



Canada

Canada

VOL 23 MONTHLY EDITION NO 11
NOVEMBER 27, 1998

WESTERN EDITION OF NOTICES TO MARINERS

Published monthly by the

CANADIAN COAST GUARD

NOTICES

2100 to 2168

CONTENTS

	Page
SEC. I Safety and General Information	1 - 2
SEC. II Chart Corrections	3 - 10
SEC. III Radio Aids to Marine Navigation Corrections	NIL
SEC. IV Sailing Directions and Small Craft Guide Corrections.....	11 - 13
SEC. V Light List Corrections.....	15

Marine Navigation Services
Directorate
Marine Aids

RECYCLED PAPER

Internet: <http://www.notmar.com>

EXPLANATORY NOTES

Geographical positions refer directly to the graduations of the largest scale Canadian Hydrographic chart unless otherwise indicated.

Bearings refer to the true compass and are measured clockwise from 000°(North) clockwise to 359°, those relating to lights are from seaward.

Visibility of lights is that in clear weather.

Depths - The units used for soundings (metres, fathoms or feet) are stated in the title of each chart.

Elevations are normally given above Higher High Water, Large Tides unless otherwise indicated.

Original Canadian Information - A star (*) adjacent to the Notice number indicates that this notice is based on original Canadian information.

Distances may be calculated as follows:

1 nautical mile	= 1 852 metres (6,076.1 feet)
1 statute mile	= 1 609.3 metres (5,280 feet)
1 metre	= 3.28 feet

Temporary & Preliminary Notices are indicated by a (T) or a (P) after the Notice number. Nautical charts and publications are not hand amended for Temporary (T) and Preliminary (P) Notices to Mariners. Listings of Charts Affected by Temporary and Preliminary Notices to Mariners are revised and promulgated quarterly, in Section I. Reference should be made to the latest published listing and to the monthly editions of Notices to Mariners published subsequently.

Please note that, in addition to the temporary and preliminary changes normally advertised as (T) and (P) Notices, there are a significant number of permanent changes to navigational aids that have been advertised as Preliminary Notices to Mariners while charts are being updated for new editions.

Marine Information Report & Suggestion Sheet - Mariners are requested to notify the responsible authorities when new or suspected dangers to navigation are discovered, changes observed in aids to navigation or corrections to publications are seen to be necessary. Such communications can be made using the *Marine Information Report & Suggestion Sheet* inserted on the last page of each monthly edition of *Notices to Mariners*.

Monthly edition of Notices to Mariners - *Notices to Mariners* are issued free of charge on a monthly basis. Mariners now have a choice between specific *Regional* issue(s) they wish to receive. Requests to be placed on or removed from the mailing list should be made by using the form inserted on page of each monthly edition. Notification of changes to the mailing addresses, regional issues and/or number of copies required should also be transmitted by means of this form.

Canadian Nautical Charts & Publications - A source list of *Canadian Nautical Charts & publications* is published in *Notice No. 14* of the current *Annual Edition of Notices to Mariners*. The source supply and the prices effective at the time of printing are listed. This list is periodically updated in the monthly edition of *Notices to Mariners*.

NOTE: Cette publication est aussi disponible en français.

DGPS INITIAL OPERATIONAL SERVICE

The Canadian Coast Guard (CCG) announces that the Differential Global Positioning Service (DGPS) Initial Operational Service (IOS) is available for positioning and navigation.

IOS means the service will provide a DGPS broadcast using the type 9 RTCM message pseudorange corrections at a data transmission rate of 200 baud. Refer to Radio Aids to Marine Navigation (RAMN) for estimated advertised coverage for each differential station.

Although the service is IOS, users may experience service interruptions without advance notice. Further, CCG advises that IOS DGPS broadcasts should not be used under any circumstances where a sudden system failure or inaccuracy could constitute a safety hazard. Following one year verification period, the DGPS service will be declared as being a Full Operational Service (FOS).

Users are also advised that differential corrections are based on the NAD 83 datum position of the reference station antenna and positions obtained using DGPS should be referenced to this coordinate system only. DGPS receivers must be set to the WGS 84 datum in order to obtain optimum positioning accuracy.

Table of Stage 1 DGPS Reference Stations					
Station Name	Id Nos of Ref. Stations	DGPS Station ID	Geogr. Pos. Latitude Longitude	Frequency [khz]	Bits/sec.
Alert Bay BC	300,301	909	50 35 N 126 55 W	309	200
Amphitrite Pt BC	302,303	908	48 55 N 125 33 W	315	200
Richmond BC	304,305	907	49 11 N 123 07 W	320	200
Sandspit BC	306,307	906	53 14 N 131 49 W	300	200
Cardinal ON	308,309	919	44 47 N 75 25 W	306	200
Warton ON	310,311	918	44 45 N 81 07 W	286	200
St. Jean Richelieu QUÉ	312,313	929	45 19 N 73 19 W	296	200
Lauzon QUÉ	316,317	927	46 49 N 71 10 W	309	200
Rivière-du-Loup QUÉ	318,319	926	47 46 N 69 36 W	300	200
Moisie QUÉ	320,321	925	50 12 N 66 07 W	313	200
Partridge Island NB	326,327	939	45 14 N 66 03 W	295	200
Pt. Escuminac	332,333	936	47 04 N	319	200

NB			64 48 W		
Western Head NS	334,335	935	43 59 N 64 39 W	312	200
Fox Island NS	336,337	934	45 20 N 61 05 W	307	200
Cape Race NFLD	338,339	940	46 46 N 53 11 W	315	200
Cape Ray NFLD	340,341	942	47 38 N 59 14 W	290	200
Cape Norman NFLD	342,343	944	51 30 N 55 49 W	310	200

DGPS USER ALERT

Currently, seventeen DGPS stations are providing Initial Operational Service (IOS) in Canada. The DGPS station at Rigolet, Labrador will be installed in November 30/98. Extensive validation of operational performance is being conducted throughout 1998. Full Operational Service (FOS) will follow after successful validation. Mariners are reminded to use caution when using DGPS until the Service is declared fully operational.

The Canadian Coast Guard has recently received reports of DGPS receivers apparently ignoring the broadcast alarm which should signal the immediate discontinuation of a particular satellite correction. Reports indicate that some user equipment does not properly recognize this "do-not-use" correction flag and as a result erroneously processes it as a correction. This can result in position errors as large as 15 kilometers while the receiver is in DGPS mode. DGPS users are advised that they should contact the manufacturer of their equipment immediately to determine if they require a receiver upgrade.

Apart from this, no major difficulties with DGPS implementation have been experienced to date nor are any expected in the future.

DISCREPANCY REPORT FOR DGPS USERS.

The Canadian Coast Guard is currently implementing the Differential Global Positioning System in Canada. Currently, seventeen DGPS stations are providing Initial Operational Service (IOS) in Canada. The DGPS station at Rigolet, Labrador will be installed in November 30/98.

Following a service validation period, it is expected that the DGPS service will be announced as providing a Full Operational Service (FOS) in March 1999. The fully operational DGPS service is expected to meet the advertised Levels of Service standards and all service guarantees will be provided with FOS.

Throughout the service validation period, the Coast Guard will be conducting numerous tests of the differential service. To assist the Coast Guard in this validation testing, mariners are requested to complete the attached anomaly report. Please take note of any DGPS service anomalies you experience and forward the completed form to the Director Marine Aids, Fisheries and Oceans Canada, 200 Kent Street, Station 5130, Ottawa, ON, K1A 0E6.

DGPS station anomaly report / Rapport d'anomalie des stations DGPS

With the purpose of constantly evaluating the quality of the DGPS service offered, the Canadian Coast Guard is providing the mariner with the following anomaly report. This report will allow us to get well-supported information concerning the anomaly and thus, will facilitate the identification of the origin of the problem. Please fill accordingly each section of this report and forward it by the suggested ways. You will find a legend at the end of this document.

Avec le souci d'évaluer constamment la qualité du service DGPS offert, la Garde côtière met à la disposition du navigateur le présent rapport d'anomalie. Ce rapport servira à bien documenter l'anomalie et, de ce fait, facilitera l'identification ou la recherche de la source du problème. Nous vous prions de bien remplir chaque section de ce rapport et de l'acheminer de la façon suggérée. Vous trouverez une légende à la fin de ce document.

User informations / Renseignements sur l'utilisateur

Vessel name / Nom du navire: _____ Destination: _____
Vessel position at the beginning of the anomaly /
Position du navire au début de l'anomalie : _____
Vessel position at the end of the anomaly /
Position du navire à la fin de l'anomalie : _____

Anomaly report / Rapport d'anomalie

Date and time of the anomaly / Date et heure de l'anomalie: _____ Duration / Durée: _____
Number of satellites tracked on GPS receiver / Nombre de satellites reçus par le récepteur: _____
DGPS site using / Station DGPS utilisée: Freq.: _____ kHz SS: _____ dB SNR: _____ dB
DOP Geometry / Géométrie DOP : _____
User receiver operates correctly with other DGPS sites? /
Votre équipement DGPS fonctionne-t-il normalement à l'utilisation d'autres stations DGPS?: Yes/ Oui _____
No / Non _____
Comments / Commentaires: _____

Point of contact / Personne-ressource: Name/ Nom: _____
Phone / Téléphone: _____

Weather conditions / Conditions météo

Winds / Vents : Direction: _____ Speed / Vitesse: _____ KTS
Temp. °C: _____ VIS: _____ N.M.
Sea State / État de la mer : _____
Bearing and range to electrical storm /
Direction et distance de l'orage : _____
Time of the storm / Heure de l'orage: _____ UTC

Essential informations on user equipment to fill / Renseignements indispensables sur l'équipement à remplir:

User equipment informations / Renseignements sur l'équipement

GPS receiver / Récepteur GPS: Make / Fabricant: _____ Model: _____
DGPS beacon receiver / Démodulateur DGPS: Make / Fabricant : _____ Model: _____
Gyro interface with GPS / Gyro intégré avec le GPS? Yes / Oui : _____ No / Non : _____
DGPS interfaced with an ECDIS / DGPS intégré dans un SVCE? Yes / Oui: _____ No / Non : _____
If yes, please fill below / Si oui, S.V.P. compléter ci-dessous:
ECDIS / SVCE: Make / Fabricant: _____ Model: _____

Radar image interfaced / Image radar intégrée?: Yes / Oui; No / Non: _____
 Gyro interfaced with ECDIS / Gyro intégré avec SVCEI? Yes / Oui: _____ No / Non: _____
 Permanent installation or in evaluation / Installation permanente ou en évaluation : _____

This report can be sent the following ways / Ce rapport peut être acheminé selon les façons suivantes:

- 1) Fax / Par télécopieur : 613-998-8428 attention AWAD.
- 2) Mail / Par la poste: Director Marine Aids
 Fisheries and Oceans Canada
 200 Kent Street, Station 5130
 Ottawa, ON
 K1A 0E6.

Canada

Legend/ Légende

- | | | |
|-------------------------------------|---|--|
| Position | : | Position can be provided by latitude, longitude, bearing and distance, location of a buoy, etc.
La position peut être donnée en latitude, longitude, relèvement et distance, emplacement de boué, etc. |
| KTS | : | Wind speed in knots /Vitesse du vent en noeuds. |
| N.M. | : | Visibility in Nautical Miles /Visibilité en milles nautiques. |
| Freq. kHz | : | Frequency in kilohertz /Fréquence en kilohertz . |
| SS | : | Signal strength in decibel / Force de signal en déibel. |
| SNR | : | Signal to noise ratio in decibel / Rapport signal-bruit en déibel . |
| DOP (dilution of precision): | : | Measure of the geometrical strength of the GPS satellite configuration. The DOP is measured on a scale of 1 to 10 /Mesure de la force géométrique de la configuration satellite. Le DOP est mesuré sur une échelle de 1 à 10 |
| SVCEI / ECDIS | : | Electronic Chart Display and Information System /Système de Visualisation de Cartes Electroniques et d'Information . |

IMPORTANT NOTICE TO USERS

The Canadian Coast Guard Marine Aids Modernization Program

- The Canadian Coast Guard is initiating an aids to navigation modernization program which takes advantage of modern technology and will result in a more equitable, safe, cost-effective and environmentally friendly service across Canada. Low maintenance buoys, solar power, the elimination of diesel power and the application of national provision and design standards, will be used to realize these objectives.
- In consultation with local users, aids to navigation which are redundant, exceed the national standards or should not be publicly funded, will be downsized, privatized or discontinued.
- Regional plans as well as detailed Notices to Shipping and Notices to Mariners will be issued and distributed in the usual manner in advance of all changes to aids to navigation. All users are encouraged to participate in local consultations and to monitor these Notices. It will be every user's responsibility to adapt to the changes and to take the appropriate measures.

1. Redundant Aids to Navigation

Many conventional aids to navigation were established for commercial mariners who now use radar. As a result these users no longer require as many landfall shore lights, large lighted buoys and fog signals and support their discontinuance.

However, before these commercially redundant marine aids are removed, the Coast Guard is assessing, where required, the local needs of small craft operators and redesigning the old commercial aids to meet these needs within national provision policies and design standards.

Coast Guard policy does not provide for the retention of fog horns for pleasure craft, due to the high cost to provide such a service across Canada. However, where practical and where there is local support, the existing redundant fog horns are being transferred to local authorities at no cost.

The conversion of light stations to solar power allows major economic and environmental benefits by allowing removal of fuel tanks and diesel generators. Although this eliminates the need for many structures, the Coast Guard will protect all heritage light stations through continued operation or transfer to provincial, municipal or other authorities for local use.

2. Aids to Navigation Standards

In consultation with local users, all aids to navigation systems across Canada are under review. National system design standards will be used to assess these systems. Systems that do not meet these standards will be upgraded; those systems that exceed them will be downsized.

Adjustments in some channels will result in an increase or a decrease in the number of buoys and/or the conversion of some lighted buoys to unlighted buoys displaying reflective material.

3. Private Aids to Navigation

Although Coast Guard policy does not provide for the establishment of aids to navigation in inadequately charted waters, or where the traffic volume does not justify the cost of the system, some have been established in the past. These aids to navigation will be transferred to local authorities at no cost, with Coast Guard retaining design and regulatory authority under the *Private Buoy Regulations*.

NEW INITIATIVES

The Canadian Coast Guard is also introducing a new differential correction service to augment the satellite-based Global Positioning System (GPS), with 18 transmitting stations fully operational in 1998.

This Differential Global Positioning System (DGPS), will improve the accuracy and integrity of GPS and will enable mariners who are equipped with the appropriate receivers to identify their precise position in most major southern Canadian waters, including the Great Lakes and the St. Lawrence River.

The use of DGPS in conjunction with Electronic Chart Display and Information Systems (ECDIS) will greatly improve navigation accuracy. The expanding use of this new technology is expected to increase marine safety and thus provide greater environmental protection to Canadian waters. It is also believed that implementation of DGPS will allow further adjustment to conventional aids in the future.

All mariners and shipowners are encouraged to equip their vessels with GPS receivers which have the capability to receive the Differential signals, particularly where there is frequent risk of reduced visibility.

The Canadian Coast Guard believes that the availability of GPS, particularly when augmented by the Differential service, will make Loran C obsolete. Consultations are underway to assess the impact of discontinuing Loran C in Canada.

CENTRAL & ARCTIC REGION

Aids Modernization consultations are continuing throughout the Central and Arctic Region of the Canadian Coast Guard. Mariners are urged to continue to read and monitor Notices to Shipping and Notices to Mariners for the most recent concerning adjustments to aids to navigation. You may also access the Central and Arctic Website at www.ccg-gcc.gc.ca/cen-arc/main.htm for further information.

Mariners and representatives of user groups seeking clarification, having questions, or wishing to provide comments or recommendations concerning any aids to navigation notice may to contact:

Superintendent Marine Aids Program
Central and Arctic Region
201 Front Street North, Suite 703
Sarnia, Ontario, N7T 8B1
Telephone (519) 383-1859 or (519) 383-1861
Facsimile (519) 383-1989

MONTHLY EDITION OF NOTICES TO MARINERS

MAILING LIST CHANGES

Director General,
Marine Navigation Services Directorate,
Canadian Coast Guard,
Department of Fisheries and Oceans,
Ottawa, Ontario,
K1A 0E6

Telephone - (613) 990-3037
Facsimile - (613) 998-8428

Please indicate which edition you would like to receive.

EASTERN EDITION (will be comprised of Arctic, Newfoundland, Maritimes, Gulf & River St. Lawrence and Central areas) _____

WESTERN EDITION (will be comprised of Arctic and Pacific areas) _____

ADD _____ **AMEND** _____ **REMOVE** _____ **NO. OF COPIES** _____

OLD ADDRESS	
NAME	
STREET	APT
CITY	POSTAL CODE
PROVINCE	COUNTRY
NEW ADDRESS	
NAME	
STREET	APT
CITY	POSTAL CODE
PROVINCE	COUNTRY

ID number above address on label

or

Attach complete address label to this sheet

INDEX

NATIONAL

CANADIAN HYDROGRAPHIC SERVICE – Cumulative chart correction list..... 2100 1,2

PACIFIC

BRITISH COLUMBIA - FRASER RIVER - SAND HEADS TO ANNACIS ISLAND - Lights and
buoy..... 2114 6
- JOHNSTONE STRAIT - CHATHAMPOINT – Light..... 2124 9
- JUAN DE FUCA STRAIT - Submarines cables..... 2161 6-8
- NORTHUMBERLAND CHANNEL - OFF DUKE POINT - Buoys..... 2118 8,9
- QUEEN CHARLOTTE ISLANDS - LOW ISLAND - Light..... 2117 10
- STRAIT OF GEORGIA - POINT ROBERTS TO CORDOVA BAY - Submarines
cables..... 2160 3-6
- UPWOOD POINT - Buoy..... 2119 9
- STUART LAKE - FORT ST. JAMES - Light..... 2116 9
- VANCOUVER ISLAND - DEPARTURE BAY - INSKIP ROCK - Buoy..... 2115 9
- VANCOUVER ISLAND, WEST COAST – UCLUELET - Buoys..... 2120 10

UNITED STATES, WEST COAST - PUGET SOUND - WHIDBEY ISLAND - Submarines
cables..... 2162 3

NUMERICAL INDEX OF CANADIAN CHARTS AFFECTED

Chart No.	Notice #	Page	Chart No.	Notice #	Page	Chart No.	Notice #	Page
3080	2116	9	LC 3902	2117	10			
3312	2119	9						
	2124	9						
3313	2115	9						
	2118	8,9						
	2160							
	2161	6-8						
3415	2161	6-8						
3419	2161	6-8						
3441	2160	3-6						
3442	2160	3-6						
3457	2115	9						
3458	2115	9						
	2118	8,9						
LC 3461	2161	6-8						
	2162	3						
LC 3463	2160	3-6						
3475	2118	8,9						
3490	2114	6						
3492	2160	3-6						
LC 3512	2119	9						
3539	2124	9						
3543	2124	9						
LC 3606	2161	6-8						
3646	2120	10						
3807	2117	10						
LC 3853	2117	10						
3894	2117	10						

***2100 CANADIAN HYDROGRAPHIC SERVICE - Cumulative chart correction list.**

The accompanying correction list is a cumulative list of charts affected by Notices to Mariners from 28-AUGUST-98 to 30-OCTOBER-98

Chart -----	Edition and Notices to Mariners Numbers -----
1220	41(1910/98)
L/C 1221	41(1910/98)
1233	36(1713/98), 35(1538/98)
L/C 1234	44(1926/98 NEW EDITION)
L/C 1235	36(1713/98)
1310	40(1902/98), 39(1747/98 NEW EDITION)
1312	44(1923/98)
1317	35(1538/98)
1338	39(1747/98 REPRINT), 35(1540/98)
1339	35(1540/98)
1409	36(1714/98)
1410	41(1911/98)
1411	35(1545/98)
1413	36(1703/98)
2006	36(1702/98)
2054	39(1752/98)
L/C 2058	39(1752/98), 37(1718/98)
2059	44(1926/98 NEW CHART)
L/C 2060	39(1752/98, 1740/98)
L/C 2064	39(1740/98), 36(1702/98)
2069	39(1752/98), 36(1702/98)
L/C 2077	36(1704/98)
2085	36(1704/98)
L/C 2100	37(1722/98, 1719/98), 36(1705/98)
L/C 2120	37(1719/98)
L/C 2121	37(1722/98), 36(1705/98)
L/C 2122	37(1722/98)
2223	44(1937/98)
2239	44(1937/98)
2259	36(1701/98)
L/C 2300	41(1907/98)
2313	44(1935/98)
3493	37(1730/98)
3494	37(1730/98)
3534	37(1728/98)
3538	35(1537/98)
3555	35(1537/98)
3957	39(1747/98 NEW EDITION)
4000	36(1712/98)
L/C 4001	38(1737/98), 36(1712/98)
L/C 4003	41(1908/98)
L/C 4006	38(1737/98)
L/C 4015	40(1904/98)
L/C 4016	38(1737/98)
L/C 4017	43(1918/98), 40(1906/98)
L/C 4024	37(1726/98, 1725/98)
L/C 4026	44(1931/98)
L/C 4047	38(1737/98)

L/C 4049		36(1712/98)
L/C 4230		39(1747/98 REPRINT), 37(1715/98)
4277		39(1748/98, 1747/98 NEW EDITION)
4279		44(1926/98 NEW EDITION)
4328		39(1747/98 NEW EDITION)
L/C 4335		44(1926/98 NEW EDITION)
L/C 4367		43(1917/98)
4396		36(1710/98)
L/C 4406		42(1913/98)
4416		39(1747/98 NEW EDITION)
4449		39(1747/98 NEW EDITION)
4470		38(1739/98)
4471		44(1934/98, 1933/98, 1932/98)
4483		43(1916/98)
L/C 4485		37(1726/98)
L/C 4486		38(1736/98), 37(1726/98)
L/C 4520		43(1918/98)
4521		36(1707/98)
4598		40(1901/98)
L/C 4624		42(1914/98)
4634		40(1904/98)
4682		40(1903/98)
L/C 4817		38(1737/98)
4830		42(1912/98)
L/C 4831		42(1912/98)
L/C 4832		42(1912/98)
4843		43(1915/98)
L/C 4845		35(1541/98)
L/C 4846		40(1906/98)
L/C 4847		40(1906/98)
4849		44(1921/98), 40(1906/98)
L/C 4850		40(1906/98)
L/C 4851		41(1909/98), 35(1539/98)
4852		35(1539/98)
4854		44(1921/98)
4886		39(1747/98 NEW CHART)
4920		44(1926/98 NEW EDITION)
4921		44(1928/98), 38(1736/98)
4957		37(1733/98)
L/C 5030		36(1711/98)
5044		39(1754/98)
5048		36(1709/98)
5049		36(1708/98)
5051		36(1708/98)
5070		39(1747/98 NEW CHART)
5179		44(1938/98)
5706		35(1536/98)
7083		37(1729/98)
7502		39(1747/98 NEW EDITION)
7783		37(1729/98)
7784		37(1729/98), 35(1546/98 NEW CHART)
L/C 8011		36(1712/98)
L/C 8012		36(1712/98)
L/C 8014		40(1906/98)

(AMA8035-10-35)

(DFO-H98-010)

***2162 UNITED STATES, WEST COAST - PUGET SOUND - WHIDBEY ISLAND - Submarines cables.**

Chart (Last correction) - L/C 3461(1)(NAD 27)(2161/98)

1. Add	submarine cable	joining	48°18'29"N 122°42'55.5"W
			48 18 27.9 N 122 43 35.7 W
			48 18 20.3 N 122 44 36.4 W
			48 18 13N 122 46 38 W
			48 18 09.6 N 122 46 48.8 W
			48 18 04.1 N 122 46 56 W
			48 17 15.3 N 122 47 13.9 W
			48 16 58.7 N 122 47 24.1 W
			48 15 24.2 N 122 48 08.4 W
			48 14 53.6 N 122 48 13 W
			48 13 43.7 N 122 48 59.5 W
			48 13 30.8 N 122 48 54.3 W
			48 13 23.3 N 122 48 38.1 W
			48 11 33 N 122 45 54.5 W
			48 11 15.9 N 122 45 20.9 W
			48 10 55.4 N 122 44 49.9 W
			48 10 30.9 N 122 44 22.5 W
			48 07 58 N 122 40 33.1 W
			48 07 33.3 N 122 39 59.3 W
			48 07 08.1 N 122 39 18 W
			48 06 57.5 N 122 39 06.2 W
			48 06 43.5 N 122 38 57.8 W
			48 05 51.7 N 122 38 37.9 W
			48 05 42.7 N 122 38 28.3 W
			48 05 10.1 N 122 38 25.8 W
			48 01 58.9 N 122 37 19.9 W
		and	47 58 39 N 122 34 30 W

NOTE: (1) A graphic representation to assist in positioning this cable on your chart may be obtained free of charge from the cable owner, Ledcor Industries, at 604-681-7500.

(2) Digital data products 3461R/M and 70141(3461) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-35)

(DFO-P98-043)

***2160 BRITISH COLUMBIA - STRAIT OF GEORGIA - POINT ROBERTS TO CORDOVA BAY - Submarines cables.**

Charts (Last correction) - 3492(Compartment b-c)(1)(Compartment a-b)(2)(NAD83)(1511/98) - 3441(3)(NAD 27)(1107/98) - 3442(4)(NAD27)(311/98) - L/C 3463(5,6)(NAD83)(1528/98) - 3313(Sheet 5)(7,8)(Sheet 6)(9)(Sheet 11)(10,11)(Sheet 22)(12)(Sheet 24)(13)(NAD83)

1. Add	submarine cable	joining	48°58'19.1" N 123°04'44.8" W
			48 58 08.6 N 123 04 49.1 W
		and	48 57 30 N 123 05 45.1 W
2. Add	cable sign		48 58 19.7 N 123 04 44.5 W
3. Add	submarine cable	joining	48 45 54.8 N 123 01 45 W
			48 45 32.5 N 123 02 20.4 W
			48 45 04.4 N 123 04 10.3 W
			48 45 04.1 N 123 04 24.1 W

48 44 50.3 N 123 04 54 W
 48 44 43.2 N 123 05 27.7 W
 48 44 37.7 N 123 05 41.5 W
 48 44'26" N 123 06'23".9 W
 48 44 17 N 123 06 45.7 W
 48 44 06.3 N 123 07 23.8 W
 48 43 49.9 N 123 08 47.7 W
 48 43 20.8 N 123 10 29.5 W
 48 43 16.3 N 123 11 13.2 W
 48 42 53.4 N 123 13 39.9 W
 48 42 53.4 N 123 13 56.1 W
 48 42 48.7 N 123 14 10.4 W
 48 42 40.6 N 123 14 21.4 W
 48 42 24.4 N 123 14 32.6 W
 48 41 48.3 N 123 15 08 W
 48 41 36.8 N 123 15 13.1 W
 48 41 25.6 N 123 15 10.9 W
 48 41 07.7 N 123 14 56.7 W
 48 40 20.8 N 123 14 27.8 W
 48 39 19.3 N 123 13 41.1 W
 48 39 00.7 N 123 13 31.3 W
 48 38 00.6 N 123 13 43.2 W
 48 35 15.4 N 123 12 55.2 W
 48 34 38 N 123 12 34 W
 48 34 24.6 N 123 12 31.8 W
 and 48 32 12 N 123 11 30.5 W

4. Add submarine cable

joining 48 55 15 N 123 09 34 W
 48 55 11.7 N 123 09 43.8 W
 48 55 04.6 N 123 09 52 W
 48 54 52.2 N 123 09 51.8 W
 and 48 54 44 N 123 09 34 W

5. Add submarine cable

joining 48 58 19.1 N 123 04 44.8 W
 48 58 08.6 N 123 04 49.1 W
 48 57 10.8 N 123 06 13.2 W
 48 55 17.6 N 123 09 30.8 W
 48 55 11 N 123 09 48.5 W
 48 55 04 N 123 09 56.7 W
 48 54 51.5 N 123 09 56.5 W
 48 54 42.8 N 123 09 36.8 W
 48 52 18.7 N 123 05 08.7 W
 and 48 50 00 N 123 00 58.2 W

6. Add cable sign

48 58 20.6 N 123 04 44.7 W

7. Add submarine cable

joining 48 31 09.9 N 123 21 59.6 W
 48 31 09.9 N 123 21 54 W
 48 30 29.9 N 123 19 00 W
 48 31 01.4 N 123 16 44.1 W
 48 31 12 N 123 14 42.8 W
 48 31 11.9 N 123 12 06.7 W
 48 31 21.2 N 123 11 41 W
 48 31 38.1 N 123 11 25.8 W
 48 31 53.7 N 123 11 23.6 W
 48 32 14.4 N 123 11 36.8 W
 48 34 23.9 N 123 12 36.5 W
 48 34 37.3 N 123 12 38.7 W
 48 35 14.7 N 123 12 59.9 W
 and 48 35 27.5 N 123 13 03.5 W

8. Add	cable sign		48 31 09.9 N	123 22 00.5 W
9. Add	submarine cable	joining	48 34 41".4 N	123 12 41".1 W
			48 35 14.7 N	123 12 59.9 W
			48 37 59.9 N	123 13 47.9 W
			48 39 00 N	123 13 36 W
			48 40 20.1 N	123 14 32.5 W
			48 41 07 N	123 15 01.4 W
			48 41 24.9 N	123 15 15.6 W
			48 41 36.1 N	123 15 17.8 W
			48 41 47.6 N	123 15 12.7 W
			48 42 03 N	123 14 56.1 W
			48 42 23.7 N	123 14 37.3 W
			48 42 39.9 N	123 14 26.1 W
			48 42 48 N	123 14 15.1 W
			48 42 52.7 N	123 14 00.8 W
			48 42 52.7 N	123 13 44.6 W
		and	48 43 08.2 N	123 12 05 W
10. Add	submarine cable	joining	48 41 41.4 N	123 15 15.4 W
			48 41 47.6 N	123 15 12.7 W
			48 42 03 N	123 14 56.1 W
			48 42 23.7 N	123 14 37.3 W
			48 42 39.9 N	123 14 26.1 W
			48 42 48 N	123 14 15.1 W
			48 42 52.7 N	123 14 00.8 W
			48 42 52.7 N	123 13 44.6 W
			48 43 15.6 N	123 11 17.9 W
			48 43 20.1 N	123 10 34.2 W
			48 43 28.5 N	123 10 08 W
			48 43 49.2 N	123 08 52.4 W
			48 44 05.6 N	123 07 28.5 W
			48 44 16.3 N	123 06 50.4 W
			48 44 25.3 N	123 06 28.6 W
		and	48 44 27.5 N	123 06 20.7 W
11. Add	submarine cable	joining	48 53 19.9 N	123 07 04.2 W
		and	48 52 56 N	123 06 20.7 W
12. Add	submarine cable	joining	48 31 12.1 N	123 13 52.7 W
			48 31 11.9 N	123 12 06.7 W
			48 31 21.2 N	123 11 41 W
			48 31 38.1 N	123 11 25.8 W
			48 31 53.7 N	123 11 23.6 W
			48 32 14.4 N	123 11 36.8 W
		and	48 32 45.9 N	123 11 51 W
13. Add	submarine cable	joining	48 50 07 N	123 01 10.9 W
			48 49 53.2 N	123 00 45.4 W
			48 49 23.7 N	122 59 44.7 W
			48 49 06.6 N	122 59 20.3 W
			48 48 13.2 N	122 58 57.6 W
			48 47 46.6 N	122 58 42.7 W
			48 47 40.1 N	122 58 43.7 W
			48 47 33.5 N	122 58 49.9 W
			48 47 20.1 N	122 59 18.2 W
			48 46 34.1 N	123 00 38.2 W
			48 46 23 N	123 00 53.6 W
			48 46 04.6 N	123 01 32.6 W

48 45 31.8 N 123 02 25.1 W
~~48 45 03.7 N 123 04 15.0 W~~
 48 45 03.4 N 123 04 28.8 W
 48 44 49.6 N 123 04 58.7 W
 48 44 42.5 N 123 05 32.4 W
 48 44 37 N 123 05 46.2 W
 48 44 25.3 N 123 06 28.6 W
 48 44 16.3 N 123 06 50.4 W
 48 44 05.6 N 123 07 28.5 W
 and 48 43 58.5 N 123 08 04.7 W

- NOTE:
- (1) A graphic representation to assist in positioning this cable on your chart may be obtained free of charge from the cable owner, Ledcor Industries, at 604-681-7500.
 - (2) Digital data products 3441R/M, 3442R/M, 3463R/M, 70003(3441), 70005(3442), 70145(3463) and 70297(3492) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-35)

(DFO-P98-041)

***2114 BRITISH COLUMBIA - FRASER RIVER - SAND HEADS TO ANNACIS ISLAND - Lights and buoy.**

Chart (Last correction) - 3490(Compartment A-B)(NAD 83)(1-6)(1308/98) - 3490(Compartment B-C) (NAD 83)(6)(1308/98)

- | | | |
|------------|---|----------------------------|
| 1. Amend | Fl G to read Fl(3) G | 49 07 10.4 N 123 16 11.1 W |
| 2. Replace | light with a porthand daybeacon equipped with a radar reflector | 49 06 54.4 N 123 16 48.8 W |
| 3. Replace | light with a porthand daybeacon equipped with a radar reflector | 49 06 31.1 N 123 17 44.4 W |
| 4. Replace | light with a porthand daybeacon equipped with a radar reflector | 49 07 26.1 N 123 15 32.4 W |
| 5. Delete | red light buoy S26 | 49 07 29 N 123 04 08 W |
| 6. Replace | light with a porthand daybeacon equipped with a radar reflector | 49 09 06.9 N 123 01 22.9 W |

- NOTE:
- (1) Light structures remain on site.
 - (2) Digital data products 3490R/M, 70015(3490) and 70128(3490) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-7-16)

(CCG-P98-003-008, DFO-P98-034)

***2161 BRITISH COLUMBIA - JUAN DE FUCA STRAIT - Submarines cables.**

Charts (Last correction) - 3419(1,2)(NAD 83)(445/95) - 3415(3,4)(NAD 27)(506/97) - L/C 3461 (5-7)(NAD 27)(1319/98) - L/C 3606(8)(NAD 27)(1301/98) - 3313(Sheet 4)(2,9)(NAD 83)

- | | | | |
|--------|-----------------|---------|------------------------------|
| 1. Add | submarine cable | joining | 48 25 15.1" N 123 24 41.7" W |
| | | | 48 25 11.7 N 123 24 45.1 W |
| | | | 48 25 10.9 N 123 24 50.3 W |

			48 25 06.2 N	123 24 51.6 W
			48 24 56 N	123 24 49.3 W
			48 24 51.7 N	123 24 44.5 W
			48 24'45".9 N	123 24'43".7 W
			48 24 27 N	123 24 43.3 W
		and	48 24 24 N	123 24 44.1 W
2. Add	cable sign		48 25 15.3 N	123 24 41.6 W
3. Add	submarine cable	joining	48 25 16.1 N	123 24 36.7 W
			48 25 12.4 N	123 24 40.4 W
			48 25 11.6 N	123 24 45.6 W
			48 25 06.9 N	123 24 46.9 W
			48 24 56.7 N	123 24 44.7 W
			48 24 52.4 N	123 24 39.8 W
			48 24 46.6 N	123 24 39.1 W
			48 24 27.7 N	123 24 38.6 W
		and	48 24 09 N	123 24 43.6 W
4. Add	cable sign		48 25 16.2 N	123 24 36.6 W
5. Add	submarine cable	joining	48 25 16.1 N	123 24 36.7 W
			48 25 12.4 N	123 24 40.4 W
			48 25 11.6 N	123 24 45.6 W
			48 25 06.9 N	123 24 46.9 W
			48 24 56.7 N	123 24 44.7 W
			48 24 52.4 N	123 24 39.8 W
			48 24 46.6 N	123 24 39 W
			48 24 27.7 N	123 24 38.6 W
			48 23 29.6 N	123 24 53.1 W
			48 23 21.6 N	123 24 48.3 W
			48 23 19.9 N	123 24 39.8 W
			48 23 19.4 N	123 23 48.3 W
			48 22 49 N	123 16 15 W
			48 22 26.4 N	123 15 30.3 W
			48 21 49.4 N	123 14 49.5 W
			48 21 28.2 N	123 14 09.1 W
			48 21 24.7 N	123 13 54.1 W
			48 21 35.5 N	123 12 04.1 W
			48 21 40.8 N	123 11 44.1 W
			48 22 36 N	123 10 56 W
			48 22 43.9 N	123 10 20.3 W
			48 22 34.5 N	123 08 46 W
			48 22 36.3 N	123 06 57.8 W
			48 22 20.7 N	122 57 45.2 W
			48 21 23.7 N	122 52 49.2 W
			48 21 14.5 N	122 49 48.7 W
			48 21 14.8 N	122 48 41 W
			48 21 04.3 N	122 48 23.6 W
			48 20 11.9 N	122 47 52.8 W
			48 20 00.4 N	122 47 41.4 W
			48 19 53.7 N	122 47 27.8 W
		and	48 18 29 N	122 42 55.5 W
6. Add	cable sign		48 25 16.2 N	123 24 34.5 W
7. Add	cable sign		48 18 27.7 N	123 42 54 W
8. Add	submarine cable	joining	48 25 16 N	123 24 35 W
			48 25 12.4 N	123 24 40.3 W

48 25 11.6 N 123 24 45.5 W
 48 25 07 N 123 24 46.8 W
 48 24'56".7 N 123 24'44".6 W
 48 24 52.4 N 123 24 39.7 W
 48 24 27.7 N 123 24 38.5 W
 48 23 29.6 N 123 24 53 W
 48 23 21.7 N 123 24 48.2 W
 48 23 19.9 N 123 24 39.7 W
 48 23 19.4 N 123 23 48.1 W

and 48 23 07.5 N 123 21 00 W

9. Add submarine cable

joining 48 25 11.7 N 123 24 45.1 W
 48 25 10.9 N 123 24 50.3 W
 48 25 06.2 N 123 24 51.6 W
 48 24 56 N 123 24 49.3 W
 48 24 51.7 N 123 24 44.5 W
 48 24 45.9 N 123 24 43.7 W
 48 24 27 N 123 24 43.3 W
 48 23 28.9 N 123 24 57.8 W
 48 23 20.9 N 123 24 53 W
 48 23 19.2 N 123 24 44.5 W
 48 23 18.7 N 123 23 52.9 W
 48 22 48.3 N 123 16 19.7 W
 48 22 25.7 N 123 15 34.9 W
 48 21 48.7 N 123 14 54.1 W
 48 21 24 N 123 13 58.8 W
 48 21 40.1 N 123 11 48.8 W
 48 22 35.3 N 123 11 00.7 W
 48 22 43.2 N 123 10 24.9 W
 and 48 22 41.2 N 123 10 04.7 W

NOTE: (1) A graphic representation to assist in positioning this cable on your chart may be obtained free of charge from the cable owner, Ledcor Industries, at 604-681-7500.
 (2) Digital data products 3415R/M, 3419R/M, 3461R/M, 3606R/M, 70014(3415), 70078(3313), 70138(3419), 70141(3461) and 70144(3606) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-35)

(DFO-P98-042)

***2118 BRITISH COLUMBIA - NORTHUMBERLAND CHANNEL - OFF DUKE POINT - Buoys.**

Charts (Last correction) - 3475(Plan, Dodd Narrows to Flat Top Islands)(NAD 27)(1-4)(183/96) - 3458(NAD 83)(5-8)(2115/98) - 3313(Sheet 20)(NAD 83)(5-8)

1. Add orange can buoy Priv 49 08'50".9 N 123 52'19".7 W
 2. Add orange can buoy Priv 49 08 48.1 N 123 52 16.6 W
 3. Add orange can buoy Priv 49 08 47.2 N 123 52 14.3 W
 4. Add orange can buoy Priv 49 08 46.2 N 123 52 13.3 W
 5. Add orange can buoy Priv 49 08 50.2 N 123 52 24.5 W
 6. Add orange can buoy Priv 49 08 47.4 N 123 52 21.4 W
 7. Add orange can buoy Priv 49 08 46.5 N 123 52 19.1 W

8. Add orange can buoy Priv 49 08 45.5 N 123 52 18.1 W

NOTE: Digital data products 3458R/M, 3475R/M, 70089(3458) and 70157(3475) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-5-16)

(CCG-P98-025, DFO-P98-031)

***2115 BRITISH COLUMBIA - VANCOUVER ISLAND - DEPARTURE BAY - INSKIP ROCK - Buoy.**

Charts (Last correction) - 3457(NAD 83)(1)(650/96) - 3458(NAD 83)(1)(652/97) - 3313(Sheet 21)
(Vancouver Island/Île de Vancouver)(NAD 83)(1)

1. Add yellow cautionary buoy marked PC 49°12'30" N 123°57'19" W

NOTE: Digital data products 3457R/M, 3458R/M, 70085(3457) and 70089(3458) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-5-16)

(CCG-P98-029, DFO-P98-037)

***2119 BRITISH COLUMBIA - STRAIT OF GEORGIA - UPWOOD POINT - Buoy.**

Charts (Last correction) - LC 3512(NAD 27)(1,2)(1528/98) - 3312(Sheet 1)(NAD 27)(1,2)

1. Add south cardinal spar buoy YB, 49°29'20".6 N 124°07'35".1 W
marked QT

2. Replace bifurcation daybeacon with a rock 49 29 21.7 N 124 07 33 W
which covers and uncovers with
drying height of 4 metres
6 decimetres

NOTE: Digital data products 3512R/M and 70142(3512) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-5-16)

(CCG-P98-026, DFO-P98-033)

***2116 BRITISH COLUMBIA - STUART LAKE - FORT ST. JAMES - Light.**

Chart - 3080(NAD 83)(1)

1. Amend Fl to read Fl G 54°27'04" N 124°16'30" W

(AMA8035-10-7-16)

(CCG-P98-021, DFO-P98-035)

***2124 BRITISH COLUMBIA - JOHNSTONE STRAIT - CHATHAM POINT - Light.**

Charts (Last correction) - 3539(NAD 83)(1)(697/97) - 3543(NAD 83)(1)(228/97) - 3312(Sheet 24)
(NAD 27)(2)

1. Amend F W Fl G 5s 6m to read 50°20'00".6 N 125°26'25".9 W (approx)

"FI G 5s 6m"

2. Amend F W FI G 5s 6m to read 50 20 01.3 N 125 26 20.7 W (approx)
"FI G 5s 6m"

(AMA8035-10-7-16)

(CCG-P98-032, DFO-P98-039)

***2120 BRITISH COLUMBIA - VANCOUVER ISLAND, WEST COAST - UCLUELET - Buoys.**

Chart (Last correction) - 3646(Plan,Ucluelet Inlet)(NAD 83)(1,2)(NewEdn., June/95)

1. Delete bifurcation light buoy YH 4856'26" N 12532'11" W

2. Add red light buoy QR, marked Y44 48 56 25.3 N 125 32 17.5 W

NOTE: Digital data products 3646R/M and 70226(3646) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value AddedRemarketers (VAR) for updates.

(AMA8035-10-5-16)

(CCG-P98-024, DFO-P98-032)

***2117 BRITISH COLUMBIA - QUEEN CHARLOTTE ISLANDS - LOW ISLAND - Light.**

Charts (Last correction) - 3807(NAD 27)(1)(92/83) - 3894(NAD 83)(2)(NewEdn., June/98) -
LC 3853(NAD 27)(1)(427/96) - LC 3902(NAD 27)(3)(609/97)

1. Amend FI 6s 56ft 5M to read FI 4s 59ft 5M 5254'45" N 13132'18" W

2. Amend FI 6s 17m 5M to read FI 4s 18m 5M 52 54 43 N 131 32 24 W

3. Amend FI 6s 54ft 5M to read FI 4s 59ft 5M 52 54 45 N 131 32 18 W

NOTE: Digital data products 3807R/M, 3853R/M, 3894R/M, 3902R/M, 70064(3902) and 70077(3853) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value AddedRemarketers (VAR) for updates.

(AMA8035-10-7-16)

(CCG-P98-028, DFO-P98-036)

SAILING DIRECTIONS AND SMALL CRAFT GUIDE CORRECTIONS

British Columbia, Volume 1, Fifteenth Edition, 1990 —

Page 65 — After paragraph 56

Add: 56.1 A submarine cable (fiberoptic) is laid in Juan de Fuca Strait leading south from Fleming Bay then east along the north side of the strait across the south approach to Haro Strait.
(P27/98)

Page 78 — After paragraph 324

Add: 324.1 A submarine cable (fiberoptic) is laid south through Fleming Bay then east along the north side of Juan de Fuca Strait.
(P27/98)

Page 86 — Paragraph 29, line 1 – after “**cable.** —”

Insert: A submarine cable (fiberoptic) crosses the south approach to Haro Strait. Another cable (fiberoptic) is laid from Cordova Bay then through Haro Strait and Boundary Pass and across the Strait of Georgia.
(P27/98)

Page 120 — Paragraph 35, line 1 – before “**Submarine**”

Insert: A submarine cable (fiberoptic) cross the Strait of Georgia from Point Roberts then through Boundary Pass.
(P27/98)

Page 172 — Paragraph 107, lines 1 and 2
366.8”

Replace by: 3 and 4 lights (366.6, 366.7) and a starboard hand daybeacon
(P28/97)

Page 193 — Paragraph 314, line 1

Delete: bascule
(P28/97)

Page 193 — After paragraph 314

Add: 314.1 **Caution.** — A seal barrier fence that impedes navigation crosses the river downstream from the above-mentioned bridge. Warning signs are posted upstream and downstream and a **light buoy** is in mid-channel upstream from the bridge. The above-water portion of the fence is painted fluorescent orange.
(P28/97)

Page 193 — Paragraph 315, line 2

Delete: bascule
(P28/97)

Page 212 — Paragraph 158, line 2

Delete: an amergency light and

SAILING DIRECTIONS AND SMALL CRAFT GUIDE CORRECTIONS

Small Craft Guide, British Columbia, Volume 1, Seventh Edition, 1989 —

Page 95 — After paragraph 72

Add: 72.1 A submarine cable (fiberoptic) is laid in Juan de Fuca Strait leading south from Fleming Bay then east along the north side of the strait across the south approach to Haro Strait.
(P27/98)

Page 111 — After paragraph 291

Add: 291.1 A submarine cable (fiberoptic) is laid south through Fleming Bay then east along the north side of Juan de Fuca Strait.
(P27/98)

Page 123 — After paragraph 7

Add: 7.1 A submarine cable (fiberoptic) is laid from Cordova Bay then north through Haro Strait.
(P27/98)

Page 125 — After paragraph 32

Add: 32.1 A submarine cable (fiberoptic) is laid from Cordova Bay then north through Haro Strait.
(P27/98)

Page 180 — After paragraph 8

Add: 8.1 A submarine cable (fiberoptic) is laid down the centre of Boundary Pass.
(P27/98)

Page 230 — Paragraph 253, line 1

Delete: bascule
(P28/97)

Page 230 — After paragraph 253

Add: 253.1 **Caution.** — A seal barrier fence that impedes navigation crosses the river downstream from the above-mentioned bridge. Warning signs are posted upstream and downstream and a **light buoy** is in mid-channel upstream from the bridge. The above-water portion of the fence is painted fluorescent orange. (P28/97)

Page 230 — Paragraph 254, line 2

Delete: bascule (P28/97)

Small Craft Guide, British Columbia, Volume 2, Eighth Edition, 1990

—

Page 45 — Paragraph 245, line 1

Delete: "Annieville ... (366.8)
Replace by: A starboard hand daybeacon (P28/97)

No.	Name	Position ----- Latitude N. Longitude W.	Light Characteristics	Focal Height in m. above water	Nomi- nal Range	Description ----- Height in meters above ground	Remarks ----- Fog Signals
-----	------	--	--------------------------	--	-----------------------	--	---------------------------------

Pacific

138	Sutton Rock light buoy Y44						Delete from List.	Chart:3646 2120/98
138	Sutton Rock light buoy Y44	SE. of the rock. 48 56 25.3 125 32 17.5	Q R	1s	Red, marked "Y44". Year round.	Chart:3646 2120/98
313.5 G5402.4	Northside Jetty 1A						Delete from List.	Chart:3490 2114/98
316 G5403.4	Northside Jetty 3A						Delete from List.	Chart:3490 2114/98
317 G5404	Northside Jetty 5	On jetty. 49 07 10.4 123 16 11	Fl(3) G	12s	7.6	5	White cylindrical tower on 9-pile dolphin, green band at top, marked "5". Radar reflector. Year round.	Chart:3490 2114/98
318 G5404.4	Northside Jetty 5A						Delete from List.	Chart:3490 2114/98
348.8	Light buoy S26						Delete from List.	Chart:3490 2114/98
355	Nelson Road						Delete from List.	Chart:3490 2114/98
518 G5591	Chatham Point	Off point. 50 20 00.6 125 26 25.9	Fl G	5s	6.4	12	White cylindrical tower, green band at top. Flash 1.5 s; eclipse 3.5 s High intensity green flash superimposed every 5s Emergency light. Radar reflector. Year round. Horns(2) - Blast 2s; sil. 18s Horns point 113° and 293°.	Chart:3539 2124/98
775 G5834	Low Island	On the NW. end of the northernmost Low Island. 52 54 45 131 32 18	Fl W	4s	18.1	5	White cylindrical tower. 13.0 Flash 0.5 s; eclipse 3.5 s Obscured from 311° to 339°. Year round.	Chart:3807 2117/98
821.2	Fort St. James Breakwater	54 27 04 124 16 30	Fl G	4s	3.0	Tower. 3.0 Flash 0.5 s; eclipse 3.5 s	Chart:3080 2116/98

**CANADIAN COAST GUARD
MARINE INFORMATION REPORT AND SUGGESTION SHEET**

Navigating Officer or Observer: _____ Captain: _____

Ship (or address) _____

If Merchant Vessel add Line or Company with Head Office address: _____

General locality: _____

Subject: _____

Approx. position: _____ Lat. _____ Long. _____

Chart No. used to plot: _____ (Corrected to N/N No. _____ of 19 _____) _____ Publications affected: (Quote Volume and page) _____

* Full details (Attach additional sheets as necessary)

Time (UTC) _____ Date _____

INSTRUCTIONS:

Mariners are requested to notify the responsible authorities when new or suspected dangers to navigation are discovered, changes are observed in aids to navigation, or corrections to publications are seen to be necessary.

** In the case of new or suspected dangers to navigation, it is important that all details be given in order to aid with future investigations. Items of interest include heights, depths, physical description, type of bottom and equipment method used to position the item. It is helpful to mark details on chart, which will be promptly replaced by the Canadian Hydrographic Service.*

Reports should be made to the nearest Marine Communications and Traffic Services Centre and should be confirmed in writing to:

Director, Marine Aids,
Canadian Coast Guard,
Department of Fisheries and Oceans,
Ottawa, Ontario, K1A 0E6

In the case of information concerning
navigational aids or the List of Lights,
Buoys and Fog Signals.

OR

Dominion Hydrographer,
Canadian Hydrographic Service,
Department of Fisheries and Oceans,
Ottawa, Ontario, K1A 0E6

In the case of new or suspected
dangers to navigation, or where
corrections to "Sailing Directions"
appear to be necessary.