and balsam. The direction of the timber flow is uncertain, but movement to tidewater appears attractive because of the distance to manufacturing centres in B.C.

C. Hydro-electric Development

B.C. Hydro has conducted extensive studies into the feasibility of hydro sites on the Stikine and Iskut Rivers which could provide a total of 15,000 million kwh/year. The development would consist of two dams and associated generation facilities on the upper reaches of the Stikine, two in the Iskut Basin, and a diversion of the head waters of a tributary of the Iskut. In addition, major transmission lines would be required to connect the development to the existing B.C. Hydro grid.

In September 1983, B.C. Hydro deferred detailed engineering and environmental studies of this development because of reductions in the forecast demand for electrical energy and current economic conditions in B.C. The deferral period is expected to last a number of years (with any probable in service date postponed past the year 2000) and its length will depend on the future growth of electrical energy demand.

At the northern end of the Panhandle, consideration is being given to a hydro grid inter-tie between the Northern Canada Power Commission's Whitehorse plant and Juneau, Alaska.

Environmental Considerations

The Ministry of Environment of the Province of British Columbia has prepared a Preliminary Environmental Assessment (PEA) of potential access routes in the Panhandle area (available on request). The report addresses the major environmental considerations in each of seven possible corridors.

It is apparent from this report that the documentation of resource and environmental information for the North West region of the province, particularly for that portion adjacent to the Panhandle, is relatively limited. Baseline information for a variety of parameters is required as the basis for analysis of both the feasibility and impacts of any major access development. Required in relation to corridors under consideration is an in-depth program to document physical parameters such as terrain, soils, climate and hydrology; and environmental factors such as vegetation, forests, fisheries, wildlife, visual and recreational resources. Provided it is initiated sufficiently in advance of any access development, this program will assist in reaching decisions on corridor and enroute feasibility, route location and design. Canadian agencies are prepared to cooperate with U.S. authorities in undertaking such investigations and related analysis.

Of greatest environmental concern in the region are the fishery resources. All five species of Pacific salmon have been documented in the major rivers (Alsek, Tatshenshini, Taku, Nakina, Stikine, Iskut and Unuk). These salmon stocks, as well as steelhead trout and Dolly Varden char, have important commercial, recreational and cultural values, and are of international interest. They must be afforded adequate protection. Migration patterns, spawning beds, water quality objectives and traditional fishing sites must all be accounted for in the corridor and route selection process and within route design.

Also important to the area are wilderness values, wildlife populations and heritage sites. These too, must be documented, evaluated and safeguarded from unnecessary impact in the context of the planning of access alternatives via Southwest Alaska.

On the basis of this preliminary assessment it is apparent that road design and construction will be difficult in the rugged terrain and harsh climatic conditions of the Northwest coast. Moreover, environmental protection measures must be incorporated into project cost estimates as basic project requirements.

Existing Transportation Links

It should be borne in mind that there are already numerous transportation routes and services linking B.C. and Yukon with Panhandle Alaska.

The public road connections include: the extension of Highway 37A from Stewart, B.C. to Hyder, Alaska; the road between Hyder and the Grand Duc mine in B.C.; the Klondike Highway from Whitehorse, Yukon to Skagway, Alaska, now open in summer only, and under active review for year-round operation as the principal supply route to Yukon; the Shakwak Highway from Haines Junction Yukon to Haines Alaska, which in addition to being a major commercial and tourist artery, is the Alaskan land bridge to Southeast Alaska from the rest of the State. The Shakwak Highway route was established on the basis of a 1942 Canada-U.S. Agreement through an exchange of diplomatic notes which also included the Alaska Highway. This route was reaffirmed in a Canada-U.S. Agreement of 1975 providing for reconstruction of the highway.

On the marine side, Alaska State Ferries offer vehicle and passenger services between Prince Rupert and several Panhandle communities, with connections to Vancouver and Seattle. Major cruise ship operators also stop at these points, and provide the major elements of Yukon tourist traffic through the ports of Skagway and Haines into Yukon. Other marine carriers offer commercial freight service to Yukon, B.C. and Alaska through Panhandle points. In addition, an Alaskan marine barge operator is aggressively soliciting freight business in the Yukon.

Currently there are no regular specific point services between B.C. and Panhandle communities. In the past, an air carrier held a licence to serve the Prince Rupert-Ketchikan route, but the licence has been cancelled. It should be noted, however, that there is scheduled air service between Whitehorse and Juneau by both U.S. and Canadian air carriers.

Freight and passenger services on the White Pass and Yukon Railway (Whitehorse to Skagway) are suspended. There are no other international rail links in the Panhandle.

The White Pass Corporation continues to operate a small diameter pipeline which carries oil products between the port of Skagway and Whitehorse along the line of the railway.

The concept of the International Gold Rush Park has been agreed to by the U.S. and Alaska as well as Canada and Yukon and is currently under review by B.C. This includes the route of the Gold Rush of 1898, from Skagway and Dyea, over the Chilcoot Trail to Canada.

The Report to Congress

Resource development in northwestern B.C. and Yukon will in due course result in significant economic benefits for both Canada and the United States. Clearly, however, the pace of that development is difficult to predict and few projects are likely to proceed in the short term.

Accordingly, it would be misleading to respond to Congress with respect to Canada's access requirements in too definitive a fashion. A more productive approach would be to focus on the process through which a particular access requirement might be considered. Such an approach would have the following elements.

- Canada's existing specific access would be guaranteed and augmented by a new bilateral agreement which would recognize Canada's general right to access across the Panhandle and would provide a method for dealing with specific access requirements as they come up.

- As part of this agreement a mechanism would be established whereby individual access requirements would be reviewed and approved according to agreed terms of reference.

- This reviewing body could be a committee made up of government representatives, or alternatively the International Joint Commission might be asked to take on this task.

- Under this scheme, the intent and relevant provisions of the ANILCA could be worked into the terms of reference of all access reviews.

It is Canada's view that this process-oriented approach will be more useful to the two countries than a premature, tightly defined corridor-by-corridor determination of access rights. The uncertainty of the timing and nature of economic development in the area suggests that this kind of flexible arrangement will in the end ensure that the full range of both countries' interests are adequately protected.

APPENDIX

This Appendix contains more detailed information about seven potential transportation access corridors across the Panhandle so far examined. The listing focusses on the mining and forest sectors.

A. Corridor Descriptions

Corridor 1 - Tatshenshini River/Dry Bay

A connection from the Haines Road to Dry Bay via the Tatshenshini and Alsek Rivers.

Corridor 2 - Taku River/Taku Inlet

A link from the Atlin/Mount McMaster Road to Taku Inlet via the Nakina and Taku Rivers.

Corridor 3 - Chutine River/Tracy Arm or Endicott Arm

Access from the Glenora Road along the Stikine to the Chutine River and across to either Endicott Arm or Tracy Arm.

Corridor 4 - Stikine River/Stikine Estuary

Access from Glenora Road along the Stikine River to tidewater.

Corridor 5 - Iskut River/Wrangell

A connection from Highway 37 to Wrangell or to the Stikine Estuary along the Iskut and Stikine Rivers, and by way of either the Katete River and Aaron Creek or the Craig and North Bradfield Rivers.

Corridor 6 - Bell-Irving River/Wrangell

A link from Highway 37 at the Bell-Irving River via Teigen Creek to the Iskut River and to Wrangell.

Corridor 7 - Unuk River/Burroughs Bay

Access to Burroughs Bay via the Unuk River from Highway 37 at the Bell-Irving River.

B. Mineral Deposits Near Access Corridors

Name	Reserves (million T)	Grades	Commodities	NTS Area
Corridor 1: Tatshenshini River to Dry Bay				
(a) Windy-Craggy	300 (approx)	1.52% Cu 0.08% Co	Cu, Co, Au(?)	114P/12
Corridor 2: Taku River to Taku Inlet				
(a) Erickson-Ashby	0.9	215 g/T Ag 1.7 g/T Au 2.2% Pb 3.8% Zn	Ag, Pb, Zn, Au	104K/11W
(b) Red Cap	uncertain		Au, Ag	104K/11W
(c) Omni Mount Ogden	uncertain		Mo	104K/6W
(d) Past Producers - Tulsequah Chief, Big Bull, Polaris Taku - all have potential (Cu, Zn, Au)				
Corridors 4 and 5: Stikine River and Iskut River				
(a) Stikine Copper (Galore Creek)	125	1.0% Cu 0.49 g/T Au 7.9 g/T Ag	Cu, Au, Ag	104O/3W
(b) Schaft Creek	910	0.3% Cu 0.02% Mo 0.113 g/T Au 0.992 g/T Ag	Co, Mo, Au	104O/7W
(c) Red Dog	1.8	1.244 g/T Au	Au	104O/9W
(d) Past producer - Bronson Creek has potential				

Corridors 3, 6 and 7 - minimal mineral exploration to date.

C. Potential Timber Volumes by Access Option

Access Option	Operable 'Coastal Spruce' Stands[1]	Operable Cottonwood Stands	Total Potentially Operable Stands[2]
	(x 1000 m^3)		
1. Dry Bay	Nil	Nil	Nil
2. Taku Inlet	100 - 150	150 - 250	1,000 - 2,000
3. Endicott Arm or Tracy Arm	----------Not a feasible route----------		
4. Stikine Estuary (via Stikine R.)	1,000 - 1,800[3]	1,100 - 1,800[3]	6,500 - 10,000[3]
5. Stikine Estuary (via Iskut R.)	1,300 - 2,000	450 - 700	8,000 - 12,500
6. Wrangell	----------Route not defined----------		
7. Unuk River	100 - 150	10 - 15	2,000 - 3,000

Notes: 1. 'Coastal Spruce' indicates Sitka spruce or Sitka spruce X white spruce. Figures are based on estimates of available height class 4 and better spruce leading stands.

2. Volumes for 'Total Potentially Operable Stands' include all coniferous species plus cottonwood. The coniferous component reflects estimates of height class 4 and better stands.

3. Volume estimates for the Stikine route do not reflect additional constraints which might be imposed in order to protect recreational values. Also, a considerable amount of this Stikine timber may be available to river access.

General Comments on the Timber Estimates in Table 1

- In the absence of ESA and operability information, these estimates must be viewed as rough approximations only.

- The 'Coastal Spruce Stands' estimates represent the coniferous volumes that would likely be economically viable under current market conditions. The cottonwood estimates probably give a reasonable approximation of potential cottonwood availability given the current demand for this product. The 'Total Potentially Operable Stands' volumes would become available only with a massive increase in marke values, especially for lower quality pulp material.

APPENDIX B

Views of the State of Alaska
(Letter Dated October 3, 1985)

STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

POUCH Z
JUNEAU, ALASKA 99811
PHONE: (907) 465-3900

OFFICE OF THE COMMISSIONER

October 3, 1985

Mr. Michael Barton
Regional Forester
U.S. Department of Agriculture
U.S. Forest Service
P. O. 1628
Juneau, AK 99802

Dear Mr. Barton:

I understand that your agency, working with the Alaska Department of Transportation and Public Facilities (DOT&PF), is nearly finished with a draft of the Stikine River Region study mandated under Section 1113 of the Alaska National Interest Lands Conservation Act (ANILCA). The purpose of my letter is to provide the State's position regarding this matter, which has been developed with assistance from the concerned State agencies and the Division of Governmental Coordination, Office of the Governor.

Section 1113 of ANILCA acknowledges the need to study the effect of that law upon the ability of the Government of Canada to obtain access in the Stikine River region of Southeast Alaska. The Government of Canada delivered a briefing paper on May 2, summarizing its position. In short, because of uncertainty about economic development projects, the Canadians indicated they are not ready to identify particular routes and do not have access requirements at this time. However, the Canadians did mention a keen interest in establishing a responsive process to deal with access needs.

Although their position focuses on access needs throughout the entire Southeastern panhandle, the State of Alaska is quite supportive of the Canadian position, insofar as the Stikine River region is concerned. Any discussion of future access needs in the Stikine region must reckon with the fact that portions of this area are Congressionally designated "Wilderness" areas, which precludes general surface access absent Congressional authorization. Clearly, there are several development activities that might occur in this area where the availability of immediate and economic access will be a key determinant. The process provided in Title XI of ANILCA, which authorizes the siting of transportation and utility systems within conservation system units such as the Stikine-LeConte Wilderness Area, is a lengthy, cumbersome, and potentially flawed solution to access needs, particularly when a foreign government and possible treaty obligations are involved.

As you probably know, DOT&PF has performed several engineering reconnaissance studies of various transportation corridors in the area. As part of its participation in the Stikine River region study group, in July 1984, the Department conducted an engineering reconnaissance by helicopter which further evaluated road routing alternatives, and the capital, maintenance, and operation costs. Our reconnaissance work found that construction costs of access routes which bypass the Wilderness portions of the Stikine River valley would be extremely high, and that winter avalanche control and snow removal would be difficult and costly. According to this work, one potential highway Wilderness bypass route traverses approximately 50 miles of moderate to extremely rough terrain from Wrangell to the Canadian border along the West Fork of the Katete River. This route presents grades of eight percent, poor alignment, the need for a two-mile tunnel, and it traverses forty-nine separate avalanche paths.

DOT&PF's regional transportation planning activity has long identified the need for surface transportation access for Southeast Alaska. In addition to encouraging economic development and resource extraction, mid-region surface access might facilitate a restructuring of Southeastern routes of the Alaska Marine Highway System. This would provide improved service and reduce future transportation costs. These considerations, combined with the engineering reconnaissance work, suggest that surface access may indeed be needed in the future, with the Stikine River valley corridor appearing as the only realistic alternative at this time.

For these reasons, the State wishes to preserve the options for future surface access in the Stikine River region. Accordingly, we wish to echo the Canadians' request for a responsive and systematic process to address access requests. Although Title XI does provide the statutory arrangement for review of such a request, we believe the final draft of the Stikine River region study should find there are overriding transportation considerations that justify a more streamlined review and approval process.

In that regard, the State of Alaska recommends the final study propose to Congress adoption of a provision addressing access for surface transportation specifically across the Stikine-LeConte Wilderness Area. We suggest it be modelled on the provisions in Section 201(4) of ANILCA, which guarantees surface access across the Kobuk River unit of the Gates of the Arctic National Preserve. It is not essential that Congress act immediately to amend ANILCA, or for the sole purpose of including a Stikine access provision. However, we recommend the study suggest Congressional action to amend this section of ANILCA as part of any appropriate amendment package which may be considered by Congress in the future, or when access needs are more demonstrable.

We believe that making this recommendation is consistent with the mandate in Section 1113 of ANILCA and responsive to the Canadians' request for a reasonable process to address access needs in the Stikine River region. Concurrently, adoption of modified access provisions modelled upon Section 201(4) ensures performance of complete environmental and economic analyses for mitigation of wildlife, fish and their habitat, and other social and environmental concerns. This provision could also include an arrangement that if a feasible alternative is identified outside the Wilderness area, the guaranteed route through the Stikine River Valley could be revoked.

I would appreciate full consideration of these recommendations by the Forest Service as you prepare the final draft study for review and comment. As the lead agency with the responsibility to oversee the State's efforts on this issue, we would be happy to answer any questions you might have regarding this letter.

Thank you for your consideration of our suggestions.

Sincerely,

R. J. Knapp
Commissioner

cc: The Honorable Bill Sheffield, Governor
Don Collinsworth, Commissioner
Department of Fish and Game
William A. Ross, Commissioner
Environmental Conservation
Esther Wunnicke, Commissioner
Department of Natural Resources
Loren R. Lounsbury, Commissioner
Department of Commerce and Economic Development
William Privett, Mayor, City of Wrangell
Don Koenigs, Mayor, City of Petersburg
Hal Brown, Attorney General
Department of Law
John Katz, Special Counsel
State/Federal Relations
Robert Grogan, Associate Director
Office of Management and Budget

APPENDIX C

Standard Form 299 (11-83) - Application for Transportation and Utility Systems and Facilities on Federal Land

STANDARD FORM 299(11–83)
Prescribed by DOI/USDA/DOT
P.L. 96–487 and Federal
Register Notice 6–3–81

APPLICATION FOR TRANSPORTATION AND UTILITY SYSTEMS AND FACILITIES ON FEDERAL LANDS

FORM APPROVED
OMB NO. 1004–0060
Expires: May 31, 1986

NOTE: Before completing and filing the application, the applicant should completely review this package and schedule a preapplication meeting with representatives of the agency responsible for processing the application. Each agency may have specific and unique requirements to be met in preparing and processing the application. Many times, with the help of the agency representative, the application can be completed at the preapplication meeting.

FOR AGENCY USE ONLY

Application Number

Date filed

1. Name and address of applicant *(include zip code)*

2. Name, title, and address of authorized agent if different from Item 1 *(include zip code)*

3. TELEPHONE *(area code)*

Applicant

Authorized Agent

4. As applicant are you? *(check one)*

a. ☐ Individual
b. ☐ Corporation *
c. ☐ Partnership/Association *
d. ☐ State Government/State Agency
e. ☐ Local Government
f. ☐ Federal Agency

* *If checked, complete supplemental page*

5. Specify what application is for: *(check one)*

a. ☐ New authorization
b. ☐ Renew existing authorization No. _____.
c. ☐ Amend existing authorization No. _____.
d. ☐ Assign existing authorization No. _____.
e. ☐ Existing use for which no authorization has been received *
f. ☐ Other *

* *If checked, provide details under Item 7*

6. If an individual, or partnership are you a citizen(s) of the United States? ☐ Yes ☐ No

7. Project description *(describe in detail)*: (a) Type of system or facility, *(e.g., canal, pipeline, road)*; (b) related structures and facilities; (c) physical specifications *(length, width, grading, etc.)*; (d) term of years needed; (e) time of year of use or operation; (f) Volume or amount of product to be transported; (g) duration and timing of construction; and (h) temporary work areas needed for construction. *(Attach additional sheets, if additional space is needed.)*

8. Attach map covering area and show location of project proposal

9. State or local government approval: ☐ Attached ☐ Applied for ☐ Not required

10. Nonreturnable application fee: ☐ Attached ☐ Not required

11. Does project cross international boundary or affect international waterways? ☐ Yes ☐ No *(If "yes," indicate on map)*

12. Give statement of your technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested.

13a. Describe other reasonable alternative routes and modes considered.

b. Why were these alternatives not selected?

c. Give explanation as to why it is necessary to cross Federal lands.

14. List authorizations and pending applications filed for similar projects which may provide information to the authorizing agency. *(Specify number, date, code, or name.)*

15. Provide statement of need for project, including the economic feasibility and items such as: (a) cost of proposal *(construction, operation, and maintenance)*; (b) estimated cost of next best alternative; and (c) expected public benefits.

16. Describe probable effects on the population in the area, including the social and economic aspects, and the rural lifestyles.

17. Describe likely environmental effects that the proposed project will have on: (a) air quality; (b) visual impact; (c) surface and ground water quality and quantity; (d) the control or structural change on any stream or other body of water; (e) existing noise levels; and (f) the surface of the land, including vegetation, permafrost, soil, and soil stability.

18. Describe the probable effects that the proposed project will have on: (a) populations of fish, plant, wildlife, and marine life, including threatened and endangered species; and (b) marine mammals, including hunting, capturing, collecting, or killing these animals.

19. Name all the Department(s)/Agency(ies) where this application is being filed.

I HEREBY CERTIFY, That I am of legal age and authorized to do business in the State and that I have personally examined the information contained in the application and believe that the information submitted is correct to the best of my knowledge.

Signature of Applicant	Date

Title 18, U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

SUPPLEMENTAL

NOTE: The responsible agency(ies) will provide additional instructions.	CHECK APPROPRIATE BLOCK	
I – PRIVATE CORPORATIONS	ATTACHED	FILED*
a. Articles of Incorporation	☐	☐
b. Corporation Bylaws	☐	☐
c. A certification from the State showing the corporation is in good standing and is entitled to operate within the State.	☐	☐
d. Copy of resolution authorizing filing	☐	☐
e. The name and address of each shareholder owning 3 percent or more of the shares, together with the number and percentage of any class of voting shares of the entity which such shareholder is authorized to vote and the name and address of each affiliate of the entity together with, in the case of an affiliate controlled by the entity, the number of shares and the percentage of any class of voting stock of that affiliate owned, directly or indirectly, by that entity, and in the case of an affiliate which controls that entity, the number of shares and the percentage of any class of voting stock of that entity owned, directly or indirectly, by the affiliate.	☐	☐
f. If application is for an oil or gas pipeline, describe any related right-of-way or temporary use permit applications, and identify previous applications.	☐	☐
g. If application is for an oil and gas pipeline, identify all Federal lands by agency impacted by proposal.	☐	☐
II – PUBLIC CORPORATIONS		
a. Copy of law forming corporation	☐	☐
b. Proof of organization	☐	☐
c. Copy of Bylaws	☐	☐
d. Copy of resolution authorizing filing	☐	☐
e. If application is for an oil or gas pipeline, provide information required by Item "I-f" and "I-g" above.	☐	☐
III – PARTNERSHIP OR OTHER UNINCORPORATED ENTITY		
a. Articles of association, if any	☐	☐
b. If one partner is authorized to sign, resolution authorizing action is	☐	☐
c. Name and address of each participant, partner, association, or other	☐	☐
d. If application is for an oil or gas pipeline, provide information required by Item "I-f" and "I-g" above.	☐	☐

* If the required information is already filed with the agency processing this application and is current, check block entitled "Filed." Provide the file identification information *(e.g., number, date, code, name)*. If not on file or current, attach the requested information.

NOTICE

The Privacy Act of 1974 provides that you be furnished the following information in connection with information required by this application for an authorization.

AUTHORITY: 16 U.S.C. 310; 5 U.S.C. 301.

PRINCIPLE PURPOSE: The information is to be used to process the application.

ROUTINE USES: (1) The processing of the applicant's request for an authorization. (2) Documentation for public information. (3) Transfer to appropriate Federal agencies when concurrence is required prior to granting a right in public lands or resources. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: Disclosure of the information is voluntary. If all the information is not provided, the application may be rejected.

DATA COLLECTION STATEMENT

The Federal agencies collect this information from applicants requesting right-of-way, permit, license, lease, or certification for the use of Federal lands.

The Federal agencies use this information to evaluate the applicant's proposal.

The public is obligated to respond to this information request if they wish to obtain permission to use Federal lands.

APPLICATION FOR TRANSPORTATION AND UTILITY SYSTEMS AND FACILITIES ON FEDERAL LANDS

GENERAL INFORMATION
ALASKA NATIONAL INTEREST LANDS

This application will be used when applying for a right-of-way, permit, license, lease, or certificate for the use of Federal lands which lie within conservation system units and National Recreation or Conservation Areas as defined in the Alaska National Interest Lands Conservation Act. Conservation system units include the National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers System, National Trails System, National Wilderness Preservation System, and National Forest Monuments.

Transportation and utility systems and facility uses for which the application may be used are:

1. Canals, ditches, flumes, laterals, pipes, pipelines, tunnels, and other systems for the transportation of water.

2. Pipelines and other systems for the transportation of liquids other than water, including oil, natural gas, synthetic liquid and gaseous fuels, and any refined product produced therefrom.

3. Pipelines, slurry and emulsion systems, and conveyor belts for transportation of solid materials.

4. Systems for the transmission and distribution of electric energy.

5. Systems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communications.

6. Improved rights-of-way for snow machines, air cushion vehicles, and all-terrain vehicles.

7. Roads, highways, railroads, tunnels, tramways, airports, landing strips, docks, and other systems of general transportation.

This application *must* be filed simultaneously with each Federal department or agency requiring authorization to establish and operate your proposal.

In Alaska, the following agencies will help the applicant file an application and identify the other agencies the applicant should contact and possibly file with:

Department of Agriculture
Regional Forester, Forest Service (USFS)
Federal Office Building, P.O. Box 1628
Juneau, Alaska 99802
Telephone: (907) 588–7247 *(or a local Forest Service Office)*

Department of Interior
Bureau of Indian Affairs (BIA)
Juneau Area Office, P.O. Box 3–8000
Juneau, Alaska 99802
Telephone: (907) 586–7209

Bureau of Land Management (BLM)
701 C Street, Box 13
Anchorage, Alaska 99513
Telephone: (907) 271–5055 *(or a local BLM Office)*

National Park Service (NPS)
Alaska Regional Office, 540 West 5th Avenue, Room 202
Anchorage, Alaska 99501
Telephone: (907) 271–4196

U.S. Fish & Wildlife Service (FWS)
Office of the Regional Director
1011 East Tudor Road
Anchorage, Alaska 99503
Telephone: (907) 276–3800

Note-Filings with any Interior agency may be filed with any office noted above or with the: Office of the Secretary of the Interior, Regional Environmental Officer, Box 120, 1675 C Street, Anchorage, Alaska 99513.

Department of Transportation
Federal Aviation Administration
Alaska Region AAL–4, P.O. 14
Anchorage, Alaska 99513

NOTE – The Department of Transportation has established the above central filing point for agencies within that Department. Affected agencies are: Federal Aviation Administration (FAA), Coast Guard (USCG), Federal Highway Administration (FHWA), Federal Railroad Administration (FRA).

OTHER THAN ALASKA NATIONAL INTEREST LANDS

Use of this form is not limited to National Interest Conservation Lands of Alaska.

Individual departments/agencies may authorize the use of this form by applicants for transportation and utility systems and facilities on other Federal lands outside those areas described above.

For proposals located outside of Alaska, applications will be filed at the local agency office or at a location specified by the responsible Federal agency.

SPECIFIC INSTRUCTIONS
(Items not listed are self-explanatory)

Item

7 Attach preliminary site and facility construction plans. The responsible agency will provide instructions whenever specific plans are required.

8 Generally, the map *must* show the section(s), township(s), and range(s) within which the project is to be located. Show the proposed location of the project on the map as accurately as possible. Some agencies require detailed survey maps. The responsible agency will provide additional instructions.

9, 10, and 12 – The responsible agency will provide additional instructions.

13 Providing information on alternate routes and modes in as much detail as possible, discussing why certain routes or modes were rejected and why it is necessary to cross Federal lands will assist the agency(ies) in processing your application and reaching a final decision. Include only reasonable alternate routes and modes as related to current technology and economics.

14 The responsible agency will provide instructions.

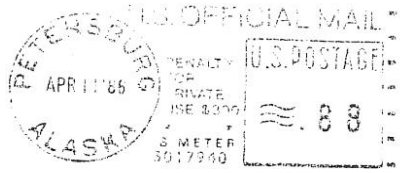
15 Generally, a simple statement of the purpose of the proposal will be sufficient. However, major proposals located in critical or sensitive areas may require a full analysis with additional specific information. The responsible agency will provide additional instructions.

16 through 18 – Providing this information in as much detail as possible will assist the Federal agency(ies) in processing the application and reaching a decision. When completing these items, you should use sound judgment in furnishing relevant information. For example, if the project is not near a stream or other body of water, *do not* address this subject. The responsible agency will provide additional instructions.

Application *must* be signed by the applicant or applicant's authorized representative.

If additional space is needed to complete any item, please put the information on a separate sheet of paper and identify it as "Continuation of Item".

(For supplemental, see reverse)



FROM : Tongass National Forest
Stikine Area
P.O. Box 309
Petersburg, AK 99833

TO :

USDI-Bureau of Land Managment
701 C Street, P.O. Box 13
Anchorage, AK 99513

THIRD CLASS MAIL

ALASKA DISTRICT

Project Maps and Index Sheets

Revised to 30 September 2003

-Contents for Rivers & Harbors-

Note: Projects are arranged alphabetically and not by project numbers. Each new project is assigned a permanent number in its respective series (i.e., River and Harbor, or Flood Control). This document is produced in compliance with EP 1130-2-520.

Cover: The Manson hopper dredge Westport returning from the disposal site to the Port of Anchorage during dredging operations, August 2003.

I

INDEX

RIVER AND HARBOR PROJECTS

U.S. Army Engineer District, Alaska

Corps of Engineers

Revised to 30 September 2003

Large Index Map 1-0. (2001)

Small Index Map 1-0. (2001)

PROJECT	MAP	SUPPLEMENT

	DATE	SHEET DATE
Anchorage Harbor, Alaska	1996	2003
Apoon Mouth of the Yukon River, Alaska *	1993	1989
Bethel Harbor, Alaska	1998	2002
Cook Inlet Navigation Channel, Alaska	2000	2003
Cordova Harbor, Alaska	1996	2003
Craig Harbor, Alaska	2003	2003
Dillingham Harbor, Alaska	1996	2003
Douglas Harbor, Alaska	2003	2003
Dry Pass, Alaska	1998	2000
Egegik River, Alaska	1993	1989
Elfin Cove, Alaska	2003	2003
Gastineau Channel, Alaska	1993	1998
Haines Harbor, Alaska	1998	2003
Homer Harbor, Alaska	2002	2003
Hoonah Harbor, Alaska	1993	2003
Humboldt Harbor, Alaska	1996	2002
Iliuliuk Harbor, Alaska	1993	2002
Juneau Harbor, Alaska	1993	2003
Kake Harbor, Alaska	2000	2000
Ketchikan Harbor, Alaska	1996	2003
King Cove Harbor, Alaska	2003	2003
Kodiak Harbor, Alaska	2001	2002
Larsen Bay, Alaska	2001	2001
Mekoryuk, Alaska	1993	1999
Metlakatla Harbor, Alaska	1999	2003
Meyers Chuck Harbor, Alaska **	1993	1989
Mountain Point, Alaska	1998	1998
Naknek, Alaska	1993	2003
Ninilchik Harbor, Alaska	1996	2003
Nome Harbor, Alaska	1996	2003

NOTE: Projects are arranged alphabetically and not by project numbers.

II

PROJECT	MAP DATE	SUPPLEMENT SHEET DATE	P N
Old Harbor, Alaska	1996	2002	1·
Ouzinkie Harbor, Alaska	2002	2002	1·

Pelican Harbor, Alaska	1993	2003	1
Petersburg Harbor, Alaska	2003	2003	1
Port Alexander, Alaska	1993	1999	1
Port Lions, Alaska	1992	2002	1
Rocky Pass in Keku Strait, Alaska	1993	2001	1
Seldovia, Alaska	1993	2003	1
Sergius and Whitestone Narrows, Alaska	1993	2003	1
Seward Harbor, Alaska	1996	2002	1
Sitka Harbor, Alaska	2001	2003	1
Skagway Harbor, Alaska	1996	2003	1
St. George Harbor, Alaska ***	1998	1996	1
St. Michael Harbor, Alaska *	1993	1989	1
St. Paul Harbor, Alaska	1993	2003	1
Stikine River, Alaska	1993	1992	1
Valdez Harbor, Alaska	1996	2003	1
Wrangell Harbor, Alaska	1996	2001	1
Wrangell Narrows, Alaska	1993	2003	1

* Completed project recommended for abandonment in 1925, House Document No. 467, 69th Congress, 1st Session.

** Project deauthorized, 1991, as per Public Law 101-640, under Section 1001(b)(2) of the Water Resources Development Act of 1968.

*** Project not completed to design depths due to the City's inability to enter into a project cost sharing agreement. Federal maintenance is suspended.

NOTE: Projects are arranged alphabetically and not by project numbers.

III

1-1.

ANCHORAGE HARBOR, ALASKA

1-36.

STIKINE RIVER, ALASKA

(CWIS NO. 17500)

LARGE PROJECT MAP LOW PHOTO
SMALL PROJECT MAP LOW PHOTO

Condition of Improvement 30 September 1992

AUTHORIZATION: Rivers and Harbors Act, 30 August 1935 (House Doc. 210, 72nd Congress, 1st Session) as adopted, provides for snagging of the river from its mouth to the Canadian border, a distance of about 30 miles, or 35 miles from the Port of Wrangell.

ADDITIONAL AUTHORIZATION: Under the provisions of Section 610 of the Economy Act of 30 June 1932, a Memorandum of Understanding between the United States Forest Service and the Corps of Engineers became effective 15 August 1972 to the extent that the Forest Service will perform all clearing and snagging operations on the Stikine, utilizing Forest Service personel, and that the Corps will be obligated to reimburse the Forest Service for expenses not to exceed $14,000 in any one fiscal year.

EXISTING PROJECT:	LENGTH	DEPTH	WIDTH
Channel	33 mi	N/A	N/A

PROJECT USAGE: The Stikine River is navigable from approximately 1 May to 15 October for shallow draft boats transporting supplies between Wrangell, Alaska, and Telegraph Creek, British Columbia, a distance of 130 miles.

PROGRESS OF WORK:

1937 - Snagging operations in the channel between the mouth of the river and the International border are started in 1937 and are carried out as necessary under contract through 1949.

1958 - Work under contract removes 20 snags from the channel October-November.

1963 - Snagging of the channel is carried out in May with 25 snags removed.

1964 - The first in a three year trial period of annual snagging operations; 32 snags are removed October-November.

1967 - Annual maintenance snagging continues with the addition of clearing potential snags from eroding bank areas.

1968 - The program initiated in 1967 continues in May of this year, June through October 1969, and August-September 1971.

1972 - The Memorandum of Understanding, providing for the U.S. Forest Service to do project clearing, is signed in August. Work on the project is postponed however, pending the outcome of an Environmental Impact Statement.

1977 - The Forest Service resumes the snagging and clearing of the river annually through 1984.

1985 - The Corps awards two contracts for the snagging and clearing of the project; both are completed in FY85.

1987 - The last full report states that snagging and clearing operations are to be carried out by the Forest Service under the Memorandum of Understanding. As long as personnel and funding are available annual maintenance will continue.

COST TO DATE:	**Maintenance**		
	$ 239,560		
RANGE OF TIDE:	**Mean Range**	**Diurnal Range**	**Extreme Range**
(Pt. Rothsay)	11.4'	13.9'	24.4'

Tidal effects have been noted for a distance of 20 miles from the mouth.

1-36.

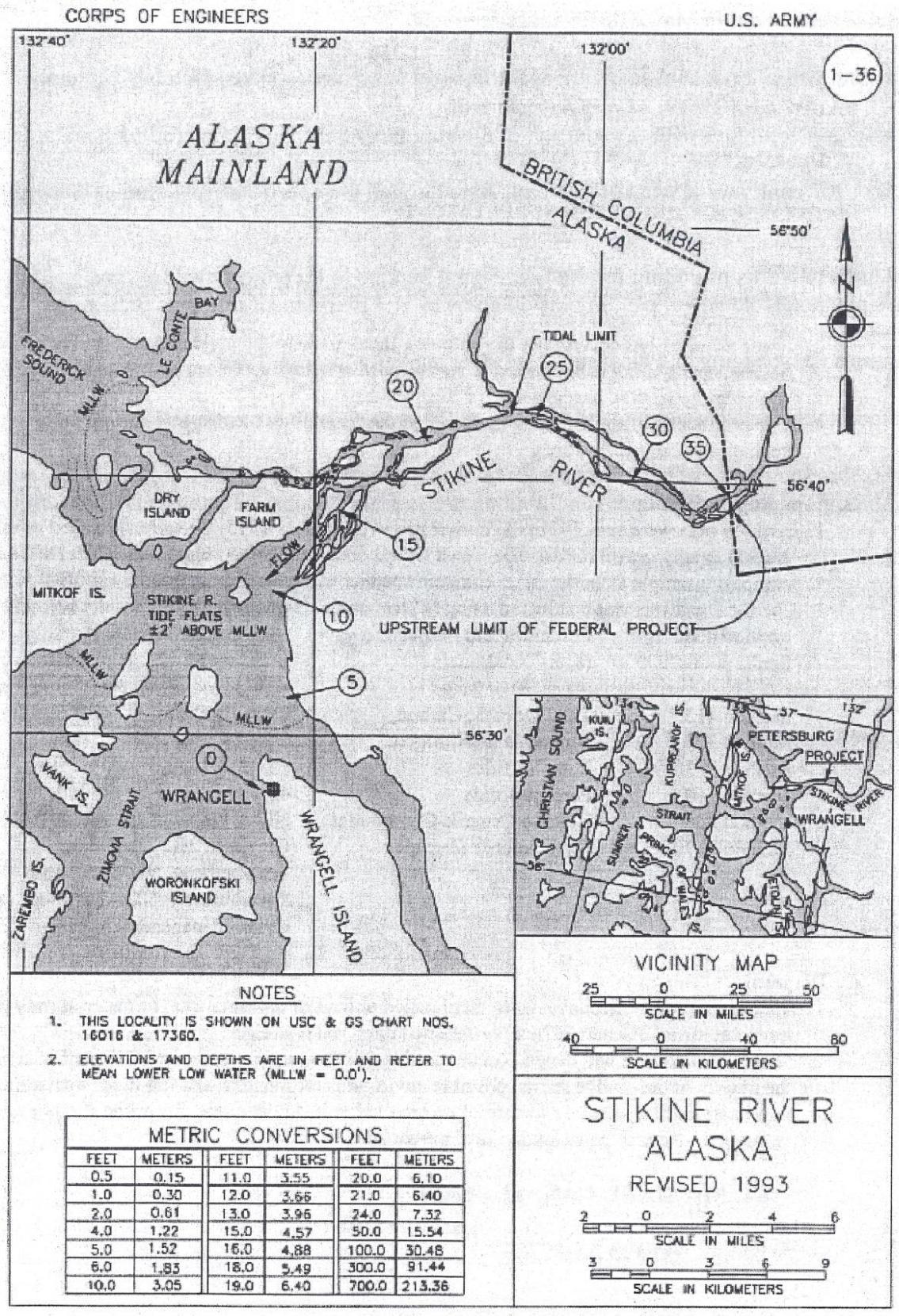
1-37.

ST. MICHAEL CANAL, ALASKA

(CWIS NO. 72847)

LARGE PROJECT MAP

SMALL PROJECT MAP



NOTES

1. THIS LOCALITY IS SHOWN ON USC & GS CHART NOS. 16016 & 17360.
2. ELEVATIONS AND DEPTHS ARE IN FEET AND REFER TO MEAN LOWER LOW WATER (MLLW = 0.0').

METRIC CONVERSIONS					
FEET	METERS	FEET	METERS	FEET	METERS
0.5	0.15	11.0	3.35	20.0	6.10
1.0	0.30	12.0	3.66	21.0	6.40
2.0	0.61	13.0	3.96	24.0	7.32
4.0	1.22	15.0	4.57	50.0	15.54
5.0	1.52	16.0	4.88	100.0	30.48
6.0	1.83	18.0	5.49	300.0	91.44
10.0	3.05	19.0	6.40	700.0	213.36

VICINITY MAP

25 0 25 50
SCALE IN MILES

40 0 40 80
SCALE IN KILOMETERS

STIKINE RIVER ALASKA

REVISED 1993

2 0 2 4 6
SCALE IN MILES

3 0 3 6 9
SCALE IN KILOMETERS

Treaty Between Great Britain and Russia, Signed at St. Petersburgh, February 28/16, 1825.

[Translation.]

Au Nom de la Très Sainte et Indivisible Trinité.

Sa Majesté le Roi du Royaume Uni de la Grande Bretagne et de l'Irlande, et Sa Majesté l'Empereur de toutes les Russies, désirant resserrer les liens de bonne intelligence et d'amitié qui les unissent, au moyen d'un accord qui régleroit, d'après le principe des convenances réciproques, divers points relatifs au commerce, à la navigation, et aux pêcheries de leurs sujets sur l'Océan Pacifique, ainsi que les limites de leurs possessions respectives sur la côte nord-ouest de l'Amérique, ont nommé des Plénipotentiaires pour conclure une Convention à cet effet, savoir:—Sa Majesté le Roi du Royaume Uni de la Grande Bretagne et de l'Irlande, le Très Honorable Stratford Canning, Conseiller de Sa dite Majesté en Son Conseil Privé, etc. Et Sa Majesté l'Empereur de toutes les Russies, le Sieur Charles Robert Comte de Nesselrode, Son Conseiller Privé Actuel, Membre du Conseil de l'Empire, Secrétaire d'Etat dirigeant le Ministère des Affaires Etrangères, etc.; et le Sieur Pierre de Poletica, Son Conseiller d'Etat Actuel, etc. Lesquels Plénipotentiaires, après s'être communiqué leurs pleins-pouvoirs respectifs, trouvés en bonne et due forme, ont arrêté et signé les Articles suivans:

Art. I. Il est convenu que, dans aucune partie du grand Océan, appelé communément Océan Pacifique, les sujets respectifs des Hautes Puissances Contractantes ne seront ni troublés, ni gênés, soit dans la navigation, soit dans l'exploitation de la pêche, soit dans la faculté d'aborder aux côtes, sur des points qui ne seroient pas déjà occupés, afin d'y faire le commerce avec les indigènes, sauf toutefois les restrictions et conditions déterminés par les Articles qui suivent.

II. Dans la vue d'empêcher que les droits de navigation et de pêche exercés sur le grand océan par les sujets des Hautes Parties Contractantes ne deviennent le prétexte d'un commerce illicite, il est convenu que les sujets de Sa Majesté Britannique n'aborderont à aucun point où il se trouve un établissement Russe, sans la permission du Gouverneur ou Commandant; et que, réciproquement, les sujets Russes ne pourront aborder, sans permission, à aucun établissement Britannique, sur la côte nord-ouest.

III. La ligne de démarcation entre les possessions des Hautes Parties Contractantes sur la côte du continent et les îles de l'Amérique nord-ouest, sera tracée ainsi qu'il suit:

In the Name of the Most Holy and Undivided Trinity.

His Majesty the King of the United Kingdom of Great Britain and Ireland, and His Majesty the Emperor of all the Russias, being desirous of drawing still closer the ties of good understanding and friendship which unite them, by means of an agreement which may settle, upon the basis of reciprocal convenience, different points connected with the commerce, navigation, and fisheries of their subjects on the Pacific Ocean as well as the limits of their respective possessions on the northwest coast of America, have named Plenipotentiaries to conclude a Convention for this purpose, that is to say:—His Majesty the King of the United Kingdom of Great Britain and Ireland, the Right Honourable Stratford Canning, a member of His said Majesty's Most Honourable Privy Council, etc., and His Majesty the Emperor of all the Russias, the Sieur Charles Robert Count de Nesselrode, His Imperial Majesty's Privy Councillor, a member of the Council of the Empire, Secretary of State for the Department of Foreign Affairs, etc., and the Sieur Pierre de Poletica, His Imperial Majesty's Councillor of State, etc. Who, after having communicated to each other their respective full powers, found in good and due form, have agreed upon and signed the following Articles:

Art. I. It is agreed that the respective subjects of the High Contracting Parties shall not be troubled or molested, in any part of the Ocean, commonly called the Pacific Ocean, either in navigating the same, in fishing therein, or in landing at such parts of the coast as shall not have been already occupied, in order to trade with the natives, under the restrictions and conditions specified in the following Articles.

II. In order to prevent the right of navigating and fishing, exercised upon the ocean by the subjects of the High Contracting Parties, from becoming the pretext for an illicit commerce, it is agreed that the subjects of His Britannic Majesty shall not land at any place where there may be a Russian establishment, without the permission of the Governor or Commandant; and, on the other hand, that Russian subjects shall not land, without permission, at any British establishment, on the north-west coast.

III. The line of demarcation between the possessions of the High Contracting Parties, upon the coast of the continent, and the islands of America to the north-west, shall be drawn in the manner following:

A partir du point le plus méridional de l'île dite Prince of Wales, lequel point se trouve sous la parallèle du 54e degré 40 minutes de latitude nord, et entre le 131e et le 133e degré de longitude ouest (méridien de Greenwich), la dite ligne remontera au nord le long de la passe dite Portland Channel, jusqu'au point de la terre ferme où elle atteint le 56e degré de latitude nord: de ce dernier point la ligne de démarcation suivra la crête des montagnes situées parallèlement à la côte jusqu'au point d'intersection du 141e degré de longitude ouest (même méridien); et finalement, du dit point d'intersection, la même ligne méridienne du 141e degré formera, dans son prolongement jusqu'à la Mer Glaciale, la limite entre les possessions Russes et Britanniques sur le continent de l'Amérique nord-ouest.

IV. Il est entendu, par rapport à la ligne de démarcation déterminée dans l'Article précédent:

1. Que l'île dite Prince of Wales appartiendra toute entière à la Russie.

2. Que partout où la crête des montagnes qui s'étendent dans une direction parallèle à la côte depuis le 56° degré de latitude nord au point d'intersection du 141° degré de longitude ouest, se trouveroit à la distance de plus de 10 lieues marines de l'océan, la limite entre les possessions Britanniques et la lisière de côte mentionnée ci-dessus comme devant appartenir à la Russie, sera formée par une ligne parallèle aux sinuosités de la côte, et qui ne pourra jamais en être éloignée que de 10 lieues marines.

V. Il est convenu en outre, que nul établissement ne sera formé par l'une des deux Parties dans les limites que les deux Articles précédents assignent aux possessions de l'autre. En conséquence, les sujets Britanniques ne formeront aucun établissement, soit sur la côte, soit sur la lisière de terre ferme comprise dans les limites des possessions Russes, telles qu'elles sont désignées dans les 2 Articles précédens; et, de même, nul établissement ne sera formé par des sujets Russes au delà des dites limites.

VI. Il est entendu que les sujets de Sa Majesté Britannique, de quelque côté qu'ils arrivent, soit de l'océan, soit de l'intérieur du continent, jouiront à perpétuité du droit de naviguer librement, et sans entrave quelconque, sur tous les fleuves et rivières qui, dans leurs cours vers la mer Pacifique, traverseront la ligne de démarcation sur la lisière de la côte indiquée dans l'Article III de la présente Convention.

VII. Il est aussi entendu que, pendant l'espace de 10 ans, à dater de la signature de cette Convention, les vaisseaux des deux Puissances, ou ceux appartenant à leurs sujets

Commencing from the southernmost point of the island called Prince of Wales Island, which point lies in the parallel of 54 degrees 40 minutes, north latitude, and between the 131st and 133rd degree of west longitude (meridian of Greenwich), the said line shall ascend to the north along the channel called Portland Channel, as far as the point of the continent where it strikes the 56th degree of north latitude; from this last mentioned point, the line of demarcation shall follow the summit of the mountains situated parallel to the coast as far as the point of intersection of the 141st degree of west longitude (of the same meridian); and, finally, from the said point of intersection, the said meridian line of the 141st degree, in its prolongation as far as the Frozen Ocean, shall form the limit between the Russian and British possessions on the continent of America to the north-west.

IV. With reference to the line of demarcation laid down in the preceding Article it is understood:

1st. That the island called Prince of Wales Island shall belong wholly to Russia.

2nd. That whenever the summit of the mountains which extend in a direction parallel to the coast, from the 56th degree of north latitude to the point of intersection of the 141st degree of west longitude, shall prove to be at the distance of more than 10 marine leagues from the ocean, the limit between the British possessions and the line of coast which is to belong to Russia, as above mentioned, shall be formed by a line parallel to the windings of the coast, and which shall never exceed the distance of 10 marine leagues therefrom.

V. It is moreover agreed, that no establishment shall be formed by either of the two parties within the limits assigned by the two preceding Articles to the possessions of the other; consequently, British subjects shall not form any establishment either upon the coast, or upon the border of the continent comprised within the limits of the Russian possessions, as designated in the two preceding Articles; and, in like manner, no establishment shall be formed by Russian subjects beyond the said limits.

VI. It is understood that the subjects of His Britannic Majesty, from whatever quarter they may arrive, whether from the ocean, or from the interior of the continent, shall forever enjoy the right of navigating freely, and without any hindrance whatever, all the rivers and streams which, in their course towards the Pacific Ocean, may cross the line of demarcation upon the line of coast described in Article III of the present Convention.

VII. It is also understood, that, for the space of ten years from the signature of the present Convention, the vessels of the two Powers, or

respectifs, pourront réciproquement fréquenter, sans entrave quelconque, toutes les mers intérieures, les golfes, havres, et criques sur la côte mentionnée dans l'Article III, afin d'y faire la pêche et le commerce avec les indigènes.

VIII. Le Port de Sitka, ou Novo Archangelsk, sera ouvert au commerce et aux vaisseaux des sujets Britanniques durant l'espace de 10 ans, à dater de l'échange des ratifications de cette Convention. Au cas qu'une prolongation de ce terme de 10 ans soit accordée à quelque autre Puissance, la même prolongation sera également accordée à la Grande Bretagne.

IX. La susdite liberté de commerce ne s'appliquera point au trafic des liqueurs spiritueuses, des armes à feu, des armes blanches, de la poudre à canon, ou d'autres munitions de guerre; Les Hautes Parties Contractantes s'engageant réciproquement à ne laisser ni vendre, ni livrer, de quelque manière que ce puisse être, aux indigènes du pays les articles ci-dessus mentionnés.

X. Tout vaisseau Britannique ou Russe naviguant sur l'Océan Pacifique, qui sera forcé par des tempêtes, ou par quelque accident, de se réfugier dans les ports des parties respectives, aura la liberté de s'y radouber, de s'y pourvoir de tous les objets qui lui seront nécessaires, et de se remettre en mer, sans payer d'autres droits que ceux de port et de fanaux, lesquels seront, pour lui, les mêmes que pour les bâtimens nationaux. Si, cependant, le patron d'un tel navire se trouvoit dans la nécessité de se défaire d'une partie de ses marchandises pour subvenir à ses dépenses, il sera tenu de se conformer aux ordonnances et aux tarifs de l'endroit où il aura abordé.

XI. Dans tous les cas de plaintes relatives à l'infraction des Articles de la présente Convention, les autorités civiles et militaires des deux Hautes Parties Contractantes, sans se permettre au préalable ni voie de fait, ni mesure de force, seront tenues de faire un rapport exact de l'affaire et de ses circonstances à leurs Cours respectives, lesquelles s'engagent à la régler à l'amiable, et d'après les principes d'une parfaite justice.

XII. La présente Convention sera ratifiée, et les ratifications en seront échangées à Londres dans l'espace de 6 semaines, ou plutôt si faire se peut.

En foi de quoi les Plénipotentiaires respectifs l'ont signé, et y ont apposé le cachet de leurs armes.

Fait à St. Pétersbourg, le 28/16 Février, de l'an de Grâce 1825.

(L.S.) STRATFORD CANNING.
(L.S.) LE COMTE DE NESSELRODE.
(L.S.) PIERRE DE POLETICA.

those belonging to their respective subjects, shall mutually be at liberty to frequent, without any hindrance whatever, all the inland seas, the gulfs, havens, and creeks on the coast mentioned in Article III for the purposes of fishing and of trading with the natives.

VIII. The port of Sitka, or Novo Archangelsk, shall be open to the commerce and vessels of British subjects for the space of ten years from the date of the exchange of the ratifications of the present Convention. In the event of an extension of this term of ten years being granted to any other Power, the like extension shall be granted also to Great Britain.

IX. The above-mentioned liberty of commerce shall not apply to the trade in spirituous liquors, in fire-arms, or other arms, gunpowder, or other warlike stores; the High Contracting Parties reciprocally engaging not to permit the above-mentioned articles to be sold or delivered, in any manner whatever, to the natives of the country.

X. Every British or Russian vessel navigating the Pacific Ocean, which may be compelled by storms or by accident, to take shelter in the ports of the respective Parties, shall be at liberty to refit therein, to provide itself with all necessary stores, and to put to sea again, without paying any other than port and light-house dues, which shall be the same as those paid by national vessels. In case, however, the master of such vessel should be under the necessity of disposing of a part of his merchandise in order to defray his expenses, he shall conform himself to the regulations and tariffs of the place where he may have landed.

XI. In every case of complaint on account of an infraction of the Articles of the present Convention, the civil and military authorities of the High Contracting Parties, without previously acting or taking any forcible measure, shall make an exact and circumstantial report of the matter to their respective Courts, who engage to settle the same, in a friendly manner, and according to the principles of justice.

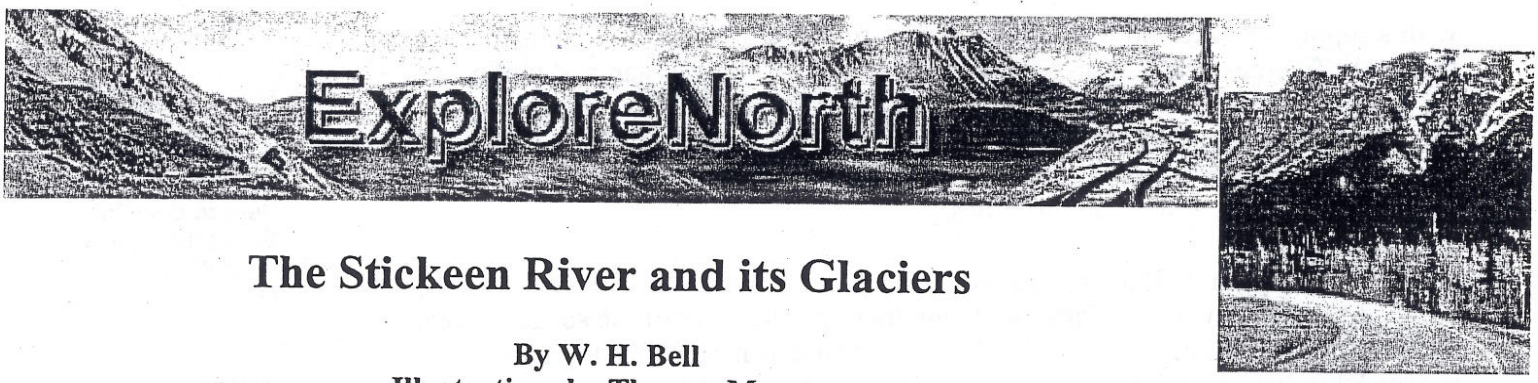
XII. The present Convention shall be ratified, and the ratifications shall be exchanged at London within the space of six weeks, or sooner if possible.

In witness whereof, the respective Plenipotentiaries have signed the same, and have affixed thereto the seal of their arms.

Done at St. Petersburgh, the 28/16th day of February, in the year of Our Lord, 1825.

[L.S.] STRATFORD CANNING.
[L.S.] COMTE DE NESSELRODE.
[L.S.] PIERRE DE POLETICA.

(Hertslet's Commercial and Slave Trade Treaties, vol. iii, p. 362.)



The Stickeen River and its Glaciers

By W. H. Bell
Illustrations by Thomas Moran

***Scribner's Monthly*, April 1879**

FACE OF THE GREAT GLACIER, STICKEEN RIVER.

A DETENTION of a month at Fort Wrangel, Alaska, awaiting the means of transportation back to Portland, Oregon, gave me the opportunity of making a trip up the Stickeen River, which empties into the Pacific a few miles north of the fort, and of seeing its glaciers, the principal one of which, the "Great Glacier," being, it is said, one of the largest in the world.

Embarking with a pleasant party from the post, one beautiful July morning, on one of the boats carrying passengers and supplies to the head-waters of the river;

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Take a Trip

with a supply of water-proofs and gum-boots for the glacier, with sketching materials, fishing-tackle, shot-guns and rifles, besides cards, organ and violin, - we were, in a few minutes, steaming away toward our destination. The passengers, besides our party, were a Mrs. Lovell, who was on the way to join her husband at Glenora, a town at the head of the river, and Mr. Colbraith, the principal merchant at the Cassiar mines.

Rounding a point half a mile from the wharf, the mouth of the Stickeen came in view; at ten A. M. we were fairly in it, and then the character of the scenery began to change from that of the coast. We had left behind us mountains, high and wooded, but here they became higher and more rugged and were occasionally capped with snow. New beauties presented themselves every moment until the sun set and it became too dark to see anything. We were to stop that night at a landing called "Bucks," just opposite to the "Great Glacier," and, as the captain had promised in the morning to give us an opportunity of going over on the ice, we waited patiently, until we were securely tied up, when we "turned in," but not to sleep; for, although the night was chilly, from our nearness to the "Ice Mountain," the mosquitoes were terrible and the first streak of daylight saw us on deck.

Opposite to us was the monster glacier, white and cold in the uncertain morning light, but which, as the sun broke upon it, sparkled and glistened like miles of heaped-up jewels. From where we lay we could look out over the surface of the ice as it came out of the mountains, dipping with a gentle slope river of from six to seven hundred feet high and about seven miles wide. From where the pressure was removed, at the mouth of the gorge, great cracks and chasms showed themselves until, as the edge of the face was approached, the whole ice plain was toward the river; immediately in front of us was the mountain-gorge, about two miles wide, through which it issued before spreading out into its fan-like shape which terminated in a perpendicular face next to the seen to be a net-work of cracks which appeared to run, with broken joints, to the very bottom of the glacier. As we looked into these fissures in the clear ice, from about one mile and a half distant, the prismatic colors were superb. The surface of the ice has the appearance of being covered with snow, but the face of the precipice is all clear ice.

The belt of timber, between the river-bank and the glacier, prevented us from seeing down to its base; but with the captain's promise in view, we made a hasty breakfast and immediately afterward the boat was loosened from its moorings and, running across, made a landing on the other bank. We were quickly ashore and started through the dense timber and undergrowth belt, which occupies the space between the "moraine" at the foot of the glacier and the river. This belt seemed to us, from the deck, to be very narrow, but being in reality almost a quarter of a mile wide and the undergrowth being very dense, with swampy ground here and there, the traveling through it was extremely difficult. It was climbing over and creeping under obstacles the whole way, and while both hands were occupied in putting aside branches or in climbing over fallen timbers, the mosquitoes were feasting on the tenderest parts of our faces or endeavoring to explore the hidden recesses of our ears.

At last, however, with numerous falls and with scratched bands and faces, we

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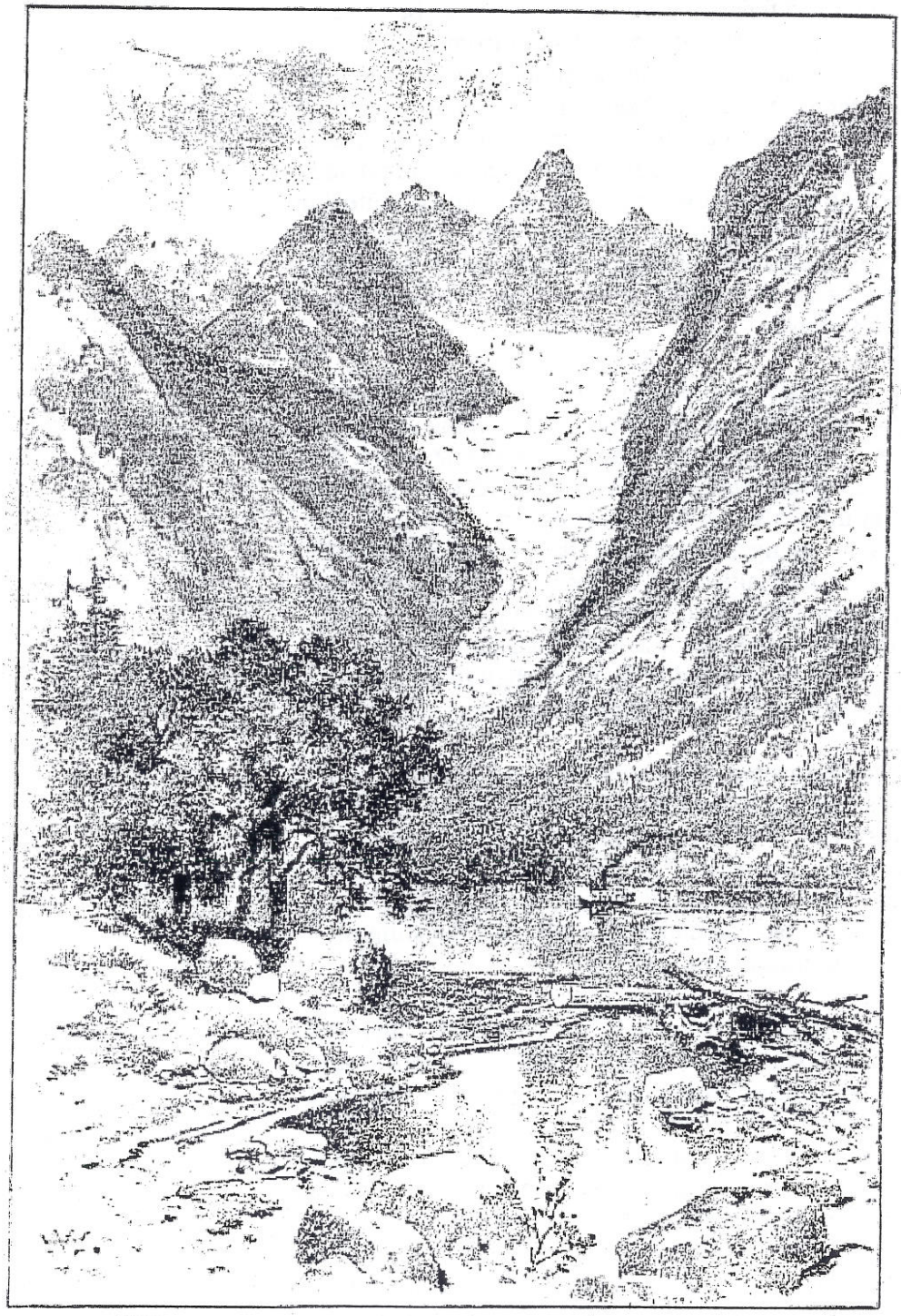
reached the great mass of moraine or ground-up rocks, which has been forced down in front of the "ice-plow" of the glacier. This is piled up in an immense, irregular, tumulose mass one hundred feet high and about one-fourth of a mile wide, parallel to the whole length of the face of the glacier, and perfectly destitute of vegetable life. Up this we clambered and at last reached the top.



BABY GLACIER, FIVE MILES BELOW GREAT CAÑON, STICKEEN RIVER.

Who can describe the sight which presented itself to our eyes? It was at once

grand and terrible; for miles on either side of our stand-point stretched this perpendicular ice-cliff, towering above our heads, fissured and seamed with great cracks and chasms, in which such tints were seen as were never laid on painter's palette; here a block, as large as a church, split out from the face and just ready to fall, and then a rock, weighing tons, which had been brought down by the tedious but terribly irresistible movement of the glacier from the mountain-tops sixty miles away, caught in a crack and held there, as one would hold a nut between thumb and finger. We were about one-quarter of a mile distant from the face of the cliff; from the foot of the moraine next to the glacier an ice slope ascends, at an angle of from ten to fifteen degrees, which has been formed by the constant breaking off of immense blocks from the face. These fall in numberless pieces, melting and flowing down in the day-time, the water freezing again at night and gradually building up the slope solidly. The edge next to the moraine is quite thin, and the movement of the glacier pushing this plow ahead against it breaks up the edges in many places, forcing the pieces into miniature bridges which span, with their pointed arch, the tiny stream flowing between the ice-plow and the moraine and emptying into the river miles above.

After gazing at this wonder for a while from the top of the moraine, we went down its inside slope, and jumping the stream, found ourselves on the ice slope and on the back of our head simultaneously. From where we had first seen it the ascent looked perfectly easy, but when we all got upon it it was discovered that an epidemic of sitting down hard at intervals, and without due warning, had broken out in our party, and it was only by taking advantages of the pebbles imbedded here and there in the ice, that we could make any progress. Then, too, there were in the ice many water-washed holes of from two to four feet in diameter, which went down like wells to the ground beneath; and the idea of going far up the slope, slipping and coming down, with the speed of a billiard ball to be fairly "pocketed" in one of these holes, deterred us from making any experiments.

Even here on the ice the mosquitoes were, most annoying and kept us moving our arms about like the fans of a wind-mill, but the sight was so grand that we felt as if we could not tear ourselves away. There was something in this mass of ice that fascinated one by its immensity. Members of the party a few hundred yards away looked like insects, and nothing was great but the ice, and that was clear, beautiful, majestic and awful. No one seemed inclined to talk, and the stillness was only broken by murmurs of admiration and wonder.

I cannot learn that the surface of this glacier has ever been explored. There is a story current, however, that two Russian officers from the garrison at Sitka, years ago made the attempt and were never beard from again, having probably become bewildered and lost in the labyrinth of chasms that can be so distinctly seen from the other bank of the river. The Indians say that at one time the glacier crossed the Stickeen, and that an old Indian and his wife paddled their canoe under it, through the ice caverns and gleaming passages that were worn by the current.

While many pleasing thoughts stole upon us as we looked up at the great ice-cliff, a prolonged whistle from the boat recalling us did not sound unwelcome, and we girt our loins for another struggle with the chaparral. Getting to the top of the moraine, we turned to have a last look, and then plunged down the slope into the bush, and after a long struggle reached the landing with disordered dresses,

hats awry, hands full of the thorns of the "Devil's Club," thoroughly tired, and thirsty enough to drink dry all the water-butts on the boat.

We soon scrambled over the gang-plank, and the lines, having been let go, were on our way again. The scenery continued grand, peak after peak shooting up, not in ranges, but singly, each timbered to the snow line, and then reaching up bare and gray to the very heavens. Here and there a small glacier, starting from near the peak, reached one of the rocky gulches, and as its foot approached the warmer air below it melted into a stream, looking tiny in the miles of distance, and dashed down to join the water of the main stream, - a full-grown river, as cold as the ice itself and as clear as crystal, its purity showing half-way across our river before mingling with its muddiness.

We staggered along bravely, making but little headway against this boiling, whirling torrent of a river until, having been under way for a few hours, it was discovered that the tubes in the boiler were leaking. Being almost abreast of the site of the old Hudson Bay fort, we ran in and tied up. As soon as the boat was quiet, off came great clouds of mosquitoes from the woods and thick bushes, and we were driven to the invention of all sorts of contrivances to keep from being literally eaten alive. I thought that I bad been in mosquito countries before; but, bless you, I was a babe in mosquito experience. They were business fellows too; did not sing and enjoy themselves as others of their class do, but possibly, knowing that the boat would not tarry long, wasted none of their valuable time but attended strictly to blood-letting.

From where we lay the bushes ran back in great luxuriance, and with a perfect evenness of height for about a half-mile, the sameness being broken by great lone pines, spruce and hemlock, with here and there a gaunt dead tree. Beyond this the larger timber grew thicker, and the bushes were lost; the pine-covered country became more broken until it suddenly reared itself boldly toward the sky. The trees became more and more scattered, until but a few detached ones were to be seen, and then up, up to a dizzy height, the bare gray rocks towered to the clouds. Away up on the first *mélange* of mountains a small glacier was visible, from under the foot of which a tiny cascade threw itself over the precipice, but it was miles away, and when it reached us, just astern of the boat, it was a roaring, tumbling brook.

At two o'clock in the afternoon, the tubes having been repaired, the fires were started , the hand of the steam-gauge soon showed the requisite amount of steam, and casting off the lines we were under way, and in a few minutes rid of the mosquitoes. Then, in anticipation of the night and sleep to come, we went to our state-room, closed all of the avenues of retreat, and with a towel, slightly wet at one end to give it weight, passed half an hour in an indiscriminate slaughter of all of the little pests that bad not been driven out by the draught of air through the boat. Leaving all closed we slipped out, with the satisfaction of knowing that we had purchased for ourselves undisturbed rest, as far as these little nuisances were concerned, and climbed up to the pilot-house, where all of the party had collected to enjoy the scenery.

Every moment brought fresh beauties, fresh surprises; mountain towered above mountain, - there was no sameness, every turn brought a picture characteristic in

itself; the foreground the river, every inch of it covered with circular swirls as the water boiled up from the bottom in its rapid descent toward the ocean; now and then a great tree, shorn of its limbs and anchored to the bottom by its rock-laden roots and bowing and plunging in the torrent in its vain efforts to free itself; then the ragged banks, with their over-hanging grasses, enormous ferns and the immense leaves of the "Devil's Club." The eye rested upon moss-covered boulders half concealed in the soil, and followed the straggling, far-reaching roots that dipped and withdrew their long arms as they struck the current ; the many-colored greens of the willows, alders, cotton-woods, British Columbia pines, spruce, hemlock and balsam, melted into the haze of distance, where the brownish-green pines began to show on the mountain-sides; then up and up traveled the delighted vision until the line of timber ceased, and the variously tinted mosses gave their tone to the scene; beyond this were gray and red masses of pitiless rocks in countless shapes; over the shoulders of these, in the deep blue of the great distance, other and higher peaks miles upon miles away. It was a perfect pandemonium of mountains; patches of snow lay on the sides and in the great fissures of the highest. Scores of "baby glaciers" were in sight, and on every hand thread-like streams of water poured down from the melting snow, leaping at times over thousands of feet of precipice, their volume dispersed in cloud-like vapor long before the bottom was reached; we all gazed in silence, exclamations of wonder and admiration breaking from our lips at intervals as our advance opened to us a view which seemed grander than anything that we had seen before.

VIEW FROM GLENORA, STICKEEN RIVER.

Finally the captain, pointing in the direction, shouted "There's the Mud Glacier!" All eyes were turned in the direction indicated, and soon, away off to our left, over the trees, we caught sight of the face of a large glacier with a perpendicular bluff of ice, and immense heaps of lateral, and terminal moraine. The trees soon hid it from view as we ran in under the bank to take advantage of an eddy, but running out again, further up, we brought it into full view about three miles away.

This glacier is next in extent to the one visited by us in the morning, and as the river makes an enormous bend here, called the "Devil's Elbow," we were in sight

of it for five hours, seeing it from all points; the flow of ice is from the mountains of the right bank, and when one can first see it it sweeps out from a ravine which runs apparently parallel to the river, and then, turning at right angles, wends its difficult way through a cañon, directly toward us, always slightly descending as it advances until it reaches the mouth of the cañon, when it spreads out into the fan shape before alluded to, terminating abruptly in a precipice of ice some three hundred feet high; from this ice-face, back to where the glacier comes out of the cañon, the distance cannot be less than from seven to eight miles, and how much further it extends no one could tell us; its width, where it leaves the cafion, must be about one mile, while at its face it is about three. Its moraine is pushed out on each side and in front, and in one place on the side, it has surrounded a belt of timber, which, I am sure, must soon give way to the force of the moving ice. This is called the "Mud Glacier," from the fact of its surface being covered with sand and dirt blown upon it from the encroaching mountains by the fierce winter winds that here prevail; and in contradistinction to the Great Glacier, the surface of which is very pure.

Our stock of wood being almost exhausted, we ran into one of the company's wood-yards to replenish. While the wood was being thrown aboard, the steward of the boat took a bucket and went up to the mouth of the stream that flows from beneath the glacier, and before we had completed the wooding returned with some of the most delicious water that I ever tasted, as cold as the ice itself. We had postponed dinner until we should arrive at this place; our morning on the upper deck,where we had drunk in great draughts of fresh air, had given us all ravenous appetites, and we all blessed "old Uncle," the cook, as dish after dish of appetizing food made its appearance. The dinner was excellent as were all of our meals while on the boat.

It was a long pull around the bend: an extraordinary circular sweep, with the face of the Mud Glacier for a center; once I lost sight of the ice, as we worked along, for some time, close in under the trees, and when it again made its appearance the boat had so changed her course, by reason of the course in the river, that I thought I had discovered a new field of ice, and so hailed it, much to the amusement of the captain. Thus we steamed on, always through the same sublime scenery, until we arrived, at ten o'clock, at the bend just below the "Big Cañon." It was still light, but some difficult passages lay just ahead of us; and as full daylight, and plenty of it, is necessary in order to make the run, we went to the bank and in a few minutes were securely tied up under the lee of a point which juts out into the river just above us.

Below, and midway in the river, there is a long, low sand island, and on the point of it, next to us, was encamped a party of Indians, with an enormous thirty-paddle canoe of solid cedar; it was a beautiful model, as are all of the canoes of these Indians. This, being an extraordinarily large one, had attracted my attention as it left Fort Wrangel, two days before we did, with a small American flag flying from a short staff, stuck in a hole made for it in the solid wood of the high stem. The Indians were cooking their supper on the sand, their canoe being pulled well up out of the water; they had evidently arrived but a short time before us. Night soon shut down, and after supper and a diversion of cards and music, we were quite ready to turn in; the fresh air and the excitement of sight-seeing had worn us all out, and we needed no opiate to send us off post-haste into the Land of Nod.

I was sleeping like a baby when the morning stir and the swash of the water against the cabin bulkheads, in deck-washing, awoke me, and I dressed and went on deck, where I learned that, on getting steam, it was discovered that the tubes were again leaking, and that it had been necessary to let the fires go out, so that the engineer might get at the tubes again; for every pound of steam is most valuable in stemming this powerful current, and the worst of our trip was to come. A movement among our Indian friends on the sand island now attracted our attention; they had their huge canoe in the water, their camp equipage all on board, and all but three of their party were seated. Of these three, two were at the bow and one at the stern, holding her in; the current from the point of land just above us ran directly across to the head of the island, and then swept along the side on which they were with great velocity, - so great that the water was banked up at least six inches in the swiftest of it, while between this elevation and the shore to which they were holding, there was a sufficient eddy to make her berth a comparatively easy one.

We could hear nothing, of course, of their conversation; but, with our glasses upon them, we saw the steersman throw up his hand as a signal; the three men leap into the canoe; with one accord, the crew sprang to their paddles. The struggle was to cross the swift current outside of the eddy. They took it quartering, with the paddles bending and springing to their limit, and the two steering paddles at the stem trying to hold them up to it. If any boat in the world could cross such a "mill-tail" that canoe, with her beautiful lines, ought to have done it; but her prow had hardly dipped into it before she was whirling down stream like a teetotum, and all control of her was lost until she bad gone the whole length of the island, where the current seemed to have lost some of its power, or where it had been distributed over the width of the stream. They then took once more to their paddles, and, crossing the river diagonally, got under the lee of the same promontory that had sheltered us during the night. They passed us with a greeting of "Cla-how-ya ?" (How are you ?) and went around the point and out of sight.

At noon, the engineer reported that the tubes were again in good order, and that sufficient steam-power to send us ahead was to be had for the asking. The lines were cast off, the bell-signal made to the engineer to "open her out wide," and once more we were under way, enjoying every moment in the grandeur of the scenery; it was eternal change in eternal sameness; there were always mountains, always snow, always glaciers; but they were different mountains, different snow, different glaciers, and the constantly changing atmospheric effects, the great, sweeping shadows of clouds across the faces of the mountains, the variously tinted spray of the leaping cascades, all combined to make monotony impossible. And then, too, there was just sufficient sense of danger in the navigation of this tearing, boiling river to give a spice to the feast.

Three P.M. brought us up to the "Great Cañon," where the whole of this great river flows through a cleft in the mountains but fifty yards wide. One can readily imagine the force with which the mass of water tears through this cut; it is, as is said of "The Dalles" of the Columbia, a river set on edge. To go through it looks impossible; and, although but about two hundred yards in length, it seemed almost madness to subject the steamer to the strain incident to an attempt at a passage. The run through, however, is perfectly straight, and we could see the

landscape beyond, beautifully framed by the sky, the water, and these eternal rocks. The signal was given for a full head of steam and at it we went! An involuntary shudder ran through us as the gray, rocky faces shut us in; they seemed, as we got fairly under them, to incline from the perpendicular toward us, ready to fall and crush us to the bottom as a punishment for our temerity. The wheel threw the spray as high as the smoke-stack in its maddening whirl; every timber and brace groaned and creaked as the fearful rush of the waters struck the boat, but she lessened the distance inch by inch, until, in fifteen minutes from the time of entrance we were fairly through and looking back on another picture through the same frame of sky, rocks and water.

We soon came down to the jog-trot which we had maintained for the greater part of the distance from the mouth. From this point the mountains decrease in size very perceptibly; they would still be called grand, however, were they not in such contrast to those that we have left behind. At six P.M. we passed through "Cloutch-man's (Woman's) Cañon." It is smaller than the others and is so called because the navigation through it is so much less difficult that a woman can steer a canoe through it without trouble. We made but one bite at this cherry of a cañon and emerged at the other end to find a cherry that required a good deal of biting. The current was terribly swift and the boat hung and shivered like a living being, for a time scarcely seeming to move as we watched the trees upon the shore for parallax; but as we held our breath we saw that she did gradually climb the watery slope until at last we ran into a place that gave her a little rest, when she plucked up her courage and showed, by the more cheerful action of her machinery, that she still had ambition left for anything that the captain saw fit to put her at. And she had need for it all, for the "Grand Rapids," the bugbear of these river men, was ahead of us, and we were all looking out for the first glimpse of it with a curiosity not unmixed with anxiety. Early this year the *Glenora*, one of the opposition boats, took a strong sheer while trying to make this passage, struck a rock and knocked a hole in her side that a man could have crept through. There are several inches more of water, however, on the rapids, the captain tells us, than when the *Glenora* fiasco occurred; and as we have great faith in the skill of our friend at the wheel we await patiently our arrival.

A sudden bend in the channel threw us out from the wooded point of a mountain declivity and there, right before us, rushed the rapid, foaming and leaping in its wild descent. The river just above the top of this water-slope is contracted by the close encroachment of two of the mountains and spreading out below to about six times its width makes the greater part of it too shoal for the navigation of any boat that cannot be handled with ease on a heavy dew. Where we are to try it, however, the river, just after it passes the gorge, is met by an island which sends a fair portion of the water around a strong bend to the left, and although it looks no deeper than where one would ordinarily wade out, on a ripple, after trout, toward it the captain points the bow of his boat and at eight P.M. we are fairly upon it. The wheel seems to fly; its rapid motion appears to draw out what little water there is under us and the vessel settles down as if we were about to touch upon the bottom. Iron, steel and brain were pitted against the torrent; the hull springs and vibrates so that a mist seems to be in front of one's eyes as they are strained to take in any sign of a forward movement. The onward movement seems impossible; the desire to assist the boat by pushing against anything belonging to the fittings of the pilothouse and which is in the direction of the

course becomes irresistible; she bangs, she recedes; the current is too strong for her! All turn to the captain with a look of appeal. He whirls the wheel over, and, trembling in every timber, she creeps diagonally across the torrent, and again, when quite in shore, obeys her wheel, turns her bow to the current and stops to take breath. If anything should give way now the result would be most disastrous. Again the wheel is pressed over and again she slowly obeys her propelling power, quartering the rapid and gaining perhaps one-quarter of her length in the right direction before the shore of the island brings her up. Thus, by successive tacks, we finally master the difficult passage and take at the top the first good breath that we have drawn for twenty minutes. A good thrower could cast a stone the length of the rapids and yet it is all that steel and steam can do to drive our light hull over it in the third of an hour.

The excitement of the Grand Rapids over, the *Beaver* was again jogging along comfortably, and with a nod of congratulation at the captain, we backed ourselves down the steep stair-way to the saloon deck. A glance through the forward cabin windows showed us that a bend in the river had brought in view a wooding station where we were to tie up for the night. The captain soon dropped the boat in alongside of the bank as gingerly as if her hull were an egg-shell; we are made fast; the wheel ceased its crazy whirl, and the decks, which had vibrated throughout the long day in response to the "hog chains," became as quiet as the floors Of an inland cottage. What a relief it was to both ears and nerves! The silence was in such contrast that the sound of one's voice was almost startling; that of fne steward was, however, very soothing as he announced supper.

The country toward Glenora loses much of its wildness, the land rising in immense terraces for miles and miles back, where, in the great distance can be seen peaks, blue and indistinct, similar to those through which the river forces its way. Much placer gold mining has been done from time to time along the banks of the Stickeen and with some success; and this morning we have passed evidences of it in the dilapidated huts and half tumbled-down sluices - not one of these places is now in operation; the miners having pressed forward for their share in the greater discoveries of the Cassiar gold fields.

Four miles below Glenora we pass an Indian rancheria or settlement called Shakesville, consisting of two houses, constructed of logs set on end. One of these was roofed with enormous shingles called "shakes," and the other with large pieces of bark and pine-boughs. In front, and between them and the river, were drying-frames, on which were suspended quantities of salmon, which were being cured for winter's use; and hauled up on the bank were two large canoes, covered from stem to stem with mats made of plaited grass to protect them from the sun, while huddled together were a number of naked Indian children watching the passage of our boat.

At half past seven A.M., we reached the Hudson Bay Company's trading post, one mile below Glenora. This post was established in 1874, when it was discovered that the old post, lower down the river, was within the boundary line of Alaska; the company has a substantial warehouse built upon the bank of the river, in which are stored the multifarious articles that are needed in trading for furs with the Indians of the interior, besides a large stock of goods necessary to the miners of Cassiar. Just across the river is another old mining sluice,

abandoned and falling to pieces; the trough gaping wide open in many places, and the supporting trestle-work reeling about in the drunkenest way possible, and looking for all the world like a "water-way" on a spree. Soon after leaving the Hudson Bay post, we rounded the point of land on which the company's buildings are situated, and saw before us the town of Glenora, and at nine A.M., were lying broadside on the gently sloping sand-beach which forms its levee, with our hawsers made fast to the "snubbing-posts" ashore. As we were to remain here until the next morning, sight-seeing became the order of the day, and we all went ashore.

The town is built on a low plateau that stretches back to the first bluff of the series of terraces which run like a huge staircase, to the distant mountains; this plateau is but a few hundred yards wide, and here are collected about fifteen log-houses and Indian huts; the houses are low and built of logs "chinked" with mud and moss, as a protection against the terrible winds of winter; they all face toward the river and have inclosed yards and vegetable gardens at their back; the front apartments are nearly all occupied as stores, the "living-rooms" being at the back; while one, a very low barn of a building, sports across its front an enormous sign of cotton drilling stretched on a frame, partially obscuring, with the lower part of its overgrown proportions, the tops of the windows and door. On this is painted, in a bold style of lettering, "Cosmopolitan Hotel." The English have a custom-house here which is presided over by a pleasant, hospitable gentleman, Mr. Hunter. Having called upon us, he invited us very cordially to make him a visit, and so, following in the wake of the ladies of our party, of whom he had taken possession, we soon found ourselves at his house, a neat little cottage with a trim walk bordered with shells, leading up to it. Although it was small, we found, upon entering, that it was filled with many comforts and elegancies.

After a very pleasant chat, our host accompanied us on a tour of inspection of some of the gardens. Considering the latitude, 58° north, and the shortness of the growing season,we were very much astonished at the size and varieties of the vegetables raised - there were onions, cabbages, turnips, carrots, beets, parsnips and peas, and in full head, a patch of oats and another of the Mexican clover (alfalfa), as well as some of the common, hardier flowers, - and this in a country that has a summer of not more than three months, and where, in winter, the thermometer goes as low as 65° below zero. One might think that the ground would be frozen so deep that the short summer would barely suffice to take the frost from it.

The unloading of the boat made the levee very lively, and everybody seemed to be employed in some way or other. We were not only permitted to inspect the gardens and the exteriors of the houses, but were taken, by the main strength of kindly feeling into each and every family; the interiors were homely but comfortable, and if black with smoke, it only told of the cozy, roaring fires and the comfortable groups that sat around them during the imprisoning cold of the winter months.

Sun-down saw us again assembled in the cabin of the boat, where we held quite a reception for our new friends ashore, who came off for a good talk about the doings of the outside world; old news to us was new to them; things that had been wonderful to us when they occurred, months ago, were to them a new wonder; but

our budget was after a while emptied and turned inside out, and, we then betook ourselves to music. Scotch, English, Irish, and American airs succeeded each other rapidly, and we sang and played on and on until we were aroused by the most unearthly, unmusical din ashore that I have ever beard, and with one accord we rushed out on the guards of the boat to find out what it meant. Lights were flashing about amid the din of beaten kettles and pans, the blowing of borns, the firing of guns and pistols and the howling and yelping of dogs. Some one suggested that it might be a "calathumpian serenade," and then it flashed upon us that Mr. Lovell was being made the recipient of a serenade in honor of the arrival of his wife, who came up with us, and that the inhabitants, in the absence of a brass band and the usual musical paraphernalia, had had recourse to their kitchen utensils.

We stood upon the guards wondering how long Mr. Lovell could stand the din before he capitulated, and whether, when he did appear, his reception of his wife's admirers would be with a loaded shot-gun or outstretched, welcoming hands. Suddenly a light streamed through the opened door of the store upon bronzed faces and gleaming pans and kettles, and the figure of Mr. Lovell could be seen in strong relief against the light within, bidding the calathumpers, by a wave of his band, to enter and partake of his hospitality. The closing door then shut the light in, and all was quiet. By this time it was quite late, and our guests gave us good-bye and God-speed, as we were to cast off our lines by early daylight, and, *D. V.*, to be in Fort Wrangel before night-fall.

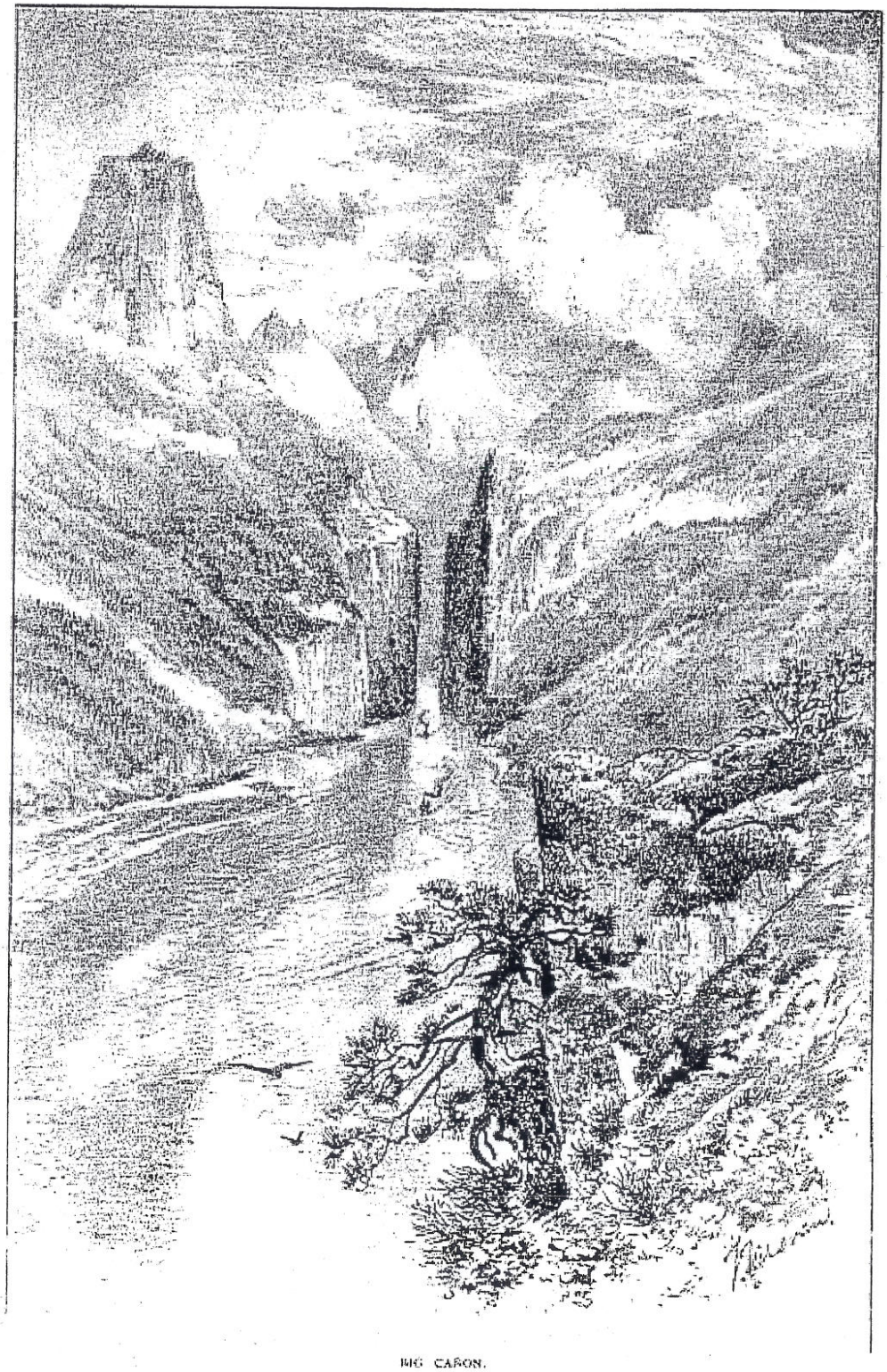
The return trip was made at break-neck speed, necessarily. I was anxious to see every inch of it, and made my arrangements to be awakened early, and after a delightful night's rest turn out willingly when called. After a good dash into the cold water in my state-room, I got on deck at half-past four o'clock, just as the headline had been cast off and the boat was swinging her bow out into the current. She spun to it like a top, the rushing stream caused her to "heel over" strongly as it struck her broadside on, and then, as her head pointed quartering down the river, the stem line was let go, and we shot away, like an arrow from a bow, doing the distance to the Hudson Bay post, which took us twenty minutes in coming up, in three minutes; it was like flying.

We passed over the Grand Rapids beautifully, but here there was such a pitch and roar of water that the wheel bad to be reversed to keep the vessel from going too fast, the speed that she attained even then being exciting, to say the least. The steering of the boat in the descent of this river was something marvelous to me. She seemed to obey the will of the captain like a sentient being. Now she whirled suddenly, with her bow as a pivot, and now her bow swept through an arc with the stem as a center, always nearly striking an obstacle but always missing it. The steering wheel was being constantly whirled about, as, in the swiftness of our course, object after object, in quick succession, arose before us. We flew past the mountains, which appeared to be engaged in a mad circular dance. Thus we sweep along until we arrive at the Great Cañon. The rush of waters through this cut seems terrible, but as there is an up stream wind which, by its concentration in the narrow gorge, is in considerable force, the captain laid the boat directly across the stream, and the wind, acting on her broadside in a direction diametrically opposed to the current, we went through easily, without turning our wheel, but still with great velocity, having been fifteen minutes in making the passage on our

way up, and but three minutes and fifty seconds in going down. Clearing the lower end, the captain swung her on her heel and away we went, right end on again.

On and on we flew! Sand-bars with their piled-up logs, tumbling, foaming mountain torrents, baby glaciers, wooding stations, canoe loads of Indians working their way up, great mountain peaks, the Mud Glacier, and the old Hudson Bay post all are rapidly left behind until, at noon, we reached the Great Glacier, and passed its whole face in review as it lay like the Palisades of the Hudson done in ice.

With a full wheel whirling behind us, we moved out of the mouth of the river into the slaty blue of the salt water around the Point, bringing the flag-staff of Fort Wrangel in sight, and at five thirty, P.M., were heaving our lines to eager hands out- stretched on the wharf to catch them, every- body there to meet us, and everybody well.



BIG CAÑON.

Last Updated on 6/28/2004 at 1:39:54 P.M. (Yukon Time)

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THE

CASE OF THE UNITED STATES

BEFORE THE

TRIBUNAL CONVENED AT LONDON

UNDER THE

PROVISIONS OF THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND GREAT BRITAIN CONCLUDED JANUARY 24, 1903.

LEWIS R. WORKS

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1903.

and longitude 150° 20′. "The entrance is not more than two and a half miles across, and this, at the distance of a few miles, seemed to be materially contracted." From the entrance the canal runs north 35° east twenty miles, with an average width of three miles, with channels breaking off to the east and west, where it receives Observatory inlet, a large branch which come about forty miles from the north-northeast. The north point dividing the inlet from the canal was named by Vancouver, Point Ramsden, and placed in latitude 54° 59′, and longitude 149° 57½′ west, (page 336). At first, when entering upon the survey of the canal and inlet, Vancouver was "uncertain which to consider the main branch." (Vol. 2, p. 330.)

* * * * * * *

STAKEEN RIVER.

This river is reported by the Russian American Telegraph Company to be navigable for boats for one hundred and fifty miles, to the mouth of the great cañon, where the river bursts through a narrow gorge three hundred feet deep, and said to be only seven feet across at the top, but wide as the present bed of the stream.

Glaciers come down to the river in several places from the flanks of the mountains, but all of them come down upon the right bank of the stream.

The general course of this river is laid down on the photographic maps forwarded to you, and on larger maps obtained from the Russian American Telegraph Company.

* * * * * * *

TAKOÚ RIVER.

From the northeast part of Stephen's strait an arm runs north by east for fifteen miles, receiving the river Takoú, up which the Hudson Bay Company carry their supplies to the interior.

CHILCAHT RIVER.

North of Admiralty island the Chatham strait is usually designated Lynn canal, at the head of which enters Chilcaht river on the west, separated by Seduction tongue from a deep bay on the east.

The astronomical station of the coast survey was on the small treeless islet off the mouth of Chilcaht, and Mr. Mosman found the position to differ from the survey of Lindenberg of the Russian American Company. The correction in latitude is seven miles. The field computation places the above islet in latitude 59° 12′ 15″, and longitude 135° 25′ 54″, assuming the longitude of Sitka to be correct.

The Chilkaht river has a bar at its mouth that is bare at low tide, and the influence of the tides is felt but a few miles above the bar. An Indian village of twelve large houses exists inside the bar on the left or eastern bank of the river.

A sketch of Chilcaht river and approaches, showing anchorages, &c., is given on the Russian map No. 10, of the Pacific series. The bottom is a very tenacious blue mud, affording capital holding ground.

* * * * * * *

I have yet a large amount of interesting information to communicate during the reduction of our observations for the determination of

Hill Barrington steering the Hazel B No. 2 up the Stikine River

1942

By Richard A. Ramme

THEY RULE THE STIKINE

WHILE THE ARGUMENT over an international highway to Alaska has been going on for years, actual warfare with Japan finds the United States without a way to ship supplies to its far northern bases by land. There is a linking chain of airports stretching across the wilderness of British Columbia, and for this lifeline by air we have to thank the Barrington Brothers, who conquered the mighty Stikine, swiftest white water river in Alaska.

Near the small fishing town of Wrangell the Stikine emerges out of the timber-covered mountains of the wild coast range, and for 163 miles over rapids and bars its winding course permits navigation by shallow river boats up to where the small town of Telegraph, B. C., is located.

Twenty-four years ago the Barrington Brothers, Sid and Hill, were well-known Yukon River boat men. Sid was the first man ever to bring a steamer into the trading post of Dawson.

In 1916 the brothers decided that the Yukon was becoming too crowded for them, and they began to look for their own river where they could start their own company and be assured of fair prospects for the future.

Their eyes fell upon the Stikine, that opened the whole of the rich interior of British Columbia, but while there were several companies competing for the up-river freight traffic, none could master the turbulent Stikine. The two brothers decided to tackle the job anyhow.

Their early days on the river have inspired many a poet and writer; Barrett Willoughby wrote her book "River-house" with the Barringtons and the Stikine as a background.

An old Indian squaw is supposed to have shown them how to navigate the rapids, how to get past the treacherous sandbars, as there were no marks of navigation on the whole course of the river. The brothers had to blow snags and trees out of the river bed during the winter months, but the traders and miners of the upper Stikine knew that the brothers would bring them their supplies regardless of the raging currents and the stage of the water and they kept on supporting the company. Therefore, the Barringtons kept on growing with the developments on the Stikine.

Late in 1940, when they ceased operation for the winter, they had two boats —the large passenger boat Hazel B No. 2 and the small freighter Hazel B No. 3.

With war clouds hovering over North America, both the United States and Canada were anxious to build air bases in British Columbia so as to assure full protection for America's back door—Alaska.

Government officials chose the sites of the airfields in the interior of British Columbia, but then came the question of how to get the immense amount of supplies across the virtually trailless wilderness of British Columbia. Finally Canadian officials decided to approach the Barrington Brothers and ask them if their boats could haul the machinery to Telegraph Creek, B. C.

"Sure we can do it," was the answer of the Barringtons, while people in both Wrangell and Telegraph Creek predicted that they would run aground on the first sandbar or sink their boats by hitting a snag if they tried to haul the thousands of tons of supplies up the river.

Instead of being discouraged by the talk, the Barringtons decided to do something about it, so they at once began building a new small shallow-draft boat, in which they put all their twenty-four years of experience as Stikine River boat men.

The brothers and Emmy Reid, chief engineer for the company, designed the boat themselves and, while they had the boat built at the Anderson marine way at Wrangell, one of them was always in the yard to see that everything was just right; for they knew that a mis-step even in the smallest detail might be harmful and prevent the supplies from getting up the Stikine.

Chief Engineer Emmy Reid, who had been an airplane inspector during the last war, and who is known to be one of the best engineers and river men in Alaska, installed the two engines all by himself, and when the new boat, christened Hazel B No. 1, slid down the way at Wrangell one fine spring morning, the Barringtons were ready to serve their country.

A few days previous, a Canadian steamer had called at Wrangell and left the first shipment of vital supplies: practically everything from heavy duty steam shovels to a dozen or so of trucks, down to toothbrushes for the workers.

Eager longshoremen loaded the hold of the new boat with small freight, then the trucks were lashed on barges, which were to be pushed by boat, and on the

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afternoon of May 7, Captain Hill Barrington blew his whistle, waved goodbye and started the race against time and the elements to haul supplies for the British Columbia bases.

No word reached Wrangell for three days as none of the boats carried a radio, but great was the joy in the home office when a wire arrived from Telegraph Creek, saying that the new Hazel B No. 1 had been sighted fighting her way up river twelve miles below town.

And a few hours afterward Captain Hill Barrington docked his boat at Telegraph Creek and was able to tell the onlookers, "Here we are, folks. We have done our part. Now it's up to you to take the stuff where your government wants it."

The Barringtons operate from May to October and, besides opening a country whose development and protection are necessary to both the national defense of Canada and the United States, their boats also traverse a country of unique scenic beauty.

Travelers who have seen the great rivers of the world say that the Stikine must have been chosen as king of the earth's rivers, for surely no other could course through so noble a country and be surrounded by so many of nature's beauties and wonders.

A trip up the Stikine, even while the boats haul vital supplies, is a leisurely and unforgettable experience, for one cannot "rush" the river.

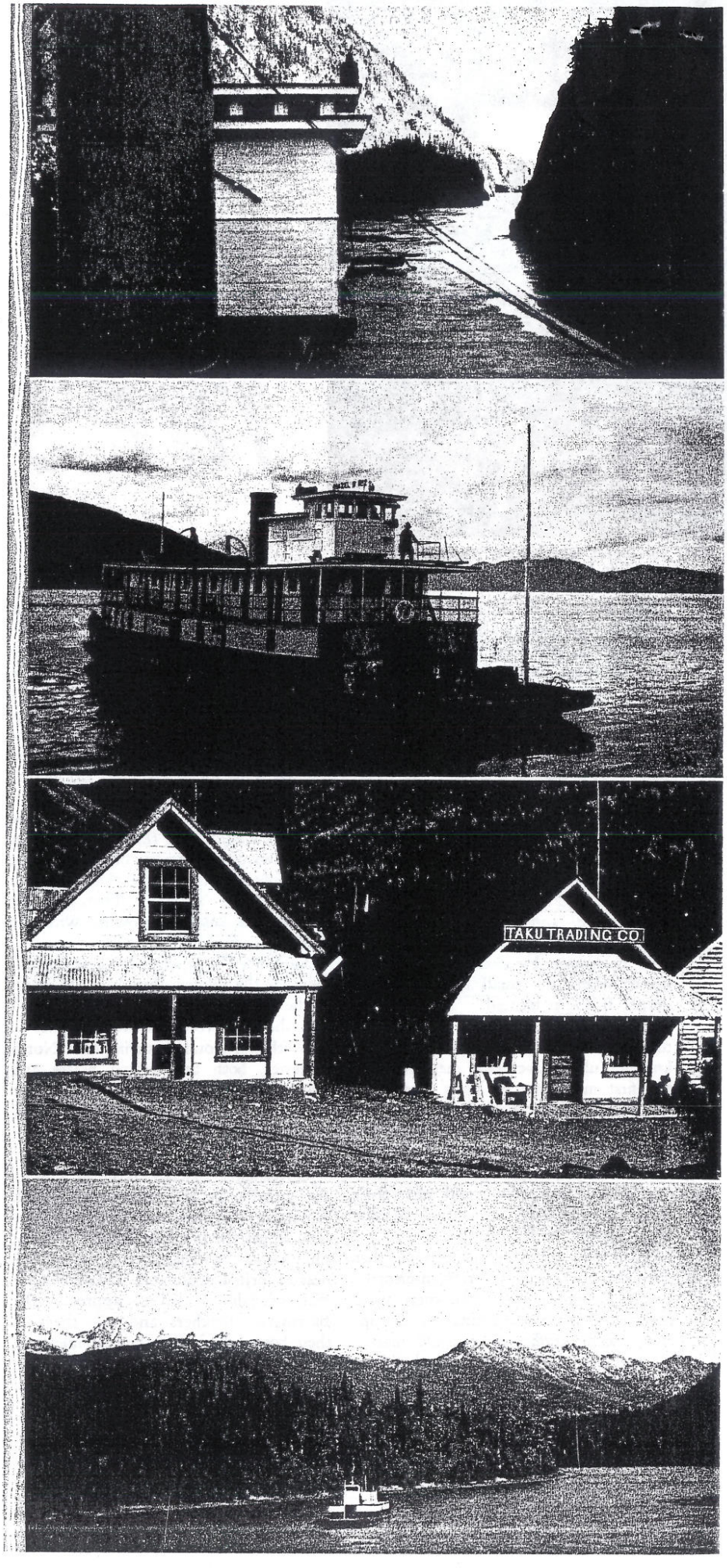
Leaving Wrangell on the Hazel B No. 2, generally late in the afternoon, the stretch of open salt water to the mouth of the Stikine is soon traversed and Captain Hill Barrington calls for his crews to stand by with the sounding poles as he eases the shallow boat over the mud banks guarding the mouth of the river.

By nightfall the heavily laden boat has gone thirty miles or so up river, but Captain Barrington decides that it is now the time to tie up alongside the bank as navigation during the night is virtually impossible on the Stikine.

Crew and passengers learn to know each other over a game of cards. All social distinctions have been left behind; the important Canadian Government official chats easily with the backwoodsman who is earning his way back home as deckhand.

Alongside the boat on the river bank

(*Continued on Page 16*)



Top to bottom: ***Hazel B. No. 2 entering the Little Canyon of the Stikine. Hazel B. No. 2 leaving Wrangell. The small stores, trading post and government works at Telegraph Creek are all supplied by the Barrington Bros. Transportation Co. The Hazel B No. 1 on the down-river trip***

EVERGREEN BOWL

(*From Page 15*)

story hours, construct equipment, supervise activities and keep up the grounds.

How much does all this cost?

You cannot measure the results of a good recreational program with a dollar yardstick. Athletic equipment is expensive, but when it is considered that the swings, teeter-totters, etc., were designed and constructed by the recreational director, and that all the machine parts were made here in Juneau, the cost was not nearly so high as it might have been. The cost of materials for archery probably did not exceed twenty-four dollars, while the finished products are valued at about five times that amount. The water for the pool comes from the city overflow, and although the amount of chlorine used to disinfect the water seems large, the cost is comparatively small.

A great deal can be accomplished in a recreational program without the expenditure of large sums of money. But it isn't economy to hire a recreational director who is not trained in that field just because his salary can be low. You wouldn't go to a plumber to get your teeth fixed. Why expect an untrained man to conduct a recreational program?

Juneau has a recreational problem just as every city in Alaska has. It is my belief that Juneau has made a substantial answer, even though there are a great many more improvements that can be made. At the present time we do not have a recreational problem caused by an influx of men for the national army. But if that occurs I am sure that the answer will be found. Other Alaskan cities can learn something about recreation from Juneau!

STIKINE RIVER

(*From Page 11*)

the branches are crackling and it may signify anything—from a deadly bear to a harmless deer coming down to the river for a drink of water.

Just about the time the first rays of light make it possible to see the top of the mountains against the skyline the boat leaves the banks and slides slowly into the river. When the passenger gets up for his breakfast, he can hardly believe the grandeur of the scenery.

Steep mountains, timbered hills, dozens of rugged glaciers—all help to make the traveler marvel at the wonders of nature. The boat goes on past the international boundary, where a single customs official guards the border between two mighty and peaceful countries, and his only troublemakers are scores of bears which invade his realm from time to time.

Slowly the boat proceeds over shallow spots with its propellers pulled up into two specially designed tunnels, while the crew stands up forward ready with its sounding poles.

Over some of the shallow spots and the rapids where the currents make steering hard, the Hazel B has to be hand-lined. The mate and the purser put out from the boat in a small skiff, and haul a cable ashore. This is fastened on the shore a quarter mile ahead. Then the cable is brought to the boat and the craft literally winds itself slowly but steadily up-river.

One never can tell how long a river trip will take; the least time is three days, but boats of the Barrington transportation company have gone up the river and were not heard of for eleven days. During this time they were battling the currents, the rapids, high waters in the canyons and had quite often to relay their cargoes on the backs of their crew, so that the boat could be hauled over a shallow spot. Several times during the twenty-four years on the Stikine, the Barrington boats have been sunk by hitting hidden snags, but the brothers battle along.

In the months or years of war ahead the little-known Stikine will play an all-important part in the defense of Alaska, for on the scattered airfields of the interior of British Columbia, planes can stop over on their flight to Alaska to refuel and the Barrington Brothers and boats will haul all the supplies.

Should the defense of Alaska require the construction of a highway in a hurry, that is where the Barringtons really will come in. For while the highway can be started at its present northern terminal at Hazelton, all the equipment can be moved up only as the road progresses. This is where the boats will help, as equipment will be hauled all the way to Telegraph Creek and from there work can be begun on the road either to the north or the south and complete the highway.

Pastels

FOR DARK DAYS

A jean Lang Original of Brushwood — wool and spun rayon — with Angora yarn flowers embroidered the length of the set-in hip pockets and neckline. The skirt is circular, with a half-belt in back to assure a snug waistline. Comes in intriguing shades of fog green, mezzotint, dust pink, cloud beige, twilight blue and brave red.

From a wide collection of jean Langs for every occasion — every size — to be found in the more exclusive shops throughout the Territory.

jean Lang
ORIGINALS*

* Reg. U. S. Pat. Office

And while many men will help to fight the war with the armed forces, the Barringtons will fight their battle on the Stikine, for they will push on even harder now that they have a brighter goal than ever before—the *defense of the United States.*

ALASKA MINERS

(From Page 8)

have very little to worry about in carrying out their programs for normal operation in 1942. No Alaskan mining company will be denied essential repair parts, nor maintenance of equipment and supplies. The OPM has already ruled that Alaskan mines have the highest preferential rating in replacements.

And this is not just idle talk. I have obtained permits by wire from Washington—in less than twenty-four hours—to purchase repair parts and such new equipment as was needed to maintain normal operation. I have done this for several mines and have not been turned down.

Mr. Wilber A. Nelson, Administrator of Mine Priorities, has been most cooperative and I have experienced no difficulties whatsoever with the OPM in behalf of the mining industry of Alaska.

It is true that there are numerous phases of the regulations which seem confusing to mining men until they are thoroughly studied. And in this connection, I would like to suggest that Alaskan mining men who are Outside this winter will do well to get acquainted with Wm. D. Shannon, manager, District Field Service, Office of Production Management, 960 Stuart Building, Seattle. Mr. Shannon will be glad to clarify the rulings and regulations so that mining men will understand their 1942 operating status.

For the mining men in the Territory, I invite them to get in touch with my office in Juneau.

Frankly, I am much gratified that Alaskan mining has fared so well in allocation of priority ratings. And I am convinced that when the mining men of the Territory clearly understand their operating status, they will know that 1942 will be a good year for them.

There is no need for the crepe hangers. There is no need to be discouraged. There is no uncertainty in priorities. The mining men who shape their operating plans in conformity with the regulations should do as well in 1942 as previously. Mining men who make little or no effort so see ahead will have only themselves to blame.

Attention, Alaska Merchants!

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AMERICAN BUILDING, SEATTLE

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New Tax Law Calls for HIGHEST RATES IN U. S. HISTORY!

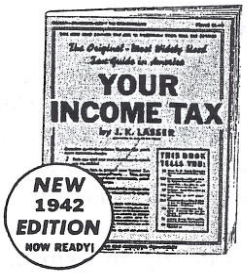
If you are SINGLE and earn $15.00 a week or more
MARRIED and earn $30.00 a week or more you are now subject to the Income Tax and must file a Return! It is up to you to determine now whether you must pay a tax, and if so how much.

TO raise 3½ BILLION Dollars for NATIONAL DEFENSE, most individuals must pay from TWO to THREE AND ONE-HALF times as much Income Tax as they paid last year.

Each of us wants to share his rightful part of national defense. This year more than ever before Americans are willing to pay their full share of taxes.

The Government does not expect you to **overpay** your tax, any more than it expects you to pay more than the right price for food, clothes, or any other article or service. Furthermore, an incorrect return, whether resulting in **underpayment** or **overpayment**, involves extra costs to the Government through expensive readjustments.

Over 500,000 taxpayers have used this book in previous years. This NEW edition is NOW READY—up-to-the-minute and containing every requirement of the new law, and important tax decisions of past year. **This** year, more than ever before, you need the new 1942 Edition of "YOUR INCOME TAX."



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This Year You Can't Afford to "Wait Till the Last Minute"!

Many taxpayers must set aside part of their salaries from now on, to meet future payments. Determine your tax **now**, so you won't have to borrow money at interest later.

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To keep you up-to-date on any changes that may be made in the law, we will send, without cost, as many reports as are required to keep you fully posted to March 15, 1942

83d Congress, 2d Session - - - - - - House Document No. 501

SOUTHEASTERN ALASKA

LETTER

FROM

THE SECRETARY OF THE ARMY

TRANSMITTING

A LETTER FROM THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, DATED APRIL 8, 1954, SUBMITTING AN INTERIM REPORT, TOGETHER WITH ACCOMPANYING PAPERS AND ILLUSTRATIONS, ON A PRELIMINARY EXAMINATION AND SURVEY OF HARBORS IN ALASKA, WITH A VIEW TO DETERMINING THE ADVISABILITY OF IMPROVEMENTS IN THE INTEREST OF NAVIGATION, FLOOD CONTROL, HYDRO-ELECTRIC POWER, AND RELATED WATER USES, AUTHORIZED BY THE FLOOD CONTROL ACT APPROVED ON JUNE 30, 1948. IT IS ALSO SUBMITTED IN FINAL RESPONSE TO A NUMBER OF OTHER CONGRESSIONAL AUTHORIZATIONS LISTED IN THE REPORT

AUGUST 20, 1954.—Referred to the Committee on Public Works and ordered to be printed with five illustrations

UNITED STATES
GOVERNMENT PRINTING OFFICE
51829 WASHINGTON : 1954

HW 13930

Alaska Highway and Skagway, and its rail connection to Whitehorse. Consideration is also being given to the possibility of establishing railroad barge connections between southeastern Alaska and a transcontinental railroad terminal at Prince Rupert. Development of this rail barge line would depend upon the economics of handling the large pulp tonnage expected to be produced in this area in the near future.

82. Statistics of domestic coastwise commerce indicate that the bulk of the cargo handled in southeast Alaska is composed of fish and fish products, oil, rafted logs, and limestone. The import of 293,700 tons of oil and oil products constituted a little over 60 percent of the total 1949 southeast Alaska port receipts. Other important import items were food, beverages, machinery, building materials, and miscellaneous commodities. Total 1949 southeast Alaska coastwise receipts amounted to 458,610 tons. Shipments in 1949, from southeast Alaska, were composed largely of fish and fish products, logs, lumber, and limestone, which together represented almost 75 percent of the total shipments for that year. Shipments of fish and fish products, rafted logs, and limestone during 1949 amounted to 83,200, 182,100, and 120,100 tons, respectively. Total 1949 shipments amounted to 527,430 tons.

83. Table 7 shows the total southeast Alaska freight traffic for the period 1940 to 1949, inclusive, and table 8 shows the number of trips and drafts of vessels calling at the more important harbors in the area.

84. Two rivers in southeast Alaska, the Stikine and Taku, are navigable to a limited extent. Both are fed by glacial streams and carry a heavy silt load which is deposited as sandbars at the river's mouth. These sandbars are continually advancing downstream and form shoal water with shifting channels which require careful navigation.

85. A river-transport service is operated out of Wrangell up the Stikine River as far as Telegraph Creek. A shallow-draft boat tows barges and carries passengers, making weekly trips during the navigable season. The traffic consists principally of packaged oil products, machinery, and food upstream and of empty oil drums, furs, and some ore downstream.

86. Boats with barges navigate Taku River as far as Tulsequah, British Columbia, about 5 miles above the Alaska boundary, from which point ore is shipped out. The period of navigation extends from late spring to early fall, depending upon the stage of the river.

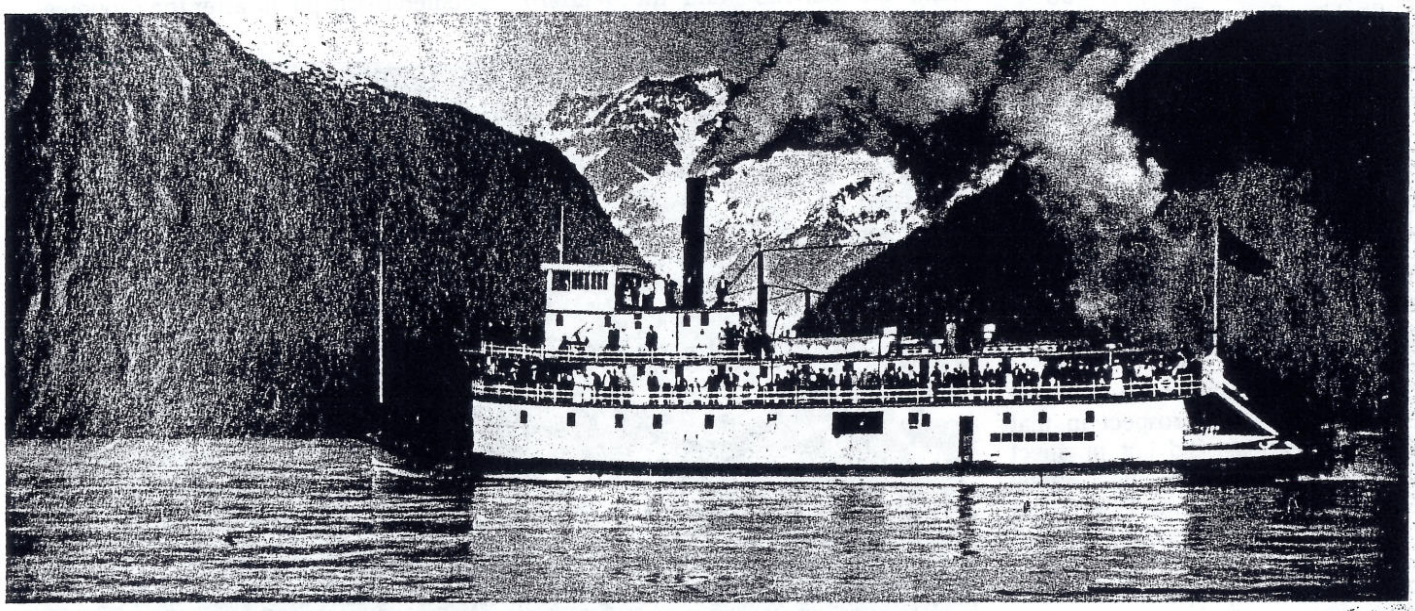
AIR TRANSPORTATION

87. The transportation of passengers and freight by air to and within southeastern Alaska has become a vital part of the economy. Two airlines operate regular scheduled routes from outside points to southeast Alaska; one having stops at Ketchikan and Juneau and the other at Juneau and Yakatat. Two local airlines, using amphibious and float planes, operate scheduled local feeder-line routes to any point within the area. These and other companies, as well as many individuals, furnish nonschedule and plane charter services for all purposes. As all communities in this region are located along the coast, they are readily accessible to amphibious or pontoon equipped planes, and airfields, which would be expensive to construct

HW 13976

Riverboating on the Stikine

By R.N. De Armond, Associate Editor



An excursion party lines the deck of the Hudson's Bay Company steamer Port Simpson *as the boat passes Great Glacier on June 21, 1914.* (J.E. Worden)

Editor's note: *The following article and photos tracing the history of riverboating on the Stikine River in northern British Columbia and Southeastern Alaska, also appears as a chapter in* The Stikine River, *the latest edition of* ALASKA GEOGRAPHIC® *(Vol. 6, No. 4). This issue is a 96-page look at the Stikine, from its historical role as a river route to three Canadian gold strikes in the 1800's to present-day development considerations. Single copies of* The Stikine River *are available for $9.95, plus $.75 postage/handling, from The Alaska Geographic Society, Box 4-EEE, Anchorage, Alaska 99509, or you may join the Society for $20 per year and receive four issues of* ALASKA GEOGRAPHIC® *(starting with the Stikine edition through January 1980).*

The first vessels on the Stikine River were undoubtedly canoes, perhaps of birch bark, more likely cottonwood dugouts. Legend has it that some of them traveled down the river at a time when it was still spanned by the Great Glacier and that, after some testing with tree branches or other objects, they successfully passed under the glacier and on down to the coast. Just how long ago that was nobody can say but there was probably a good deal of canoe traffic up and down the river by the time the first white men approached its mouth in the 1790's. Furs were the first big concern of the white men, but it was gold that brought the first steamboat to the river. Gold was discovered in 1861 by Alexander "Buck" Choquette in the vicinity of present Telegraph Creek. Word of the discovery quickly spread to the Fraser River diggings and reached the ears of a Prussian with the unlikely name William Moore who was steamboating on the lower Fraser with a fast stern-wheeler named the *Flying Dutchman.* Late in the spring of 1862 Moore loaded a barge and his steamer with 125 passengers and some assorted cargo and headed for the Stikine. So far as has been learned, he had no difficulties, either navigational or legal. Russia then owned Alaska but had leased the mainland of what is now Southeastern Alaska to the Hudson's Bay Company. That fur-buying firm had maintained a trading post, Fort Stikine, where Wrangell is today, but it had been long abandoned by the time Moore reached

the scene. The company had at least one trading post up the river, too, but it was so insignificant that it never had a name. Moore may have hired an Indian pilot or two at the Stikine village. At any rate, he pushed the *Flying Dutchman* up to head of navigation and made several more profitable trips that summer. He was, in fact, reported to have cleared $14,000 during 72 days of steamboating on the river, which was a lot better than any of the miners did.

The miners had their best diggings on Buck's Bar, Carpenter's Bar, Fiddler's Bar and Shakes' Bar, but the best of them yielded only from $3 to $10 to the man per day, according to Professor William P. Blake, an American who visited the river with a Russian exploring party in 1863. Some gold continued to be taken from the bars of the Stikine for many years but on the whole the 1861 strike was a fizzle. Subsequent events proved that there was an immense body of placer gold a few miles to the north in the vicinity of the Cassiar Mountains, but apparently the '61 men did not prospect in that direction or at least did not prospect thoroughly enough. The *Flying Dutchman* returned to the Fraser and for four years the Stikine was without the chuffing of a steamboat.

Then came a proposal to reach Europe with a telegraph line by way of Alaska and Siberia. The line through British Columbia was to cross the Stikine at the head of navigation. For service on both the Skeena and the Stikine, the Overland Telegraph Expedition built at Victoria the sternwheeler *Mumford*, somewhat larger than the *Flying Dutchman* and apparently just as successful. The *Mumford* carried quantities of telegraph wire and other construction materials up the Stikine in the summer of 1866 to the place that became known as Telegraph Creek. After the project was abandoned—a cable had finally been successfully laid across the Atlantic—most of the material was sent downriver again to the American port of Fort Wrangel and from there shipped south for scrap. Fort Wrangel was one of five Army establishments along the coast that followed the raising of the Stars and Stripes at Sitka in 1867. Four of them, including Fort Wrangel, were abandoned after a few years, but Fort Wrangel was reestablished with the start of the Cassiar gold rush.

That rush, for which the Stikine was a main highway, came about after a pair of hardy prospectors named Thibert and McCullough reached Dease Lake by an overland route and found gold there. There followed the biggest rush since the Cariboo excitement farther south in British Columbia a decade earlier. Captain Moore returned to the Stikine with, successively, the *Gem*, the *Gertrude* and the *Western Slope*, but this time he did not have the river to himself. Captain John Irving, a famous name in British Columbia marine history, was there with the *Glenora* and others ran the *Beaver*, the *Cassiar* and the *Nellie*. Both Fort Wrangel and Telegraph Creek became boom towns for a few seasons. The rush itself, which got well started in 1874, lasted about four years but mining in the Cassiar district continued, with some ups and downs, for more than 60 years. And during most if not all of that period there was some steamboat traffic on the river. John C. Callbreath, who established a trading business at Telegraph Creek and later became Alaska's first salmon hatchery operator, had the *Nellie* in service in the 1870's and into the 1880's and she was followed by the *Alaskan* which ran up into the big days of the Klondike gold rush. During that period between the gold rushes it is possible that the Hudson's Bay Company brought one of its paddle boats up from the Skeena to serve its posts on the Stikine.

The glory days of Stikine River steamboats resulted from the gold rush to the Klondike and lasted only one short season, a part of the summer of 1898. Vast quantities of misinformation about routes to the Klondike were peddled to the public after the Klondike discovery became known. One bit was that the Stikine offered a short and easy way to the headwaters of the Yukon River. This route involved a boat trip from tidewater to the head of navigation on the Stikine, and that was the easy part. But the remainder of the journey—overland to Dease Lake, then overland again from the foot of Dease to the head of Teslin Lake— was anything but an easy road. The head of navigation on the Stikine was either Telegraph Creek or a landing 12 miles downstream at Glenora. It had more level ground than Telegraph Creek and a short-lived settlement sprang up there. It was even proposed to build a railroad, sometimes called the Cassiar Central and sometimes the Teslin Lake and Yukon Railroad, from a point near Glenora to Teslin Lake. A number of

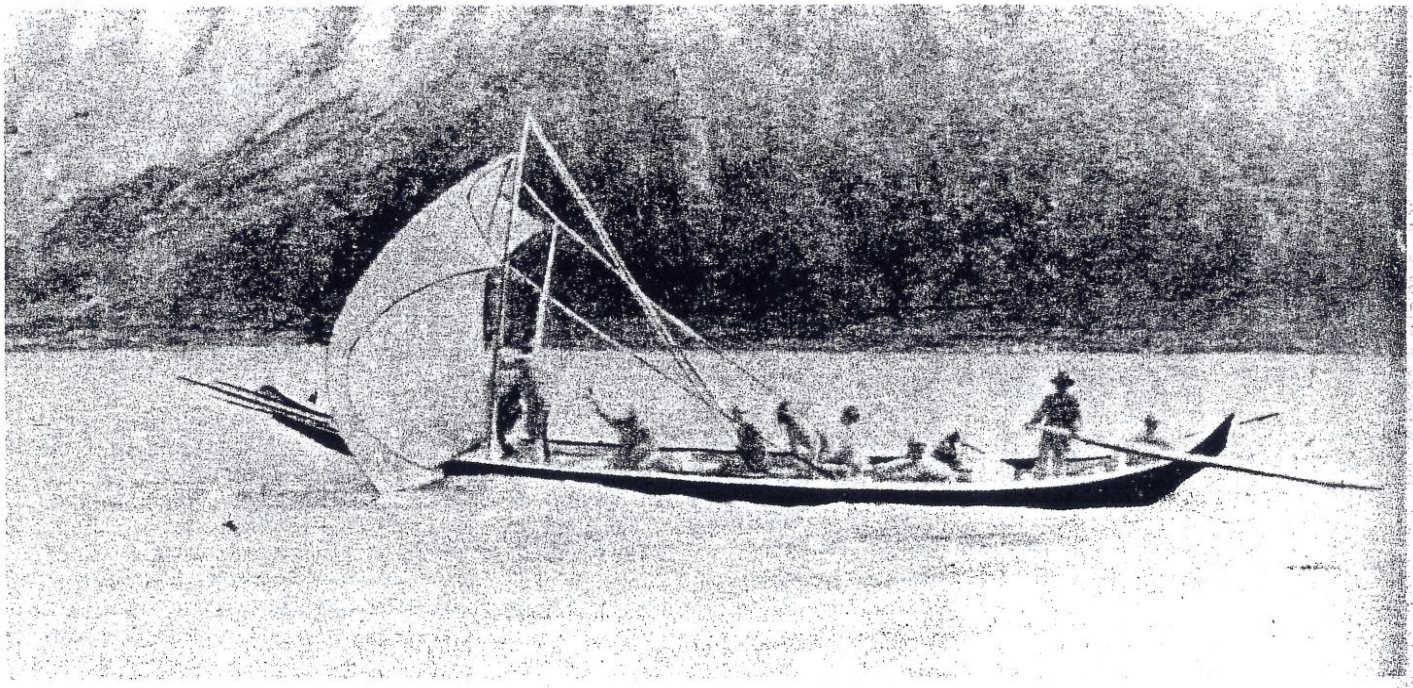
The three Barrington brothers, Hill, Syd and Harry, dominated the Stikine riverboat business for about 35 years with six boats, all named the Hazel B. (Winter & Pond)

warehouses were built at Glenora and some building material hauled up the river to them, but little if any track was actually laid.

In the spring of 1898 many eager gold seekers arrived at Fort Wrangel early and there was good business for sternwheelers hauling them and their goods to the mouth of the river so they could start up over the ice. Later, after the ice went out, there were so many steamboats on the river that the Department of Marine and Fisheries of Canada established a long list of navigation rules.

It was a mad, pell-mell business while it lasted, but it lasted only about two months before all the wind that had been blown into the Stikine route leaked out again. Some of the boats went to the Skeena or the Fraser or back to Puget Sound; several went to the Yukon River and others were wrecked trying to get there, and a number ended in the boneyard at or near Wrangell. A few managed to keep running on the river: there was a lot of back country trapping and some big game hunting, there was a little mining here and there and some trading posts to supply. The Hudson's Bay Company took care of most of the business, sending one of its vessels up from the Skeena River each summer to make several trips to Telegraph Creek. In 1902 Fort Wrangel officially changed its name to Wrangell and by then it had become more of a sawmilling and fishing port than a transportation center.

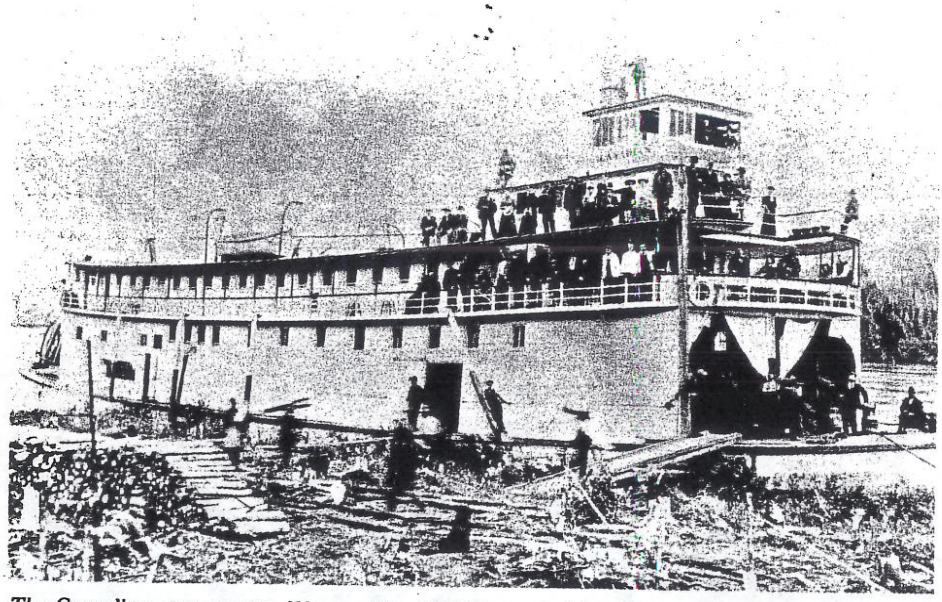
The steamboat era on the Stikine ended in August 1916, when the big *Port Simpson* of the Hudson's Bay Company made her last trip to Telegraph Creek and was withdrawn from the route as being too expensive to operate for the amount of business offered. And that same year a new figure appeared on the Stikine, one who was to dominate the river traffic for many years to come. Captain S.C. Barrington, usually known as Syd, had made a reputation on the upper Yukon River and its tributaries, starting during Klondike rush days. With the beginning of construction of the Alaska Railroad he went to Anchorage and in 1915 operated one of his boats, the *B & B*, on the Susitna River. At the end of the season he sold the boat to the Alaska Engineering Commission and in the spring of 1916 built a new one at Anchorage for use on the Susitna. The boat was named the *Hazel B. No. 2*, but business did not pan out as anticipated and near the end of July he loaded his 90-foot boat on a barge and took her down to Wrangell. Later Captain Syd and his long-time partner, Captain Charles Binkley, were joined by Barrington's brothers, Hill and Harry, and during the next 35 years or so they operated six motor vessels on the Stikine, all of them named *Hazel B.* Three of the six were in operation at one time. During this period there was another minor rush to the Cassiar as well as some mining on the Stikine and on some of its tributaries; there were trading posts and ranches to be supplied, and there was a good deal of casual passenger traffic—big game hunters and tourists, mostly—as well as prospectors, miners and trappers. Then along came the airplane and a road to Telegraph Creek, and commercial surface traffic on the Stikine dwindled almost to nothing.



The first boats on the Stikine were probably log canoes belonging to Tlingits of the coast, who paddled, poled and sailed upriver to trade with Natives of the Interior. This photograph of Chief Shakes' canoe sailing up the Stikine appeared in a 1904 book, Hunting Big Game in Far Northwest British Columbia. (Courtesy of B.C. Provincial Archives)

107 Years of Stikine Riverboats

The following is a list of the commercial boats that operated on the river between 1862 and 1969. The list is arranged alphabetically rather than chronologically, but the starting and ending dates for each vessel are given when these could be learned.



The Canadian *was sent to Wrangell in 1898, intended for use on the Stikine, but records showing her use on the river have not been found.* (Courtesy of B.C. Provincial Archives)

ALASKAN—Built at Seattle, Washington, in 1886 and measured 156 tons gross with a length of 84.5 feet. She apparently came up to the Stikine soon after her launching and was in charge of Captain J.D. Tackaberry for a time. She continued to operate through the big Klondike period and sometimes carried freight from Wrangell to nearby salt-water ports.

BEAVER—Built at Portland, Oregon, in 1873, and was 125 feet long with 25 feet beam and was reported rather slow. She ran between Portland and Astoria until June 1876 when she was sold to Uriah Nelson for the Stikine River trade during the Cassiar excitement. Captain J.D. Tackaberry was her first skipper on the river and was with her until 1878 when Captain Nat. H. Lane, Jr., took charge. The *Beaver* was wrecked on a rock 60 miles below Glenora on May 17, 1878. The machinery was salvaged but otherwise she was a total loss.

BIG CHIEF—Owned by F. Matheson, a Wrangell merchant, and spoken of as a "big canoe" with a gasoline motor, and quite fast. In June 1909 she made a trip to the lower river with 20 people and on June 17 of that year left Wrangell for Telegraph Creek with a party of five mining men. Not again reported.

BLACK FOX—A.J. Kalkins and his son Ed took this motorboat up the river on her first trip on June 4, 1910, and made Telegraph Creek in 50 hours running time. She was on the river in 1911, 1912 and 1913, the latter year in charge of Ed and Steve Kalkins.

CALEDONIA—Built for the Hudson's Bay Company at New Westminster, British Columbia, in February 1891 for the Skeena River trade. She was 100 feet long with 24.5 feet of beam. In May 1898 she was taken up to Wrangell and made six trips up the Stikine to Glenora under Captain John H. Bouser, then went back to the Skeena.

CANADIAN—Built at Victoria, British Columbia, in 1898 by the Canadian Development Company and sent to Wrangell with the intention of putting her on the Stikine. No record has been found that she went up the river. She measured 716 tons gross and would have been by far the largest vessel to navigate the river. She was in charge of Captain P. Martin and on June 29 she left Wrangell for Saint Michael along with the *Victorian* and *Columbia,* convoyed by the steamer *Tordenskjold.* She made the voyage safely, arrived at Dawson on August 24 and ran for years on the upper Yukon. Ended in the Whitehorse, Yukon, boneyard.

CASCA—Built by the Esquimalt Marine Railway Company near Victoria for the Casca Trading & Transportation Company and measured 140 feet long with 30 feet beam. Captain Hanson took her to Wrangell where she arrived June 1, 1898. Captain L.A. Grant took over for the Stikine River service and she made 12 trips to Glenora and one to the boundary, then went to Victoria for the winter. In 1899 she arrived from Victoria on May 23 and sailed three days later for Glenora. Captains J. Whitmore and W.P. Gray commanded her that year. She took members of the International Boundary Commission on an inspection trip during the summer and also made one trip on the Skeena as far as Hazelton. No reports were found on her after the 1899 season and it is possible that she went to the Yukon.

CASSIAR—Built at Seattle in 1879 especially for the Stikine River and was 132 feet long with 26 feet beam, had a 20-foot stern wheel and drew 16 inches of water when light. Captain Nat H. Lane, Jr., was her skipper with Robert Moran as chief engineer. By that year, however, the Cassiar gold rush had dwindled to almost nothing and there was little business for the big vessel. She was placed under British registry and sent to the Fraser River.

COLUMBIAN—Built at Victoria in 1898 and sent up to Wrangell by her owners, the Canadian Development Company. It is not certain that she made any Stikine trips; if she did it was during June 1898, when the rush was at its height. At the end of that month she went to Saint Michael with the *Victorian* and *Canadian,* arriving at Saint Michael on July 15. She ran on the Yukon until 1906 when she was destroyed by an explosion and fire with a loss of six lives.

COURSER—A vessel of 101 tons measurement, she was known as one of the fastest riverboats in British Columbia, having operated on the Fraser River before arriving at Wrangell early in May 1898. Owned by the Glenora Steamship Company, her captain was H.B. Babington and D. McCulloch was purser. On her first trip up the Stikine in May she blew out some of her boiler tubes and had to return to Wrangell, but was successful during the rest of the summer. She sometimes relayed freight from Glenora to Telegraph Creek for larger or less powerful vessels. She left Wrangell for Vancouver, British Columbia, on September 24, 1898, and apparently did not return to the Stikine.

DISTRIBUTOR—Built in 1908 for the Grand Trunk Pacific Railway Company and chartered to the Hudson's Bay Company. She arrived at Wrangell June 23, 1908, in command of Captain S.B. Johnson and made several trips to Telegraph Creek that

summer. That appears to have been her only season on the Stikine.

DUCHESNAY—Built at Vancouver, British Columbia, for the Canadian Pacific Railroad Company early in 1898 and was sent to Wrangell in May under Captain George W. Willburn. She made several trips to Glenora in May and June and in August was reported tied up at Cottonwood Island, along with several other river steamers, apparently because of lack of business. No further record found of her.

ELWOOD—Built at Portland, Oregon, in 1891 and was 154 feet long with 30 feet of beam. She had a number of owners on the Columbia River and its tributaries before 1898 when she was purchased by the Cassiar Central Railroad Company which proposed to building a railroad from the Stikine to the Yukon. She made several trips from Wrangell to Glenora during the summer of 1898 under Captain W.J. Johnson and at the end of the season was placed in a cradle at the head of the harbor at Wrangell. She remained there until January 1903 when she was sold to Captain H.H. MacDonald of Seattle for use on Puget Sound. With a measurement tonnage of 510 gross she was one of the largest steamers to run on the Stikine.

FLOUNDER—Built at the Fletcher Boat Shop in Wrangell in 1915 for Captain Kenig Johansen, owner of the *Karen*. Measured 55 by 12 feet with a twin tunnel hull. The engine from the *Karen* was placed in her and drove two propellers through a chain and sprocket arrangement. She started her first trip up the Stikine in October 1915 but got only as far as the boundary when the chains wore out. Nothing further found on her.

FLYING DUTCHMAN—The first steamboat on the Stikine, she was built by Captain William Moore for the Fraser River trade in 1860 and was 93 feet long with 17 feet beam and was said to have been very speedy. In 1862 Captain Moore brought her to the Stikine and ran her there during the summer. She may have been on the river for a trip or two in 1863 but thereafter ran on Puget Sound.

GEM—Built in the spring of 1873, probably at Victoria, for Millard & Moore, the same Moore who had owned the *Flying Dutchman*. She was built especially to serve the Cassiar rush, then just starting, and was very light draft, just over 70 feet long with 13 feet beam. She apparently was on the Stikine only one season then went to the Fraser.

GERTRUDE—Another of Captain William Moore's boats, built in 1874 for the Stikine River trade, the rush to the Cassiar then being at its height. She ran on the Stikine for four years then, as the mining excitement died, went to the Fraser.

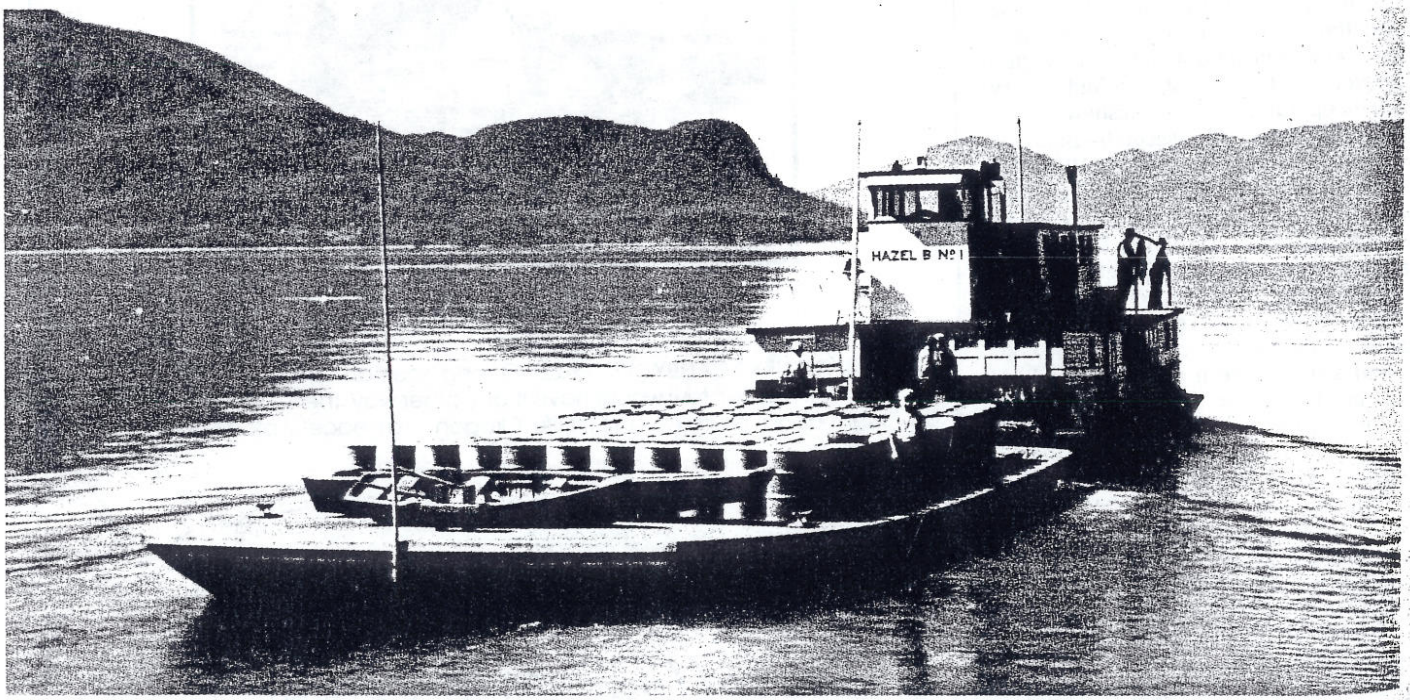
GIPSY QUEEN—Described as a scow steamer of about 50 tons, built at Wrangell and launched early in May 1898. She was to make three trips to Glenora in command of Captain Lake to carry up the outfit of her owners. Whether she ran longer on the river is not known but in 1907 John Hadland and Peter Sommers were using her as a saltery and icing station at Summit Island in Dry Strait.

GLENORA—The first of two vessels of this name on the Stikine was launched at Victoria in March 1873. She was owned by Captain John Irving and was sent to the Stikine to handle traffic bound for the Cassiar. She ran on the Stikine each summer through 1876 when she was sold to Captain William Moore and taken to the Fraser River.

GLENORA—Measured 342 tons, but whether this was gross or net measurement is not known. She made at least two trips from Wrangell to Glenora in May and June 1898. On October 6 that year she was sold at a U.S. marshal's auction to satisfy claims against her and went to S. Barber for $3,975, which was said to have been less than the amount of the claims. It was reported that she would be overhauled and used on the Stikine in 1899 but no further reports have been found. She may have gone to the Yukon River, where a *Glenora* burned at Dawson in 1902.

HAMLIN—Built at Vancouver in 1898 by the Canadian Pacific Railroad especially for the Stikine River trade and arrived at

Hazel B. No. 1 *(second of this name) was built to carry and push cargo upriver for construction of the Watson Lake airport.* (Courtesy of Raymond M. Patterson)



Wrangell early in May. She was 140 feet long with 30 feet beam and when loaded with 180 tons of cargo drew 26 inches. Captain A. Insley was in charge during the summer when she made at least eight trips up to Glenora. Whether she ran on the river in 1899 is uncertain; she was laid up at the head of the Wrangell harbor and remained there until February 1903 when she was sold to new owners and was taken south under her own steam.

HAZEL B. No. 1 (second of this name; first was on the Yukon River in 1916)—Built at Wrangell and launched May 1, 1941, 102 tons gross measurement, 64.7 feet long with 23.8 feet beam; powered by twin 170-horsepower Superior diesels. Owned by the Barrington Transportation Company, she was built especially to carry cargo upriver for the construction of the Watson Lake airfield. Captain S.C. Barrington had a contract to move 1,200 tons of cargo for the job that summer. Ran on the Stikine through the 1943 season and in 1944 was taken across the Gulf of Alaska by Captain Al Ritchie and went into service on the Yukon River, hauling freight between Nenana and Galena.

HAZEL B. No. 2 (first of this name)—Built at Anchorage in 1916 by Captain Charles Binkley and Captain Syd Barrington for use on the Susitna River during construction of the Alaska Railroad. She was 88.2 feet long with 23.8 feet beam, a twin screw tunnel boat fitted with two 100-horsepower Wisconsin gas engines. On July 24, 1916, she left Anchorage on a barge for Wrangell and went into service on the Stikine upon arrival. Ran on the river through the season of 1917, after which Captain Hill Barrington converted her to a fish station and saltery which he operated at Cape Fanshaw.

HAZEL B. No. 2 (second)—Built at Wrangell and launched April 21, 1925, this was the finest boat on the river in modern times so far as passenger accommodations and comfort went. Designed by Captain Charles Binkley, she was 90 feet long with 25 feet beam and powered by two 90-horsepower eastern Standard gas engines. Construction cost was $50,000. She had a tunnel stern and the propellers could be raised or lowered from the wheelhouse. There were 22 staterooms and a dining room to seat 24, with 110-volt lighting and a large social hall. She operated on the Stikine each season through 1931 and at the end of the latter was pulled out on the marine ways near Shustak Point. About 10 p.m. on January 23, 1932, the boat was seen to be afire and it was impossible to check the blaze. Other boats of the fleet were saved.

HAZEL B. No. 2 (third)—Built at Seattle in the spring of 1932 and arrived at Wrangell on May 20 in command of Captain S.C. Barrington. She was 100 feet long with 25 feet of beam and two 135-horsepower diesel engines, the first diesels in the fleet. She was of tunnel stern construction with propellers that could be raised. Fully loaded she drew only 20 inches of water. She had a dining room that would seat 30, a modern light plant and a refrigeration system. Some years later, during World War II, she was taken to the Yukon River and placed in U.S. Army service. She later pushed a barge for the Alaska Department of Health, and in 1969 she was owned by D.A. Peterson, a Nenana riverboat operator.

HAZEL B. No. 3—Designed and built at Wrangell in 1917 by Captain Charles Binkley, a long-time partner of Captain Syd Barrington on the Yukon. The timbers all came from the Sylvester and Willson sawmill and the upper works were of native spruce and cedar, with fir hull planing. She was 62.5 feet over all with 13.1 feet of beam and of such shallow draft that it was said she would run in nine inches of water. Powered at first by a 95-horsepower Wisconsin gas engine, she was given a larger engine in later years. Left Wrangell on her first upriver trip on July 26, 1917, under Captain Syd Barrington, and made it to Telegraph Creek in 26 hours. She continued in service for many years and in 1933 was skippered by Captain Hill Barrington with "Deaf Dan" McCullough, a long-time riverman on the Stikine, as pilot. In 1949, coming downriver in command of Captain Ed Kalkins on May 24, she sank after hitting a snag and apparently was not salvaged.

HAZEL B. No. 4—Designed and built at Wrangell in 1919 by Captain Charles Binkley. She was 65 feet long with 19 feet beam and originally had a 100-horsepower Wisconsin gas engine. She was built without a tunnel for more efficiency but at the

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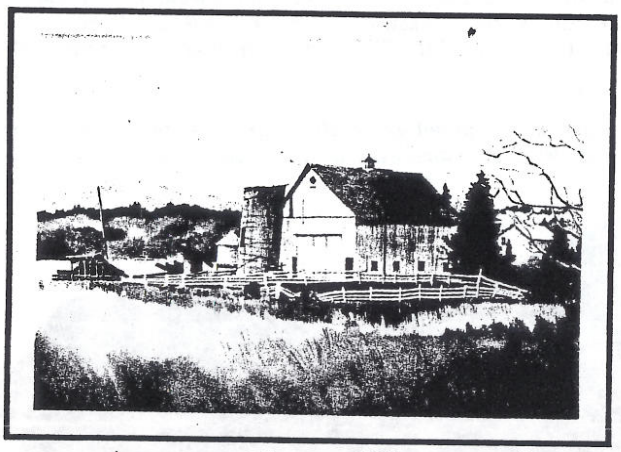

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end of her first season was converted to a twin screw tunnel boat with two 100-horsepower engines. Then, in 1928, at the Anderson boat shop in Wrangell, she was again rebuilt. This time she was lengthened by 20 feet and more staterooms were added. She was also given more power. She disappeared from the register of vessels in 1936, and in 1939 was reported to be half underwater on the beach at Wrangell.

HAZELTON—Built at Victoria in 1900 for service on the Skeena River and purchased two years later by the Hudson's Bay Company. She ran mostly on the Skeena but made trips up the Stikine during at least two summers, 1907 and 1908, carrying freight for her owners and such other business as offered. J.P. Bucey was her skipper in 1907 with G. Lockerby as purser. After the completion of the Grand Trunk Pacific Railroad to Prince Rupert, the *Hazelton* had her machinery removed and served for many years as the clubhouse for the Prince Rupert Yacht Club.

ISCOOT—Built for the Stikine River trade in 1898 and owned by the Klondike Mining, Trading & Transportation Company. It is not certain that she ever completed a trip up the river as she was reported wrecked early in June 1898, a total loss.

ISKOOT—Built at Wrangell in 1916 with a length of 50 feet and beam of 11.5. She was licensed to carry passengers and had a 48-horsepower engine, but no other information about her has been found.

JEANNE—Built at Juneau in 1930 by Captain William Strong for service on the Taku River and measured 63.6 feet in length with 18.4 feet beam. She had accommodations for 12 passengers and this was increased to 16 in 1932 by the addition of two more staterooms. She went into service on the Stikine in 1931 in charge of Captain E.E. Kalkins with Elliott Fremming as purser. She was out of the vessel register by 1943.

JUDITH ANN—Launched at the Campbell-House boatyard at Wrangell on June 18, 1950, for Al Ritchie's Stikine River service, successor to the Barrington Transportation Company. She was 64 feet long with 17 feet beam and drew 14 inches light. She had a tunnel stern and was powered with a 165-horsepower G.M. diesel taken from the former riverboat *Marie*. Accommodations included six staterooms for twelve passengers, plus a crew of four. She was owned by the Ritchie Transportation Company and in 1969 was listed as owned by Edwin V. Callbreath.

KAREN—Built at Wrangell in 1913 for Captain Kenig Johansen and was 46 feet long with 9 feet beam and a 48-horsepower gasoline engine. She ran on the Stikine for at least three years and may have run longer. In 1915 Captain Johansen was having a new boat, the *Flounder*, built and it was reported that she would have the engine from the *Karen*. The latter vessel remained in the marine register through 1922.

LOUISE—Measured 129 tons and was at Wrangell in March 1898, making daily trips to the mouth of the Stikine carrying passengers, freight and livestock. She was owned by Klondike Mining, Trading and Transportation Company and made her first upriver trip on May 9 in command of Captain J. Jordeson. Later in the season she was skippered by Captain Walter Allenby. On July 17, 1899, the *Louise* was destroyed by fire at Victoria, British Columbia.

MARGARET ROSE—Last of the riverboats to operate commercially on the Stikine, the *Margaret Rose* was built in Seattle by Duwamish Shipyards and went into service in 1967. Powered by four 165-horsepower diesels, she was 65 feet long with a 30-foot beam and operated in 22 inches of water. Skipper Ed Callbreath (who also had owned the *Judith Ann* in the late 1960's) offered four-day round-trip service between Wrangell and Telegraph Creek for $120 in 1967, carrying up to 26 passengers in heated cabins. She went out of regular service in 1969.

MARIE—Built at Telegraph Creek in 1945 for Captain A.V. Ritchie, she was 54.6 feet long with 10.6 feet beam and was originally powered by a 125-horsepower gasoline engine. When the *Judith Ann* was built in 1950 it was reported that she would be powered by a 165-horsepower diesel taken from the former riverboat *Marie*.

McCONNELL—Built at Vancouver in the spring of 1898 by the Canadian Pacific Railroad for use on the Stikine as part of its "all-Canadian" route to the Klondike. Arrived at Wrangell June 6 and immediately cleared for Glenora under Captain J.G. Gidley. She made at least six trips under Captain Gidley and one or more under Captain George Raab, then was tied up at Cottonwood Island because of lack of business. Later she was laid up at the head of the harbor at Wrangell and remained there, along with the *Ogilvie*, until 1901. On March 27 of that year she reached Skagway, with the *Ogilvie*, in tow of the tug *Pioneer*. She was to have been dismantled and shipped by rail to Whitehorse but the

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plan was abandoned and she was towed back to Vancouver and converted to a barge.

MONO—One of the few Stikine River steamboats that was actually built on the river. During the winter of 1897-98 Captain F.B. Armstrong went up the river on the ice to a point near the boundary and put up a small sawmill and planer. In 58 days he and a crew had sawed the lumber and completed the vessel. She was said to have been the lightest draft steamer on the river in 1898 and made Telegraph Creek every trip. In July Captain Armstrong decided to take her to the Yukon and she left Wrangell on July 22 along with the *Stikeen Chief* in tow of the steamer *Fastnet*, bound first for Port Simpson, then for Saint Michael. A towline broke and the *Mono* went ashore on Bushy Island in Snow Passage. Captain Armstrong sold her where-is and as-is to four Wrangell men who patched her, got her back to town and eventually back on the river where she ran that fall until stopped by ice. She may later have gone to the Yukon; a vessel of this name burned near Dawson in March 1902.

MONTE CRISTO—Built at Everett, Washington, in 1891 for the Snohomish River trade and was 90 feet long. In 1898 she was purchased by the Canadian Development Company and sent to the Stikine where she was the second vessel up the river that spring, leaving Wrangell on May 4 with a load of freight for the proposed railroad. In charge of Captain Frank Murray she made 13 trips up the river that summer and advertised that she made connections at Glenora with the company's own packtrains which in turn connected with another company steamer at Teslin. After her service on the Stikine the *Monte Cristo* went to the Skeena.

MOUNT ROYAL—Owned by the Hudson's Bay Company which used her on the Skeena River commencing in 1902. She was reported to have had luxurious accommodations. In May 1906 she started the first of five trips from Wrangell up the Stikine in command of Captain S.B. Johnson and on that trip carried 52 horses, 30 tons of freight and 50 passengers. She was again on the Stikine in 1906 and 1907, making two trips the latter year before she was recalled to the Skeena. There while upbound on July 6 she was wrecked in Kitsalas Canyon with the loss of six lives.

MUMFORD—Built at Victoria in 1866 for the Western Union Telegraph Expedition and was 110 feet long, 19 feet beam and 4 feet, 8 inches depth of hold. She was a sternwheeler and was skippered by a Captain Coffin. She made at least one trip up the Stikine, perhaps several, in 1866 and carried a quantity of telegraph wire and other materials to Telegraph Creek. After the overland telegraph project was abandoned, the Mumford ran on the Fraser River.

Two of the several Hazel B. *boats,* No. 4, *left, and* No. 3, *are pulled up to the bank at Telegraph Creek.* (Courtesy of Raymond M. Patterson)

The Stikine River in 1898

By Eliza Ruhamah Scidmore, excerpted from National Geographic, *January 1899*

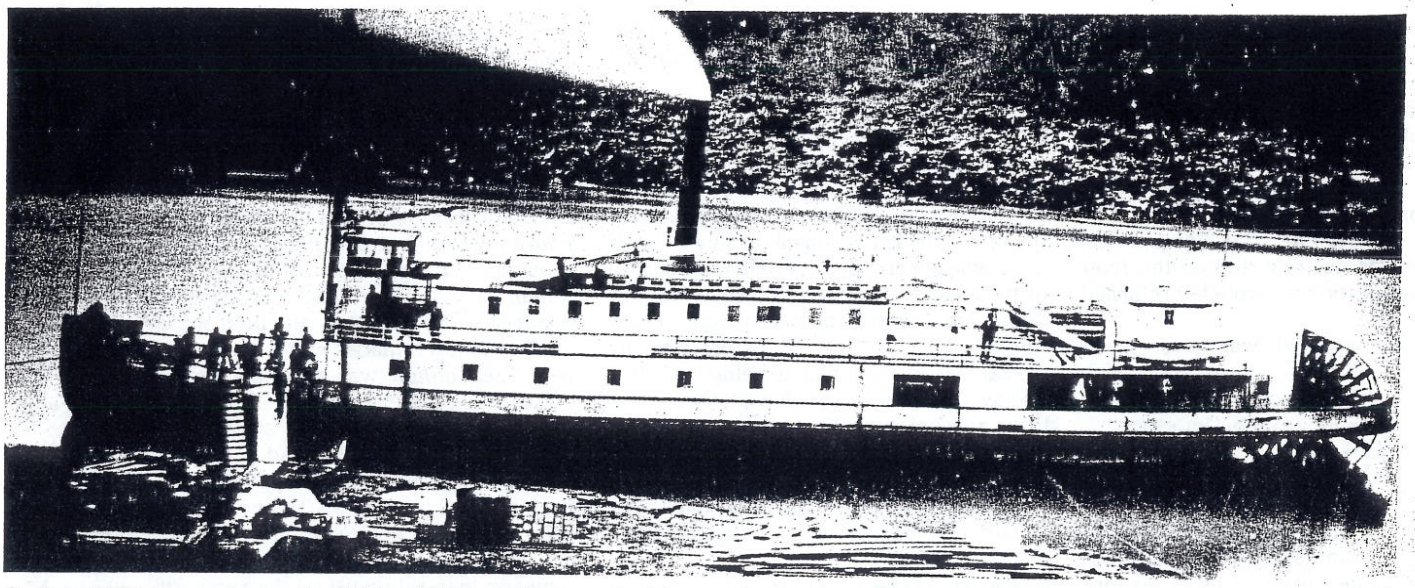
Photos and illustrations courtesy of B.C. Provincial Archives

Editor's note: *The short-lived Stikine boom was already over when Eliza Ruhamah Scidmore traveled up the river in the summer of 1898. Since that January gold seekers had begun gathering in Fort Wrangell and streaming up the frozen Stikine in an unending procession, hoping to reach the Klondike gold field, via the Teslin trail. But by later that spring, word had already gotten out that far from being an easy route to the Interior, the Stikine led Klondikers to such a harsh and long overland trail from its headwaters that only the hardiest could make it. The "all-Canadian" route quickly lost out to the preferred Chilkoot and White Pass trails, which headed inland from Skagway.*

Spring and open waters brought a number of steam-powered riverboats to the Stikine to accommodate what was expected to be the summer rush of adventurers. That rush never materialized and neither did the tourists. One of the earliest travel writers to visit the North, Miss Scidmore reported that as far as "the most diligent inquiries could establish the fact," only three pleasure travelers took advantage of the Stikine boom to travel comfortably and view the magnificent scenery of the river. Here are excerpts from her account of her Stikine voyage.

Fort Wrangell, Alaska, where the ocean steamers landed the all-Canadian army of gold-seekers, was crowded all winter and revived its prosperity of thirty years before. A "boom" of extravagant proportions was well on in March and collapsed by the end of May with distressing results, when the failure of the railway land grant measure resulted from the many political entanglements and jealousies at the Canadian capital. Fort Wrangell real estate took on absurd values while the boom lasted. The tide line was edged for a quarter of a mile with flimsy pine buildings and fragmentary footwalks on stilts; tents crowded upon every vacant spot and whitened the hillside.

A score of saloons ran wide open, despite Alaska's severe prohibition laws; the most barefaced gambling games and swindling schemes were conducted on every side without concealment and this "boomtown" of 6,000 inhabitants displayed all the worst features of such lapses in civilization. Without water supply, drainage, or sanitary measures of any kind, with all refuse dumped into the space before the first row of water-fronting buildings, and with the butcher slaughtering in the open before his shop, Fort Wrangell, in July, was more



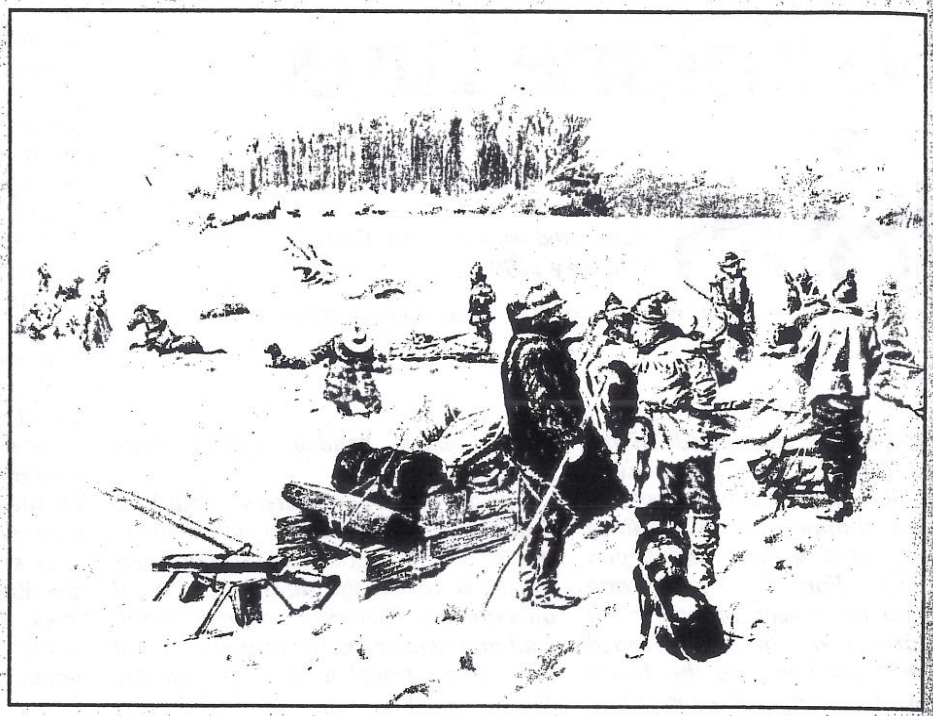
Built in 1879 for service on the Stikine, Western Slope *arrived just as the Cassiar gold rush excitement was ending, and served only one season before departing.*
(Courtesy of B.C. Provincial Archives)

weary, bored and homesick, as one lounged down for his mail and fresh beef, and the other whistled in his doorway. There is a station of Canadian mounted police on the river bank a few rods beyond, an officer and twenty men occupying a group of hewn-log buildings on a knoll, with the red flag of the Dominion flying from a tall pole. Their storehouses were on the bank, and men in canvas working-clothes were putting company gardens in order and giving an appearance of permanency, trimness, and order to the edges of British domain.

* * *

There are glaciers everywhere and of every type — hanging on the mountain side, plunging down ravines and through gaps, curving around spurs, fretting and pricking through the surface of vast snowfields and everywhere debouching toward the river's edge in spreading fans of boulders and muddy ice. One can count a dozen great glaciers at once from a certain point of view, and easily accepts Dr. John Muir's count of 100 glaciers seen from his canoe, and of 300 glaciers seen by climbs and tramps ashore, all draining directly into the Stikine. There is a feast and almost a surfeit of glaciers in the next fifty miles. . . .

* * *



Before the river broke up that spring, prospectors, horses and dogs battled heavy snows — depicted in this illustration by C.E. Tripp — as they made their way up the frozen riverbed.

beam and was at Wrangell in April 1898 under Captain E.P. Wilson and with W.W. Jelly as purser. She made daily trips to the mouth of the Stikine, carrying miners who wished to start upriver over the ice. When the ice did go out, she was the first steamer to sail for Glenora, taking up a load of railroad construction material. Later that summer she was in charge of Captain W.J. Kenny. She was not reported on the river after the one season and probably returned south.

SAMSON—A snag boat, was towed up to Wrangell from Victoria late in April 1898, worked on the Stikine during the summer and was towed south again in October.

SKAGIT CHIEF—Constructed at Tacoma, Washington, in 1887, 137.5 feet long with 26.3 feet beam, and operated on Puget Sound until May 1898 when she arrived at Wrangell in command of Captain B. Barlow. She made several trips to Glenora under Captain A.W. Gray, then was laid up when her crew filed claims amounting to $4,000 against her. In October she was sold at a marshal's sale for $2,600 and taken back to Puget Sound where she ran for several years.

STIKEEN CHIEF—Arrived at Wrangell in May 1898 under Captain W.E. Nesbitt and with A.W. Shiels as purser. She made at least five trips to Glenora and in July was prepared to go to the Yukon. Along with the *Mono* she left Wrangell on July 22 with 36 people aboard. Both vessels were in tow of the steamer *Fastnet* which soon lost the *Mono*. On August 5 the mail steamer *Dora* sighted finely splintered wreckage off Kodiak Island, identified as being from the *Stikeen Chief*. It was believed there had been an explosion. There was also a dog swimming about and as it was neither very hungry nor thirsty, it was believed it had not been in the water long. Presumably the *Stikeen Chief's* passengers had been picked up by the *Fastnet*.

STRATHCONA—A sister ship of the *Caledonia* and like her built at Victoria in 1898 for the Hudson's Bay Company. Measured 376 tons. Under Captain Frank Odin she made at last 14 trips to Glenora in 1898, then went to Port Simpson for the winter. She was again on the Stikine for several trips in 1899 after which she operated on the Skeena River until the Grand Trunk Pacific Railroad was completed.

TAHLTAN—Built for the Hudson's Bay Company to replace the big steamer *Port Simpson* which had become too expensive to operate for the amount of business. The *Tahltan* had a gas engine and arrived at Wrangell on June 9, 1916, and both she and the *Port Simpson* made river trips that summer. The *Tahltan* was described as "the finest gas boat ever in Wrangell for use on the river." In 1917 she was skippered by Captain C.A. Gardner who had been on the *Port Simpson*. She had propeller trouble that summer and on July 21 her engineer, W.H. Clements, fell overboard at Buck's Bar and was drowned. The Hudson's Bay Company then relinquished the river work to the Barrington Transportation Company and the *Tahltan* was taken to Prince Rupert.

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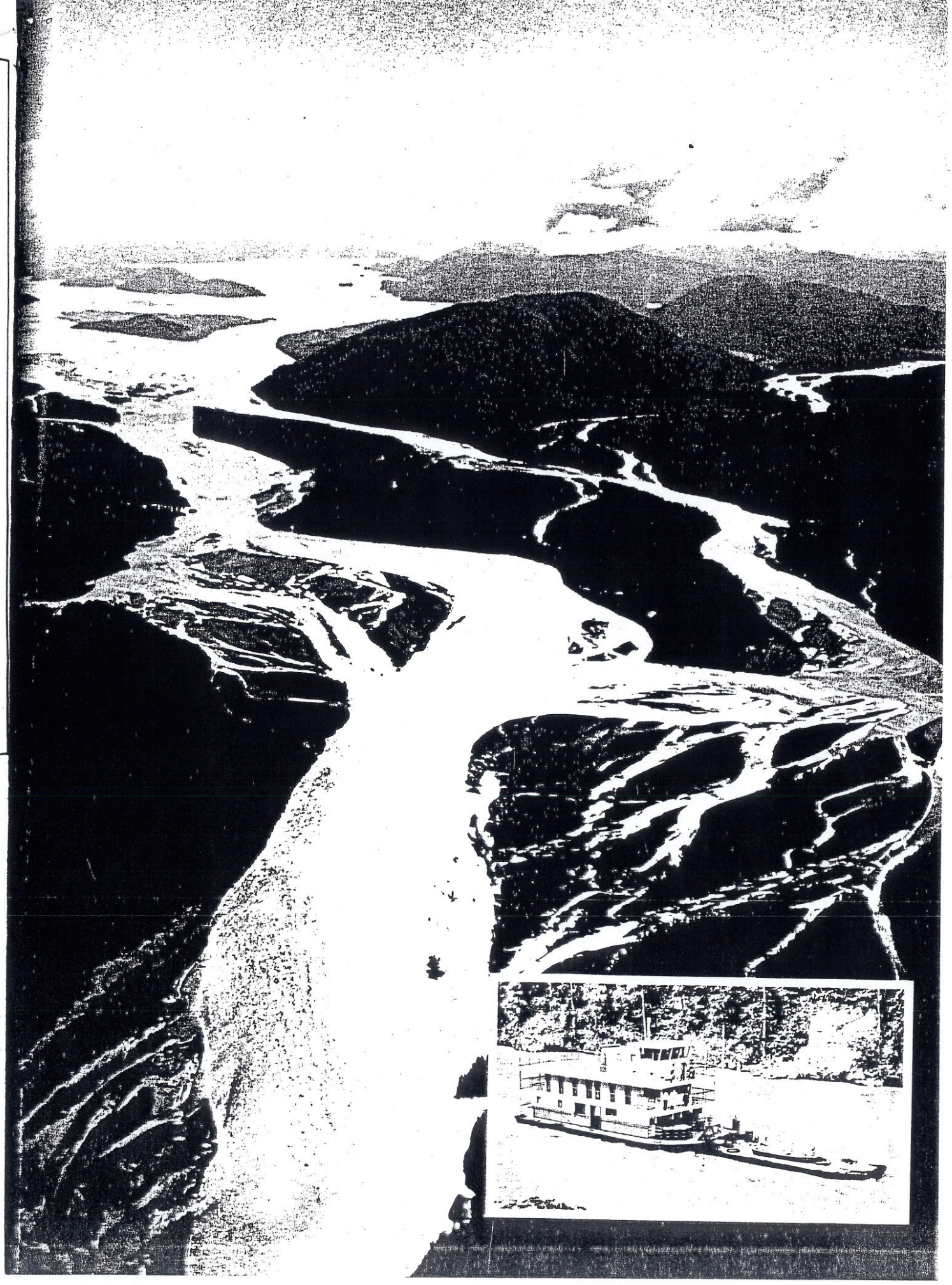
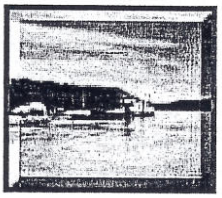


Introduction
The Stikine River Historical Foundation (SRHF) a 501(c)(3) nonprofit organization located in Wrangell, Alaska, is dedicated to the "restoration, reconstruction, reactivation, replication and protection of artifacts, structures or documents relevant to the human and natural history of the Stikine River in Southeast Alaska and British Columbia, Canada." SRHF believes that the best way to insure the continued existence of historically significant vessels and structures is to restore and activate them. Any net profits from said activation will be used to further the purposes of the foundation or similarly structured organizations.

The first and perhaps most important project for the SRHF is the restoration and reactivation of the historic sixty-five foot, wooden-hulled riverboat, "*Judith Ann*". Other future restoration and replication projects of the SRHF include: a Stern Wheeler, a Bristol Bay sail troller; a fifty-foot Native Tlingit cedar canoe (similar to the canoes that were used by the Tlingit nation to implement trade with the upper Stikine River Taltans) and a large square-rigged sailing freighter like those used to transport supplies to Skagway during the Gold Rushes of the late 1800's. In addition, SRHF would like to establish a "Marine Park" to house and display these and other historic vessels.



"*Judith Ann*" was constructed in 1950 at the Campbell-House shipyard in Wrangell, Alaska. She was taken out of service in 1970 and is in disrepair, but salvageable. "*Judith Ann*" is the last remaining wooden-hulled riverboat to have navigated the Stikine River and is eligible for National Historic status.

The natural beauty and historic character of the Wrangell area provide the ideal setting for the restoration and reactivation of " *Judith Ann*". The restored riverboat will be a genuine "time machine" to transport passengers up the Stikine River and into the past, while providing a first-rate exploration of riparian, marine and rain forest wilderness. Pristine wilderness such as exists throughout the length of the Stikine River is also rapidly becoming a thing of the past. "*Judith Ann*" will take you there.

A Brief Description of the Wrangell, Alaska Region and its History
Wrangell's history is complex, dramatic, and unique. It is rooted in the water, timber, flora, fauna, geological and cultural phenomena that have supported diverse human and non-human habitation throughout time.

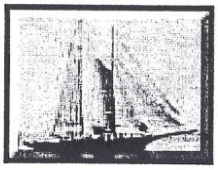
The City of Wrangell, population 2,549, is located on the northern tip of Wrangell Island, along the renowned Inside Passage, 155 miles south of Juneau and 89 miles northwest of Ketchikan. It is near the mouth of the Stikine River, an historic trade route to the Canadian Interior. Wrangell is in the maritime climatic zone and experiences cool summers, mild winters, and year-round rainfall. Summer temperatures typically range from 42 to 64; winter temperatures range from 21 to 44. Average annual precipitation is 82 inches, including 64 inches of snowfall.

Wrangell is one of the oldest settlements in Alaska. In 1811, the Russians began fur trading with the indigenous Tlingit residents, and built a stockade named Redoubt Saint Dionysius in 1834. The Island was named for Ferdinand Von Wrangel, manager of the Russian-American Co. around 1830. The British of Hudson's Bay Co. leased the fort in 1840, and renamed the stockade Fort Stikine.

(A large Stikine Indian village known

But two epidemics of smallpox, in 1836 and 1840, reduced

as Kotzlitzna was located 20 miles south of the fort.) The Tlingits claimed ancient trade rights to the Stikine River, and protested when the Hudson Bay Company began to use their trade routes.



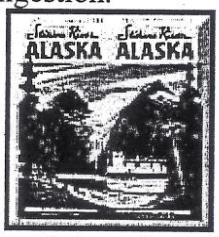
the Tlingit population by half. The fort was abandoned in 1849 when furs were depleted. The fort remained under the British flag until Alaska's purchase by the U.S. in 1867. In 1868, a U.S. military post called Fort Wrangell was established, named for the Island.

The community of Wrangell grew rapidly as an outfitter for gold prospectors in 1861, 1874-77, and in 1897. Riotous activity filled gambling halls, dance halls, and the streets. Thousands of miners traveled up the Stikine River into the Cassiar District of British Columbia during 1874, and again to the Klondike in 1897. There were many gold discoveries along the river that can still be pointed out today, and will be part of the *Judith Ann* history and pleasure tours.

A short ways down the Stikine River from the site of a former Taltan Native village is "Telegraph Creek". Remnants of cable and equipment from the early 20th century can still be seen here. Telegraph Creek gets its name from the communication cable that was planned (and partially implemented) to connect the North American continent with Europe, across the Bering Straits. The project was cancelled upon completion of the Trans-Atlantic Cable, but not before supplies and material had been brought into the area. "*Judith Ann*" will voyage up the Stikine River to Telegraph Creek and return to Wrangell at least once a month during the Stikine River's navigable season. This is an exciting trip lasting approximately six days.

Description of the *Judith Ann*

Many types of riverboats have plied the waters of the Stikine River since the days when Tlingit Natives used paddles and sails on fifty-foot cedar canoes: stern-wheelers, side-wheelers, diesel-powered vessels with tunnels and even multiple outboards crowded the Stikine. At one time there were as many as seventeen large vessels on the river at the same time, requiring traffic police to control the congestion.



The *Judith Ann* is a sixty-five foot, twin-diesel powered, tunnel-configured wooden vessel. Her flat-bottomed hull allows her to sit down on suitably flat intertidal areas. She draws 14" which enables her to enter very shallow lagoons and sloughs. After restoration to her original, authentic splendor, the *Judith Ann* will once again provide passengers with excellent food, lodging, bathroom facilities, walk-around spaces inside and outside, a main lounge with large view windows and a fireplace. The top deck provides a roomy walk-around outside, with deck chairs for enjoying the panoramic views. In her restored condition, with comfortable staterooms, excellent Alaskan cuisine and local guides, the *Judith Ann* will offer passengers a gratifying journey into beauty, past and present.

Restoration Plan and Schedules

This web-site, http://stikineriverhistorical.org, will contain running commentary on the activities on and around *Judith Ann*, beginning with text and images detailing her pre-construction condition, and appeals for volunteer and financial

support. As reconstruction commences (target date September 2003) and proceeds, there will be weekly updates on the web site explaining the reconstruction progress through photographs, drawings and text. The web site will also include notes on the history of *Judith Ann*, the Stikine River and other riverboats. At the completion of reconstruction and with activation of the vessel (target date April 2004), the web site emphasis will shift to chronicles of the first and subsequent trips up the river, perhaps even with a live web-cam. However, the web site will never abandon history.

There are many fascinating true stories and legends about the Stikine River drainage, Telegraph Creek, Glenora and Wrangell that lend themselves well to a web site presentation of interest to many people around the world.

The *Judith Ann* project is unusually blessed by the fact that many people associated with her history are living in the area and willing to assist in her resurrection. Restoration will be guided by the following people: Robert Seimers, who piloted the *Judith Ann* when she was active on the river; Susan Richie, niece of *Judith Ann* Richie for whom the boat was named; Leonard Campbell, who with his partner Don House owned the Campbell-House company that built the *Judith Ann*; Jim Rhodes who assisted in the original construction of *Judith Ann* (he designed and installed the tunnels); Betty Wigg, who cooked aboard *Judith Ann* and several other river vessels for sixteen years; and Edwin Calbreath, who piloted the *Judith Ann* between Wrangell and Telegraph Creek for the last ten years she was active on the river.

The first stage of restoration involves the transport of the *Judith Ann* from her present location (on a grid located 12.5 miles south of Wrangell) to the boat shop in Wrangell. To accomplish this, the plan is to close up the gaps in planking with sheets of plywood and then wrap the hull in two canvas tarps. The single seam will be sealed by rolling the overlap and securing the roll to the hull with lathe. She will be towed to Wrangell, with pumps to ensure her safety, and placed on the ways of the boat shop where work will begin.

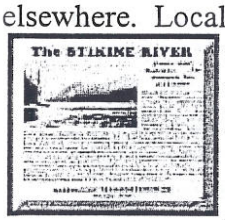
After complete restoration, *Judith Ann* will once again transport passengers on tours of the scenic Stikine River. Other exciting trips within fifty miles of *Judith Ann*'s homeport of Wrangell can be arranged. Scheduling will be flexible. It is expected that two- and three-day trips will be most popular. The trip to Telegraph Creek and return (six days) will be scheduled once a month from May to September.

The SRHF will invite riverboat and other historians for *Judith Ann*'s first return voyage up the river. Hopefully Edwin Calbreath and/or John Ellis will be aboard, and a travel writer or journalist will be invited to record this historic event.

Need and Significance of this Project for Wrangell

The economy in Wrangell has suffered some severe setbacks in recent years, and needs all the help it can get. The closing of the Alaska Pulp Co. sawmill in 1994 forced 225 mill workers and loggers into unemployment. The mill employed over 20% of the population and supported 30% of the local economic base.

Before the mill closure, Wrangell had a steady population of 3,200 people and a stable economy based on commercial fishing and timber from the Tongass National Forest. Many families left town after the mill's closure, looking for work elsewhere. Local businesses suffered and several closed. The mill has since reopened in April 1998 with 50 employees under the ownership of Silver Bay Logging. Wrangell is still recovering from this blow to the economy and currently has an unemployment rate of 6.9% in a population of 2,549 (Dec. 1999, DECD).



To counteract the economic slump resulting from the mill closure, the City of Wrangell has begun a

concerted effort to stimulate and create a strong tourist industry. Approximately 30 cruise ships dock in Wrangell each season on their voyages up and down the famous Inside Passage. These cruises bring an estimated 120,000 tourists seasonally, but with limited contribution to the local economy as the stops are brief. Most cruise ship tourists (or Alaska Marine Highway ferry passengers) take a short walk down Main Street and then return to their ships. Some independent tourists are attracted by Stikine Wilderness Adventures; Alaska Waters and other day-tour operations that are locally owned businesses. The ongoing projects of the Stikine River Historical Foundation, beginning with restoration and reactivation of the *Judith Ann* in the Wrangell Harbor, will enhance the economic situation in Wrangell, providing unique wilderness, pleasure and historical experiences for Alaska's tourists.

Cost/Benefit Ratio and Financial Benefits

Estimated costs for restoration total $484,571. After restoration, the *Judith Ann* can be active for 150 days each season. Operational expenses for the first two seasons will be approximately $167,600. With each passenger paying $400 per day, and twelve passengers aboard, there is a maximum gross potential of $720,000 per season. Supplies and labor will be contracted locally, and the operation will contribute an estimated 75% of its gross ($540,000) to the local economy each season. The *Judith Ann* project and the SRHF will directly create two seasonal jobs (April to October) and three year-round jobs. All positions will be filled locally.

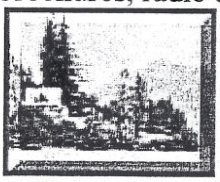
The *Judith Ann* will be available for group charters and for regularly scheduled trips on the Stikine River and other exciting places within a fifty mile radius of Wrangell. Return visits and word-of-mouth advertising are confidently anticipated.

Marketing the *Judith Ann*

Preliminary market research has identified several special interest groups as potential passengers on the *Judith Ann*, including bird watchers, photographers, artists, wilderness enthusiasts, history buffs, riverboat historians, and sightseers from around the world. For any of the above groups or individuals, a few days or a week on the Stikine or elsewhere in the Wrangell area will provide an unequaled natural and historic experience.

The Stikine River is one of the very few wild and pristine navigable rivers remaining on the North American continent. The Southeast Alaska rain forest ecosystem is home to bald eagles, killer whales, porpoise, seals, sea lions, mountain goats (high on the sides of towering mountains that surround and frame the river) and many other species sharing a healthy environment-all within viewing range from the decks and main lounge of the *Judith Ann*. There is no more comfortable way to see and enjoy all of this beauty than from the elegant old *Judith Ann*.

One of the primary tools for marketing is the Internet's World Wide Web. In addition to the SRHF web site (featuring *Judith Ann*), other Internet venues can be linked to expand web access, information, audiences, potential visitors and donors to the project. Other means of publicizing the *Judith Ann* will include magazine and newspaper ads and articles, brochures, radio and TV interviews or documentaries. The market for *Judith Ann* extends beyond the United States, to Canada, Australia, England, Japan, Germany and other Asian and European markets. In September 2001, an advertisement for the *Judith Ann* project will appear in the Alaska State Vacation Planner, a publication of the Cooperative Marketing Program sponsored jointly by the State and the Alaska Visitor's Association, reaching approximately 450,000 people every year. Alaska Magazine has expressed interest in doing a story in conjunction with a long-term advertisement agreement. Other agreements are in progress with foreign magazines, travel agencies, chambers of commerce and historical journals, magazines and organizations.



Other local and complementary attractions include golfing, air tours, fishing, small watercraft charters, gift shops featuring Alaskan art and artifacts, the museum, the petroglyphs site and the Tlingit Community House and Native Park.

Competition

There is no competition on the Stikine River for *Judith Ann*'s offer of historic, luxury voyages of several days' duration, with excellent food and lodging. At present, the only other river trips available are jet boats that operate at high speeds to The Great Glacier, Telegraph Creek, other shorter runs and return. The *Judith Ann* will provide food, lodging, showers and toilet facilities, on a historic vessel with walk-around space, lounge with fireplace and top deck with chairs.

Conclusion

In remote, beautiful places like Wrangell, Alaska, the local residents often take for granted the very features of their home place that are objects of longing and desire for many other people. Recent economic conditions in Wrangell have helped inspire its residents to invite strangers to visit and enjoy what they have, without compromising those treasures. The *Judith Ann* is a vessel for dreams-of the past, present and future. The Stikine River Historical Foundation is confident that the *Judith Ann*, and its other marine restoration projects, are icons of a time that has not passed, will never pass, in the human imagination. The mystique of a ship on the water, powered by human skill and simple technology, is a fundamental, archetypal symbol of the human spirit that may be more important now than ever before. We hope to share the humble charm of *Judith Ann* with the many people in our world who hunger for simplicity, elegance without pretension, and an accessible means for "time-travel."

You may contact us by mail at:

The Stikine River Historical Foundation
P.O. Box 1499
Wrangell, AK 99929

Or, you may send us an e-mail or use our response form.