



Canada

Canada

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SEPTEMBER 24, 1999

WESTERN EDITION OF NOTICES TO MARINERS

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CANADIAN COAST GUARD

NOTICES

1700 to 1757

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Marine Navigation Services
Directorate
Marine Aids

RECYCLED PAPER

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

ADVISORY

NOTICES TO SHIPPING (WRITTEN AND BROADCAST)

The Canadian Coast Guard is implementing a number of changes to the aids to navigation system in Canada.

These changes are advertised as Notices to Shipping (Broadcast and Written) by the Canadian Coast Guard and are followed up with Notices to Mariners, then charts are updated by hand correction, reprints or new editions.

The publication of Notices to Mariners and chart revisions are being delayed by the volume of changes that are taking place.

Mariners are advised that all relevant Written Notices to Shipping should be kept until superseded by Notices to Mariners or through revised charts issued by the Canadian Hydrographic Service.

Written Notices to Shipping are published weekly and are available from local Canadian Coast Guard Offices.

The Canadian Hydrographic Service is reviewing the impact of these changes with the Canadian Coast Guard and together we are preparing an action plan on the issuing of chart revisions.

For further information contact your local Canadian Coast Guard office.

Newfoundland

St. John's MCTS Centre
Phone: (709) 772-2083
Fax: (709) 772-6285

Maritimes

Maritimes Regional Operations Centre
Toll Free in Maritimes 1-800-565-1633
Phone: (902) 426-6030
Fax: (902) 426-6334
<http://www.mar.dfo.mpo.gc.ca/cg/ops/roc.htm>
Website E-Mail: ROCWeb@mar.dfo-mpo.gc.ca

Laurentian

GC\SO\COR
Notices to Shipping
Phone: (418) 648-5410
Fax: (418) 648-7244
E-Mail: OPSAVIS@dfo-mpo.gc.ca

Central & Arctic

Sarnia MCTS Centre
Toll Free in Ontario 1-800-265-0237
Phone: (519) 337-6360
Fax: (519) 337-2498

Pacific

Vancouver Regional Marine Information Centre
Phone: (604) 666-6011
Fax: (604) 666-8453



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 *xiii* 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 for 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 a 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 DGPS Reference Stations in Canada					
Station Name	Id. Nos of reference stations	DGPS Station ID	Geog. Position Latitude Longitude	Frequency [kHz]	Bit/s
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
Rigolet, NFLD	344,345	946	54 15 N 58 30 W	299	200
Partridge Island, NB	326,327	939	45 14 N 66 03 W	295	200
Pt. Escuminiac, NB	332,333	936	47 04 N 64 48 W	319	200
Fox Island, NS	336,337	934	45 20 N 61 05 W	307	200
Western Head, NS	334,335	935	43 59 N 64 40 W	312	200
St.-Jean-sur-Richelieu, QC	312,313	929	45 19 N 73 19 W	296	200
Lauzon, QC	316,317	927	46 49 N 71 10 W	309	200
Riviere du Loup, QC	318,319	926	47 46 N 69 36 W	300	200
Moisie, QC	320,321	925	50 12 N 66 07 W	313	200
Warton, ON	310,311	918	44 45 N 81 07 W	286	200
Cardinal, ON	308,309	919	44 47 N 75 25 W	306	200
Alert Bay, BC	300,301	909	50 35 N 126 55 W	309	200
Amphritrite 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	300	200

			131 49 W		
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DGPS RECEIVER - WARNING

The Canadian Coast Guard's Differential Global Positioning System (DGPS) broadcast contains built in health information designed to alert a DGPS user receiver of an out of tolerance or fault condition. During testing, it was found that some user DGPS receivers did not process the health information properly. Improper processing by user equipment can result in incorrect positions.

Please contact your DGPS manufacturer or supplier to ensure that your receiver is capable of processing the DGPS Reference Station Health information correctly.

DGPS USER ALERT

The Canadian Coast Guard received reports in March 97 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.

DISCREPANCY REPORT FOR DGPS USERS

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.

GPS "ROLLOVER" AUGUST 1999

The Global Positioning System accounts for time by using a number for every week the service is in operation and accounts for the seconds within each numeric week. It counts weeks using a starting point of midnight (0000) on the evening of January 5, 1980 / morning of January 6, 1980 (UTC), and has increased its count by 1 for each week since then. Both week and seconds are broadcast as part of the GPS message provided by the satellites and are used by receivers in their computations. The GPS week number field in this message can only provide for numbers up to 1024 which means that, at the completion of the week 1023, the week number field will roll over from 1023 back to 0. This will occur at midnight 21-22 August 1999. On 22 August 1999, unless repaired, many GPS receivers will claim that it is 6 January 1980.

It will be the responsibility of the user to account for this changeover, the satellite themselves will simply start broadcasting the new week number. How it will affect your particular GPS unit will depend on what brand and model of receiver you have. Some receivers may merely display inaccurate date information, but others may also calculate incorrect navigation information or might stop providing positions. If the rollover hasn't been taken into account at the time your GPS receiver was designed and built, then the unit might have problems. Some units will require a software upgrade. Mariners are advised to consult with the manufacturers of their receiver's compliance to GPS rollover.

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 reçu par le récepteur: _____
DGPS site using / Station DGPS utilisée: Freq.: _____ kHz SS: _____ dB SNR: _____
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: _____

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 SVCEI? Yes / Oui: _____ No / Non : _____

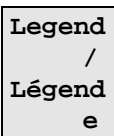
If yes, please fill below / Si oui, S.V.P. compléter ci-dessous:

ECDIS / SVCEI : Make / Fabriquant: _____ 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



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 bouée, 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 décibel.

SNR : Signal to noise ratio in decibel / Rapport signal-bruit en décibel .

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 lightstations 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 lightstations 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

Chief, Information and Publications,
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) _____

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NATIONAL

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ARCTIC

NORTHWEST TERRITORIES - CAMBRIDGE BAY - Buoys.....	1723	7,8
- M'CLINTOCK BAY TO ETA ISLAND - Buoys.....	1720	7
- SPENCE BAY AND APPROACHES - Buoys.....	1711	7
- STORIS PASSAGE TO SIMPSON STRAIT - Shoal depths.....	1721	7

PACIFIC

BRITISH COLUMBIA - FITZ HUGH SOUND - RIVERS INLET - GOOSE BAY - Rock.....	1732	8
- LAMA PASSAGE - NEW BELLABELLA - Buoys.....	1702	8
UNITED STATES - ALASKA - DIXON ENTRANCE - DALL ISLAND - POINT CORNWALLIS - Light.	1745	8,9
VANCOUVER ISLAND - ESQUIMALT HARBOUR - Beacon and radar.....	1740	8

NUMERICAL INDEX OF CANADIAN CHARTS AFFECTED

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3787	1702	8					
LC 3802	1745	8,9					
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7731	1721	7					
7733	1721	7					
7735	1720	7					
7750	1723	7,8					
7770	1711	7					

***1756 CANADIAN COAST GUARD PUBLICATION - Amendments to the 1999 Annual Edition of the Notices to Mariners.**

The following pages should be substituted or added as indicated.

Substitute the following page.

This publication is available from:

Hydrographic Chart Distribution Office
Fisheries and Oceans Canada
1675 Russell Road
P.O. Box 8080
Ottawa, Ontario
Canada
K1G 3H6

Phone: (613) 998-4931
Fax: (613) 998-1217
E-mail: chs_sales@dfo-mpo.gc.ca

Internet: <http://www.chs-shc.dfo-mpo.gc.ca/>

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(Aussi disponible en français)

Substitute page A13-9 by the following.

13. Arriving Lewisporte or Botwood, Nfld., via St. John's and Hamilton Sound
Charts in List 11 up to 4565, and then:

CANADIAN CATALOGUE		U.S.A CATALOGUE	RUSSIAN FEDERATION CATALOGUE	U.K. CATALOGUE
Chart	TitleScale 1:	Chart	Chart	Chart
4850	Cape St-Francis to/à Baccalieu Island and/et Heart's Content 60,000	14360 REFERENCE	25643	296 REFERENCE
	Old Perlican 15,000			
	Heart's Content 20,000			
4853	Trinity Bay Northern Portion/ Partie Nord 60,000			
	Trinity Harbour 25,000			
	Trinity Wharves 2,500			
4562	Bonavista Bay (Outer Portion) 75,000	14360 & 14380 REFERENCE	25642	296 & 293 REFERENCE

4560	Indian Bay to Wadham Islands 75,000		14380 REFERENCE	25641	293 REFERENCE
4530	Hamilton Sound, Eastern Portion/ Partie Est 40,000			22618 REFERENCE	
	Carmanville 18,000				
4531	Carmanville to Bacalhao Island and Fogo 40,000				293 & 285 REFERENCE
4520	Orange Bay to Cape Banovista 286,000		14380	22617 & 22618	285 & 293
	Fortune Harbor 25,000				
	Great Troytown Harbor 25,000				
	Round Harbor 12,500				
4886	Cutwell Harbor 25,000		14380 REFERENCE	22617 REFERENCE	285 REFERENCE
	Twillingate Harbours 15,000				

The charts in List 14, excluding 4520.

Any chart listed on the same line as the Canadian chart may be used as an equivalent in the immediate area concerned except those charts marked REFERENCE, which are to be used for reference purposes only because their chart scale does not comply with that required by the regulations.

Substitute page A13-14 by the following.

22. Montréal to Thunder Bay (continued)

CANADIAN CATALOGUE		U.S.A CATALOGUE	RUSSIAN FEDERATION CATALOGUE	U.K. CATALOGUE
Chart	TitleScale 1:	Chart	Chart	Chart
14852(US)	St. Clair River 40,000	14852	25928	424 REFERENCE
2228	Lake Huron/Lac Huron Southern Portion/Partie Sud 120,000	14862	23945 & 23948	
2200	Lake Huron/Lac Huron 400,000	14860	21903	
14864(US)	Harrisville to Forty Mile Pt. 120,000	14864	23946 & 23947	
2297	Duck Islands to De Tour Passage 91,100	14880	23941	
14882(US)	St. Marys River - De Tour Passage to Munuscong Lake 40,000	14882	25942	
14883(US)	St. Marys River - Munuscong Lake to Sault Ste. Marie 40,000	14883	25943	
14884(US)	St. Marys River - Head of Lake Nicolet to Whitefish Bay40,000	14884	25944	
14962(US)	St. Marys River to Au Sable Point 120,000	14962	23950 & 23951	
2310	Caribou Island to Michipicoten Island 97,300	NONE	21904 REFERENCE	
2300	Lake Superior/Lac Supérieur	14960 & 14961		

	600,000		
	Superior Shoal 70,000		21904 REFERENCE
14968(US)	Grand Portage Bay to Shesheeb Point, Ont. 120,000	14968	
2301	Passage Island to/à Thunder Bay 74,500		25960
2302	St. Ignace Island to Passage Island 73,000		25955
2311	Thunder Cape to/à Pigeon River 72,900		25956
2314	Port of Thunder Bay 20,000	14968 REFERENCE	28960
	Main Entrance North/ Entrée Principale du Nord 5,000		
	Main Entrance South/ Entrée Principale du Sud 5,000		
	Mission River Entrance/ Entrée à Mission River 5,000		

Any chart listed on the same line as the Canadian chart may be used as an equivalent in the immediate area concerned except those charts marked REFERENCE, which are to be used for reference purposes only because their chart scale does not comply with that required by the regulations.

Substitute page A13-18 by the following.

30. Inner Passages, British Columbia, Vancouver to Portland Canal

CANADIAN CATALOGUE			U.S.A CATALOGUE	RUSSIAN FEDERATION CATALOGUE	U.K. CATALOGUE
Chart	TitleScale 1:		Chart	Chart	Chart
3481	Approaches to/Approches à Vancouver Harbour 25,000		18406	68868	925
3463	Strait of Georgia, Southern Portion/ Partie Sud 80,000		17518	65859 & 63823 REFERENCE	79
3512	Strait of Georgia, Central Portion/ Partie Centrale 80,000		17517	63822 & 63823 REFERENCE	579 REFERENCE
3513	Strait of Georgia, Northern Portion/ Partie Nord 80,000		17515	63822 REFERENCE	
3539	Discovery Passage 40,000	17513	NONE		3162
	Seymour Narrows 20,000				
3540	Approaches to/Approches à Campbell River 10,000	17503			
3543	Cordero Channel 40,000	17521			
	Dent and/et Yuculta Rapids 20,000				NONE
	Greene Point Rapids 20,000				REFERENCE
3544	Johnstone Strait, Race Passage and/ et Current Passage 25,000	17522			
3545	Johnstone Strait, Port Neville to/à Robson Bight 40,000	17523			
3546	Broughton Strait 40,000				
	Port McNeill 20,000	17525		3417 REFERENCE	

	Alert Bay 20,000			
3547	Queen Charlotte Strait Eastern Portion/Partie Est 40,000	17526	65841	581 REFERENCE
	Stuart Narrows 20,000			
	Kenneth Passage 20,000			
3548	Queen Charlotte Strait Central Portion/Partie Centrale 40,000	17524	65840 & 65841	NONE
	Port Hardy 15,000			
	Blunden Harbour 15,000			
3549	Queen Charlotte Strait Western Portion/Partie Ouest 40,000	17528	65840	
	Bull Harbour 20,000			
3550	Approaches to/Approches à Seymour Inlet and/et Belize Inlet 40,000	17506	63818 REFERENCE	
3598	Cape Scott to Cape Calvert 74,500	17489	63818 REFERENCE	
3727	Cape Calvert to Goose Island including Fitz Hugh Sound 73,600	17486	65889	1933 REFERENCE
3934	Approaches to/Approches à Smith Sound and/et Rivers Inlet 40,000	17489 & 17486 REFERENCE	63818 REFERENCE	1933 REFERENCE
	Darby Channel 15,000			
3784	Kwakshua Channel to/à Spider Island and/et Namu Harbour 36,800	17487	65889 REFERENCE	1933 REFERENCE
Any chart listed on the same line as the Canadian chart may be used as an equivalent in the immediate area concerned except those charts marked REFERENCE, which are to be used for reference purposes only because their chart scale does not comply with that required by the regulations.				
Substitute page A14-1 by the following.				

<p>14 CANADIAN NAUTICAL CHARTS AND PUBLICATIONS AND INTERNATIONAL PUBLICATIONS</p> <p>Canadian nautical charts and the most frequently used publications may be obtained from the sources indicated below. Payment for mail orders must be made in advance, by VISA or MASTERCARD credit cards, by money order or bankable remittance payable, in Canadian funds, to the Receiver General of Canada and sent to:</p> <p>Obtainable from:</p> <p>Hydrographic Chart Distribution Office, Department of Fisheries and Oceans, P.O. Box 8080, 1675 Russell Road, Ottawa, Ontario K1G 3H6 Telephone: (613) 998-4931; (613) 998-4932; (613) 998-4933; Facsimile: (613) 998-1217 Email: CHS_sales@dfo-mpo.gc.ca Internet: http://www.chs.shc.dfo-mpo.gc.ca</p>	<p>Pacific Coast and Western Arctic Charts may also be obtained from:</p> <p>Canadian Hydrographic Service, Department of Fisheries and Oceans, Institute of Ocean Sciences, P.O. Box 6000, 9860 West Saanich Road, Sidney, B.C. V8L 4B2 Telephone: (250) 363-6358 Facsimile: (250) 363-6841 Email: chartsales@pac.dfo-mpo.gc.ca Internet: http://www.ios.bc.ca/ios/chs</p> <p>* Orders for publications marked with an asterisk may also be obtained from the Canada Communication Group-Publishing, Ottawa, Canada, K1A 0S9. (See attached order form for details).</p>
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Catalogue #	Title	Price
	Nautical Charts	\$3.50 to 88.00
	Regional Chart Catalogue and Price Lists	Free
	Tidal Current Atlases for specific areas	\$16.50 to 35.00
	Sailing Directions	
Fs72-14/1994-1E	Sailing Directions, Arctic Canada, Volume 1	\$30.00
Fs72-14/1994-1F	Instructions nautiques, Arctique canadien, volume 1	30.00
Fs72-14/1985-2E	Sailing Directions, Arctic Canada, Volume II	17.50
Fs72-14/1985-2F	Instructions nautiques, Arctique canadien, volume II	17.50
Fs72-14/1994-3E	Sailing Directions, Arctic Canada, Volume 3	21.95
Fs72-14/1994-3F	Instructions nautiques, Arctique canadien, volume 3	21.95
Fs72-13/1988E	Sailing Directions, Labrador and Hudson Bay	41.25
Fs72-13/1988F	Instructions nautiques, Labrador et baie d'Hudson	41.25
Fs72-9/1990E	Sailing Directions, Nova Scotia (Atlantic Coast) and Bay of Fundy	29.25
Fs72-9/1990F	Instructions nautiques, Nouvelle-écosse (côte de l'Atlantique) et baie de Fundy	29.25
Fs72-28/1992E	Sailing Directions, Gulf of St. Lawrence	19.95
Fs72-28/1992F	Instructions nautiques, Golfe du Saint-Laurent	19.95
Fs72-24/1992E	ATL 100 - Sailing Directions - General Information - Atlantic Coast (and Binder)	14.95

Substitute page A14-4 by the following.

Catalogue #	Title	Price
T34-6/1999E	List of Lights, Buoys and Fog Signals-Inland Waters	\$1 9.95

Section I

EDN. # 09/99

T34-6/1999F	Livre des feux, des bouées et des signaux de brume-Eaux Intérieures	19.95
T34-7/1995E	List of Lights, Buoys and Fog Signals-Pacific Coast	14.95
T34-7/1995F	Livre des feux, des bouées et des signaux de brume-Côte du Pacifique	14.95
	Radio Aids to Marine Navigation (Published annually)	
T51-5/1999E	Radio Aids to Marine Navigation-Pacific	14.95
T51-4/1999E	Radio Aids to Marine Navigation-Atlantic and Great Lakes	18.95
T51-4/1999F	Aides radio à la navigation maritime/Atlantique et Grands Lacs	18.95
T1-5E/1999E	1999 Annual Edition of Notices to Mariners	22.95
T1-5F/1999F	Édition annuelle des Avis aux navigateurs-1999	22.95
*T31-73/1992E	Ice Navigation in Canadian Waters/Navigation dans les glaces en eaux Canadiennes	24.95
*T31-73/1992F	Navigation dans les glaces en eaux canadiennes	24.95
T31-31/1999E	Safe Boating Guide	Free
T31-31/1999F	Guide de sécurité nautique	Free
Fs23-70/1990E	An Important Message for All Boaters	Free
Fs23-70/1990F	Important message pour plaisanciers	Free

The following publications are only available from: Canada Communication Group-Publishing
Ottawa, Canada, K1A 0S9
Telephone: (819) 956-4802
Telex: 053-4296
Facsimile: (819) 994-1498
Discounts available for volume purchase.

Catalogue #	Title	Price
YX55-1985-S-9	Canada Shipping Act, revised 1985/Loi sur la marine marchande du Canada, révisé 1985	22.65
T31-58/1986	Standard Marine Navigational Vocabulary/Vocabulaire normalisé de la navigation maritime	15.95
T31-59/1986	Table of Life-Saving Signals/Tableau des signaux de sauvetage	16.25
T32-5-1986E	International Code of Signals	35.95
T32-5-1986F	Code international de signaux	31.25

NOTE: All regulations published in bilingual format

(M2204-390)

(CCG-H99-067)

***1711 NORTHWEST TERRITORIES - SPENCE BAY AND APPROACHES - Buoys.**

Chart (Last correction) - 7770(NAD 27)(1)(642/94) - 7770(Inset,Spence Bay)(NAD 27)(2)(642/94)

- | | | |
|-----------|----------------|--|
| 1. Delete | black can buoy | 69°24'37" N 93°52'33" W |
| 2. Delete | black can buoy | 065° 7750 ft from beacon Bn R 15ft
(69°31'54" N 93°35'00"W)(approx.) |

(AMA8035-10-5-18)

(CCG-A98-135,136, DFO-C99-096)

***1720 NORTHWEST TERRITORIES - M'CLINTOCK BAY TO ETA ISLAND - Buoys.**

Chart (Last correction) - 7735(1-6)(569/99)

- | | | |
|-----------|--------------------|-------------------------|
| 1. Delete | black can buoy | 68°38'47" N 97°43'52" W |
| 2. Delete | red conical buoy | 68 38 42 N 97 43 37 W |
| 3. Delete | red conical buoy 2 | 68 39 21 N 97 53 49 W |
| 4. Delete | red conical buoy 4 | 68 38 44 N 97 49 41 W |
| 5. Delete | black can buoy 7 | 68 36 58 N 97 43 06 W |
| 6. Delete | black can buoy 15 | 68 33 08 N 97 27 48 W |

(AMA8035-10-5-18)

(CCG-A98-133,134,137-140, DFO-C99-093)

***1721 NORTHWEST TERRITORIES - STORIS PASSAGE TO SIMPSON STRAIT - Shoal depths.**

Charts (Last correction) - 7731(1-3)(570/97) - 7733(4-7)(569/97)

- | | | |
|--------|----------------------------------|-------------------------|
| 1. Add | 0 fathom 2 feet | 68°37'20" N 98°03'50" W |
| 2. Add | 0 fathom 2 feet | 68 36 04 N 98 01 52 W |
| 3. Add | drying height of 0 fathom 1 foot | 68 35 22 N 98 03 22 W |
| 4. Add | 0 fathom 2 feet | 68 37 14 N 98 03 08 W |
| 5. Add | 0 fathom 2 feet | 68 35 58 N 98 01 25 W |
| 6. Add | drying height of 0 fathom 1 foot | 68 35 28 N 98 03 00 W |
| 7. Add | 2 fathoms 2 feet | 68 28 38 N 97 02 10 W |

(AMA8035-10-35)

(DFO-C99-094)

***1723 NORTHWEST TERRITORIES - CAMBRIDGE BAY - Buoys.**

Chart (Last correction) - 7750(Inset, Cambridge BayHarbour)(NAD 83)(1-4)(NewEdn. June/97)

- | | | |
|--------|---------------------------|--------------------------|
| 1. Add | red conical buoy marked 2 | 69°02'43" N 105°05'12" W |
|--------|---------------------------|--------------------------|

- | | | |
|-------------------|---------------------------|--------------------------------|
| 2. Add | green can buoy marked 7 | 69 02 39 N 104 59 27 W |
| 3. Add | red conical buoy marked 8 | 69°02'45" N 104°58'48" W |
| 4. Add | green can buoy marked 11 | 69 03 00 N 104 58 52 W |
| (AMA8035-10-5-18) | | (CCG-A98-141-144, DFO-C99-098) |

***1740 BRITISH COLUMBIA - VANCOUVER ISLAND - ESQUIMALT HARBOUR - Beacon and radar.**

Charts (Last correction) - 3419(NAD 83)(1,2)(323/99) - 3440(NAD 83)(1)(1305/99) - 3313(Sheet 4) (NAD 83)(1)

- | | | |
|-----------|------------------------|---------------------------------------|
| 1. Delete | beacon and legend BnOr | 48°25'41" N 123°26'10" W
(approx.) |
| 2. Delete | legend Radar | 48 25 42 N 123 26 11.7 W (approx.) |

NOTE: Digital data products 3419R/M, 3440R/M, 70075(3440) and 70138(3419) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-35)	(DFO-P99-043)
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***1732 BRITISH COLUMBIA - FITZ HUGH SOUND - RIVERS INLET - GOOSE BAY - Rock.**

Chart (Last correction) - 3934(NAD 83)(1)(730/99)

- | | | |
|--------|---|----------------------------|
| 1. Add | rock which covers and uncovers
with a drying height of 0metre
5 decimetres Rep (1999) | 51°24'28".5 N 127°40'10" W |
|--------|---|----------------------------|

NOTE: Digital data products 3934R/M and 70131(3934) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-35)	(DFO-P99-044)
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***1702 BRITISH COLUMBIA - LAMA PASSAGE - NEW BELLA BELLA - Buoys.**

Charts (Last correction) - 3787(NAD 27)(1,2)(743/99) - 3785(NAD 27)(1,2)(558/99) - 3720(NAD 27)(1,2)(558/99)

- | | | |
|-----------|-------------------------------|--------------------------------------|
| 1. Delete | orange and white mooring buoy | 52°09'52".7 N 128°08'22" W (approx.) |
| 2. Delete | orange and white mooring buoy | 52°09'40" N 128°08'24" W (approx.) |

NOTE: Digital data products 3720R/M, 3785R/M, 3787R/M, 70059(3785) and 70119(3720) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-35)	(DFO-P99-041)
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***1745 UNITED STATES - ALASKA - DIXON ENTRANCE - DALL ISLAND - POINT CORNWALLIS
- Light.**

Charts (Last correction) - LC 3802(NAD 27)(1)(902/99) - LC 3000(NAD 27)(2)(507/99)

1. Delete	light Fl 4s 193ft 7M	54°42'14" N 132°52'18" W (approx.)
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2. Delete	light	54 42 00 N 132 52 00 W
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NOTE: Digital data products 3000R/M, 3802R/M and 70189(3802) may also be affected. Contact Nautical Data International Inc. (NDI) or your local Value Added Remarketers (VAR) for updates.

(AMA8035-10-35)

(DFO-P99-045)

SAILING DIRECTIONS AND SMALL CRAFT GUIDE CORRECTIONS

Arctic Canada, Volume 3, Fifth Edition, 1994 —

British Columbia, Volume 1, Fifteenth Edition, 1990 —

Page 67 — Paragraph 96, line 3 — after “port hand”

Insert: light and

(P34/99)

Page 76 — Paragraph 293, lines 4 and 5

Delete: prominent radar tower and

(P34/99)

Page 123 — Paragraph 112, line 3

Delete: (●—●●)

Replace by: (— — —)

(P34/99)

British Columbia, Volume 2, Twelfth Edition, 1991 —

Page 198 — Delete paragraph 57.

(P34/99)

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
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PACIFIC

216 G5334	Discovery Island	On extremity of island, Haro Strait. 48 25 28.3 123 13 32.7	F Fl	W W	5s 	28.3 	White cylindrical tower. 10.7	Flash 0.14 s; eclipse 4.86 s High intensity white flash (0.14 s) superimposed every 5s. Visible from 146° through S., W. and N. to 050°30'. Year round.
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Horns(2) - Blast 6s; sil. 54s
Horns point NE. and SE.
Horns sound in unison.

Chart:3424
Edn. 09/99

**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 (UTQ) _____ 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,
Coast Guard,
Department of Fisheries and Oceans,
Ottawa, Ontario, K1A 0E6

In the case of information Canadian
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.