



NOTICES TO MARINERS

WESTERN EDITION

Published monthly by the



CANADIAN COAST GUARD

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Marine Programs Directorate
Aids to Navigation



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Mariners are advised that all relevant Written Notices to Shipping should be kept until superseded by Notices to Mariners or through revised charts issued by the Canadian Hydrographic Service.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		Frequency [khz]	Bit/s
			Latitude	Longitude		
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	131 49 W	300	200

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 a 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, Navigation Systems, Department of Fisheries and Oceans, 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 upgraded. 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 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 SVCEI? Yes / Oui: _____ No / Non : _____

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

ECDIS / SVCEI: 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, Navigation Systems
Department of Fisheries and Oceans
200 Kent Street, Station 5130
Ottawa, ON
K1A 0E6

Directeur, Systèmes à la navigation maritimes
Ministère des Pêches et Océans
200, rue Kent, 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 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
Canadian Coast Guard
Department of Fisheries & Oceans
201 Front Street North, Suite 703
Sarnia, ON
N7T 8B1

Telephone (519) 383-1859 or (519) 383-1861
Facsimile (519) 383-1989

MONTHLY EDITION OF NOTICES TO MARINERS

MAILING LIST CHANGES

Superintendent, Information and Publications
Navigation Aids
Navigation Systems Branch
Canadian Coast Guard
Department of Fisheries and Oceans
Ottawa, ON
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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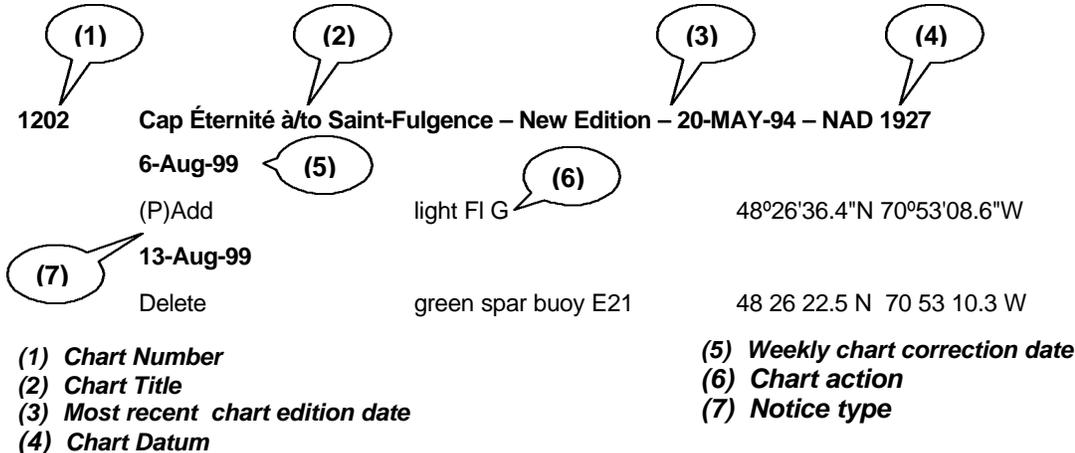
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NEWSLETTER NOTICE TO USERS

In our quest to improve our service to our clients, we are implementing the following changes to the Monthly Edition of Notices to Mariners at the start of the new millennium.

CHART CORRECTIONS – SECTION II

Corrections to nautical charts will be listed in numeric order by chart number. Each chart correction listed applies only to that particular chart. Related charts, if any, will have their own specific correction listed separately. Users should also refer to CHS Chart 1 Symbols, Abbreviations Terms for additional information pertaining to the correction of charts. The illustration below describes the elements that will comprise a typical Section II chart correction.



UPCOMING NEW FEATURES

Activity Reports

A Regional Activity Report will be compiled detailing marine aid activities that have not yet been incorporated on charts or related nautical publications. These activity reports will be updated on a monthly basis and are to be used as a reference tool only and should not differ you from using caution when navigating in these areas. Charts and nautical publications will be updated to reflect the changes mentioned in the activity reports as expeditiously as possible.

Paper Mailing List

A renewal subscription address card will be mailed out through the Monthly Edition.

Notices to Mariner Internet Site – notmar.com

Publications

As an Internet user you now have access to all the Notices to Mariners publications free of cost. All volumes of the List of Lights, Buoys & Fog Signals as well as the Annual Edition of Notices to Mariners are kept-up-to date on a Monthly basis.

Chart User Profile

Users can set up a 'user profile' account on the site to receive Notices to Mariners chart correction changes via e-mail.

Weekly Posting of Chart Corrections

Chart corrections will soon be posted to the Internet Site on a weekly basis.

We will keep you posted in future Newsletters on the implementation of these new features.

CANADIAN HYDROGRAPHIC SERVICE - Charts.

CHARTS	TITLE & CONTENTS	SCALE	PUBLISHED	CAT #	PRICE
1. New Chart.					

BRITISH COLUMBIA COLOMBIE BRITANNIQUE

3447	Nanaimo Harbour and/et Departure Bay	1:10 000	10-DEC-99	2	\$20.00
	Limit(s):				
	49°08'12"N	123°52'04"W			
	49°08'12"N	123°58'15"W			
	49°14'06"N	123°58'15"W			
	49°14'06"N	123°52'04"W			

Note: This chart incorporates and cancels Notice 556(P)/99.

2. Chart Permanently Withdrawn.

<u>CHART</u>	<u>TITLE</u>	<u>ON PUBLICATION OF CHART</u>
3457	NANAIMO HARBOUR AND/ET DEPARTURE BAY	3447

CANADA - PUBLIC PORT TARIFF INCREASES.

Following extensive consultations with users and stakeholders of Transport Canada's public ports, Transport Canada is increasing its public port fees by 5% per annum for each of the next two fiscal years. As such, all public port fees, except those for utilities and other services which will remain unchanged, will be increased by 5% on April 1, 2000, and by an additional 5% effective April 1, 2001.

These charges are applicable only to the regional/local ports and the remote ports remaining under the purview of Transport Canada. They do not apply to Canada Port Authorities, divested sites, nor facilities owned and operated by other government departments or private entities.

Transport Canada publishes a tariff schedule for all public port charges except lettings. Typical charges include:

Harbour Dues	- A charge assessed against a vessel that comes into or uses a public port. This charge is based on the vessel's size and registry.
Wharfage	- A charge for moving cargo over a public wharf. This fee is based on cargo type with a rate per unit basis (i.e. per tonne or cubic metre).
Berthage	- A charge for occupying a berth or part thereof at a public port. The charge is based on the vessel's size and its length of stay.
Storage	- A charge for use of sheds or open space for assembling or distributing cargoes. The charge depends on space occupied and duration of use.

Utilities and Other
Services

- A charge for the use of utilities and other services provided at public ports. The charge is based upon actual cost plus a percentage mark-up to cover administrative fees.

The tariff notices can be found on Transport Canada's web site at :
<http://www.tc.gc.ca/PortPrograms/en/menu.htm>. For further information, please contact:

Transport Canada
Director
Port Corporations and Port Property
330 Sparks Street
Place de Ville, Tower "C"
Ottawa, Ontario
K1A 0N5
Facsimile: 613-954-0838

CANADIAN COAST GUARD PUBLICATION - New Edition of the Annual Edition of the Notices to Mariners 2000

The new edition of the Annual Edition of Notices to Mariners for the year 2000 is now available at a cost of \$22.95.

This publication is available from:

Hydrographic Chart Distribution Office
Fisheries and Oceans Canada
9860 W. Saanich Road
P.O. Box 6000
Sidney, British Columbia
Canada
V8L 4B2
Tel: (250) 656-8358
Fax: (250) 363-6323
E-mail: chart_sales@ios.bc.ca
Internet: www.ios.bc.ca/ios/chs/

or through your authorized Canadian Hydrographic Service Chart Dealer.

This publication is also available from the Notices to Mariners Internet web site www.notmar.com

CANADIAN COAST GUARD PUBLICATIONS - New Editions of Radio Aids to Marine Navigation Publications - 2000

The 2000 editions of the Radio Aids to Marine Navigation (Atlantic and Great Lakes) and Radio Aids to Marine Navigation (Pacific) publications have been published. (Atlantic Price \$18.95), (Pacific Price \$14.95). These publications are available from:

Hydrographic Chart Distribution Office
Fisheries and Oceans Canada
1675 Russell Road
P.O. Box 8080
Ottawa, Ontario
Canada
K1G 3H6
Tel: (613) 998-4931
Fax: (613) 998-1217
E-mail: chs_sales@dfo-mpo.gc.ca
Internet: www.chs-shc.dfo-mpo.gc.ca

or

Hydrographic Chart Distribution Office
Fisheries and Oceans Canada
9860 W. Saanich Road
P.O. Box 6000
Sidney, British Columbia
Canada
V8L 4B2
Tel: (250) 656-8358
Fax: (250) 363-6323
E-mail: chart_sales@ios.bc.ca
Internet: www.ios.bc.ca/ios/chs/

Internet: <http://www.chshq.dfo.ca>

or through your authorized Canadian Hydrographic Service Chart Dealer.

L/C3000 - Juan de Fuca Strait to/à Dixon Entrance - New Edition - 20-JAN-1989 - Nad 1927

28-APR-2000.

(P)Add submarine cable

joining 48°26`27.6"N 124°41`44.5"W
 48°26`48.5"N 124°49`04.3"W
 48°23`39.4"N 124°58`33.2"W
 48°24`03.2"N 125°04`51.7"W
 48°22`43.6"N 125°15`07.6"W
 48°22`39.2"N 125°17`43.0"W
 48°21`31.5"N 125°21`24.2"W
 48°21`05.9"N 125°24`40.5"W
 48°21`11.9"N 125°27`32.0"W
 48°19`22.2"N 125°41`28.9"W
 48°17`56.3"N 125°48`17.0"W
 48°15`52.7"N 126°03`06.0"W
 48°16`12.3"N 126°06`28.9"W
 48°14`53.9"N 126°12`16.2"W
 48°12`38.3"N 126°28`58.0"W
 48°07`57.5"N 126°55`35.9"W
 48°08`30.9"N 127°05`00.0"W
 48°45`48.9"N 128°57`11.2"W
 48°51`09.0"N 129°16`43.4"W
 48°56`19.1"N 129°30`18.8"W
 49°10`15.7"N 130°33`45.5"W
 49°16`19.0"N 130°41`48.7"W
 49°19`27.0"N 130°49`00.9"W
 49°23`53.0"N 131°11`32.4"W
 49°30`38.5"N 131°29`47.3"W
 49°38`00.1"N 131°59`59.8"W
 49°49`24.0"N 132°52`15.6"W
 49°53`51.1"N 133°18`59.9"W
 49°57`40.6"N 133°25`00.0"W
 50°00`55.3"N 133°42`18.6"W
 50°07`30.2"N 134°09`59.8"W
 50°24`27.6"N 135°52`37.0"W
 50°35`50.8"N 136°52`24.0"W
 and 50°51`27.7"N 139°00`00.0"W

L/C3001 - Vancouver Island/Île de Vancouver Juan De Fuca Strait to/à Queen Charlotte Sound - New Edition - 07-OCT-1994 - Nad 1927

28-APR-2000.

(P)Add submarine cable

joining 47°59`00.0"N 122°34`33.4"W
 48°01`55.0"N 122°37`03.6"W
 48°07`02.0"N 122°38`24.9"W
 48°09`01.2"N 122°41`00.7"W
 48°12`09.8"N 122°46`11.7"W
 48°12`20.3"N 122°47`53.3"W

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48°15`03.2"N 122°53`40.8"W
 48°14`57.2"N 122°59`07.8"W
 48°15`09.3"N 123°02`22.0"W
 48°14`18.0"N 123°07`17.3"W
 48°12`20.3"N 123°15`17.9"W
 48°12`08.2"N 123°17`28.9"W
 48°10`54.4"N 123°19`26.2"W
 48°10`21.2"N 123°22`35.6"W
 48°10`22.6"N 123°26`36.7"W
 48°10`56.0"N 123°28`42.9"W
 48°12`03.7"N 123°30`38.1"W
 48°11`56.3"N 123°35`40.3"W
 48°12`32.4"N 123°37`21.9"W
 48°13`58.4"N 123°49`55.4"W
 48°16`34.9"N 124°08`23.3"W
 48°19`23.5"N 124°17`19.1"W
 48°23`22.7"N 124°31`10.2"W
 48°26`27.6"N 124°41`44.5"W
 48°26`48.5"N 124°49`04.3"W
 48°23`39.4"N 124°58`33.2"W
 48°24`03.2"N 125°04`51.7"W
 48°22`43.6"N 125°15`07.6"W
 48°22`39.2"N 125°17`43.0"W
 48°21`31.5"N 125°21`24.2"W
 48°21`05.9"N 125°24`40.5"W
 48°21`11.9"N 125°27`32.0"W
 48°19`22.2"N 125°41`28.9"W
 48°17`56.3"N 125°48`17.0"W
 48°15`52.7"N 126°03`06.0"W
 48°16`12.3"N 126°06`28.9"W
 48°14`53.9"N 126°12`16.2"W
 48°12`38.3"N 126°28`58.0"W
 48°07`57.5"N 126°55`35.9"W
 48°08`30.9"N 127°05`00.0"W
 48°45`48.9"N 128°57`11.2"W
 48°51`09.0"N 129°16`43.4"W
 48°56`19.1"N 129°30`18.8"W
 and 49°04`28.1"N 130°07`00.0"W

L/C3002 - Queen Charlotte Sound to Dixon Entrance - New Edition - 16-DEC-1994 - Nad 1927

07-APR-2000.

Delete Fog Sig

54°17`41.0"N 130°52`42.0"W

21-APR-2000.

Amend Fl(2) 8s 97ft to read Fl(2) 9s 92ft

54°17`41.0"N 130°52`42.0"W

3313 - Approaches to/Approches à Nanaimo - Sheet 20 - New chart - 28-JUL-1995 - Nad 1983

07-APR-2000.

Amend	legend Chart/Carte 3457 to read Chart/Carte 3447	49°11`06.0"N	123°53`54.0"W
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3313 - Nanaimo Harbour and/et Departure Bay - Sheet 21 - New chart - 28-JUL-1995 - Nad 1983

14-APR-2000.

Delete	light	49°09`44.3"N	123°55`33.3"W
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Delete	light	49°09`49.7"N	123°55`36.5"W
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07-APR-2000.

Amend	legend Chart/Carte 3457 to read Chart/Carte 3447	49°12`22.0"N	123°55`36.0"W
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Amend	legend Chart/Carte 3457 to read Chart/Carte 3447	49°11`15.0"N	123°54`44.0"W
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Amend	legend Chart/Carte 3457 to read Chart/Carte 3447	49°10`03.0"N	123°54`46.0"W
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3419 - Esquimalt Harbour - New chart - 02-JUL-1993 - Nad 1983

21-APR-2000.

(P>Delete	light (Priv) F R	48°26`01.8"N	123°25`36.0"W
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(P>Delete	light (Priv) F R	48°26`02.1"N	123°25`35.5"W
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(P>Delete	light (Priv) F R	48°26`02.4"N	123°25`31.4"W
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(P>Add	CAUTION: Extensive changes have occurred in the area of Yarrows Ltd Shipyards	48°25`51.0"N	123°25`33.0"W
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These changes will be incorporated into a New Edition currently in production.

3458 - Approaches to Nanaimo Harbour/Approches à Nanaimo Harbour - New Edition - 10-MAR-1995 - Nad 1983

07-APR-2000.

Delete	legend Chart/Carte 3457	49°12`24.0"N	123°55`06.0"W
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Delete	legend Chart/Carte 3457	49°10`30.0"N	123°53`42.0"W
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Add	legend Chart/Carte 3447	49°13`57.0"N	123°54`18.0"W
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Add	legend Chart/Carte 3447	49°12`42.0"N	123°52`24.0"W
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Add	legend Chart/Carte 3447	49°09`50.0"N	123°52`48.0"W
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L/C3461 - Juan de Fuca Strait, Eastern Portion / Partie Est - New chart - 06-JAN-1984 - Nad 1927

28-APR-2000.

(P>Add	submarine cable	joining	47°59`02.3"N	122°34`30.0"W
			48°00`28.4"N	122°35`42.2"W
			48°01`11.9"N	122°36`06.8"W
			48°01`51.4"N	122°36`53.3"W
			48°02`50.0"N	122°37`20.0"W
			48°05`06.6"N	122°37`49.4"W
			48°06`35.5"N	122°38`20.8"W
			48°08`11.1"N	122°39`34.7"W
			48°08`32.6"N	122°40`02.7"W
			48°09`18.4"N	122°41`33.6"W
			48°10`17.4"N	122°42`59.7"W
			48°12`05.2"N	122°46`00.9"W
			48°12`18.0"N	122°46`45.3"W
			48°12`17.6"N	122°47`20.9"W
			48°12`36.3"N	122°48`28.5"W
			48°14`32.8"N	122°52`19.6"W

48°15`02.9"N 122°53`51.9"W
 48°15`07.9"N 122°55`51.5"W
 48°14`57.4"N 122°58`50.6"W
 48°15`12.0"N 123°01`49.0"W
 48°14`18.6"N 123°07`14.5"W
 48°12`23.0"N 123°15`00.7"W
 48°12`14.8"N 123°16`44.6"W
 48°11`51.9"N 123°17`50.2"W
 48°11`00.7"N 123°19`05.4"W
 48°10`29.2"N 123°21`07.1"W
 48°10`21.9"N 123°22`44.9"W
 48°10`21.4"N 123°26`05.8"W
 48°10`39.7"N 123°27`53.9"W
 48°11`06.2"N 123°28`51.3"W
 48°11`37.7"N 123°29`22.7"W
 48°11`55.1"N 123°30`13.3"W
 48°12`07.5"N 123°32`25.9"W
 48°11`56.5"N 123°35`38.7"W
 48°12`26.2"N 123°37`07.6"W
 48°12`49.0"N 123°39`23.0"W
 and 48°13`30.2"N 123°45`30.0"W

3492 - Roberts Bank - New chart - 27-JUN-1997 - Nad 1983

14-APR-2000.

Add anchor berth R 49°00`46.0"N 123°12`14.0"W

L/C3602 - Approaches to/Approches à Juan de Fuca Strait - New Edition - 24-MAY-1985 - Nad 1927

28-APR-2000.

(P)Add submarine cable joining 48°25`18.7"N 124°37`30.0"W

48°26`19.5"N 124°41`11.6"W
 48°26`29.5"N 124°42`12.7"W
 48°26`47.4"N 124°48`24.6"W
 48°26`36.8"N 124°49`58.3"W
 48°24`00.7"N 124°57`14.6"W
 48°23`39.0"N 124°58`56.9"W
 48°23`36.8"N 125°00`20.6"W
 48°24`01.3"N 125°03`34.9"W
 48°24`00.2"N 125°05`47.2"W
 48°22`42.8"N 125°14`59.1"W
 48°22`44.5"N 125°16`26.3"W
 48°22`34.5"N 125°17`54.3"W
 48°21`35.3"N 125°21`15.2"W
 48°21`08.6"N 125°24`28.7"W
 48°21`13.1"N 125°27`31.3"W
 48°19`25.0"N 125°41`15.0"W
 48°18`01.2"N 125°47`50.7"W

48°15`54.6"N 126°02`59.0"W
 48°16`13.9"N 126°06`22.6"W
 48°14`52.5"N 126°12`15.6"W
 48°12`33.1"N 126°29`47.3"W
 and 48°11`54.0"N 126°33`12.0"W

L/C3606 - Juan de Fuca Strait - New Edition - 27-JUL-1984 - Nad 1927

28-APR-2000.

(P)Add submarine cable

joining 48°10`31.0"N 123°21`00.0"W
 48°10`29.2"N 123°21`07.1"W
 48°10`21.9"N 123°22`44.9"W
 48°10`21.4"N 123°26`05.8"W
 48°10`39.7"N 123°27`53.9"W
 48°11`06.2"N 123°28`51.3"W
 48°11`37.7"N 123°29`22.7"W
 48°11`55.1"N 123°30`13.3"W
 48°12`07.5"N 123°32`25.9"W
 48°11`56.5"N 123°35`38.7"W
 48°12`26.2"N 123°37`07.6"W
 48°12`49.0"N 123°39`23.0"W
 48°13`30.7"N 123°45`34.7"W
 48°13`58.5"N 123°49`59.4"W
 48°16`08.7"N 124°04`26.9"W
 48°16`32.1"N 124°08`15.0"W
 48°18`00.5"N 124°13`18.6"W
 48°19`14.1"N 124°16`24.4"W
 48°21`48.7"N 124°25`07.0"W
 48°23`19.4"N 124°31`24.1"W
 48°24`21.9"N 124°34`04.2"W
 48°26`25.5"N 124°41`35.0"W
 48°26`47.5"N 124°48`29.0"W
 48°26`38.7"N 124°49`51.9"W
 48°23`59.9"N 124°57`13.5"W
 and 48°23`39.9"N 124°59`00.0"W

3670 - Broken Group - New Edition - 21-OCT-1994 - Nad 1983

21-APR-2000.

Delete	fresh water symbol (Benson Island)	48°53`02.2"N 125°22`48.1"W
Delete	fresh water symbol (Clarke Island)	48°53`28.2"N 125°22`37.3"W
Delete	fresh water symbol (Effingham Island)	48°52`24.1"N 125°18`35.9"W
Delete	fresh water symbol (Turret Island)	48°54`12.7"N 125°20`52.9"W
Delete	fresh water symbol (Willis Island)	48°54`59.7"N 125°20`32.2"W
Delete	fresh water symbol (Dodd Island)	48°55`17.9"N 125°19`39.9"W
Delete	fresh water symbol (Gibraltar Island)	48°55`02.0"N 125°15`26.1"W
Delete	fresh water symbol (Hand Island)	48°56`59.5"N 125°18`54.2"W
Delete	fresh water symbol and legends "Fresh Water" and "Eau de source"	48°59`31.2"N 125°23`41.0"W

Delete	emergency cabin (Clarke Island)	48°53'30.8"N	125°22'39.3"W
Delete	emergency cabin (Jaques Island)	48°54'58.6"N	125°16'05.9"W
Delete	2 floats and label "Flo" (north side of Gibraltar Island)	48°55'05.8"N	125°15'26.8"W

3685 - Tofino - New Edition - 25-AUG-1995 - Nad 1983

07-APR-2000.

Delete	orange and white mooring buoy	49°09'34.5"N	125°54'14.1"W
Delete	orange and white mooring buoy	49°09'34.8"N	125°54'11.3"W
Delete	orange and white mooring buoy	49°09'35.3"N	125°54'08.6"W
Delete	orange and white mooring buoy	49°09'35.6"N	125°54'05.7"W
Delete	"OrW"	49°09'33.9"N	125°54'10.1"W

L/C3802 - Dixon Entrance - New Edition - 24-NOV-1989 - Nad 1927

07-APR-2000.

Delete	Fog Sig	54°17'41.0"N	130°52'42.0"W
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21-APR-2000.

Amend	Fl(2) 8s 82ft to read Fl(2) 9s 92ft	54°17'41.0"N	130°52'42.0"W
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3808 - Juan Perez Sound - New chart - 30-MAR-1962 - Nad 1927

21-APR-2000.

Delete	6 fathoms 3 feet	52°34'54.2"N	131°26'43.7"W
Add	3 fathoms 3 feet	52°34'54.2"N	131°26'45.0"W
Add	1 fathom 4 feet	52°34'48.0"N	131°26'47.2"W
Delete	11 fathoms	52°34'41.1"N	131°23'27.0"W
Add	4 fathoms 5 feet	52°34'42.8"N	131°23'26.2"W
Add	rock awash	52°34'23.2"N	131°26'33.0"W

3957 - Approches to/Approches à Prince Rupert Harbour - New Edition - 05-JUN-1998 - Nad 1983

07-APR-2000.

Delete	Fog Sig 60s	54°17'40.9"N	130°52'49.5"W
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21-APR-2000.

Amend	Fl(2) 8s 25m to read Fl(2) 9s 28m	54°17'40.7"N	130°52'49.8"W
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5003 - Hudson Bay (Southern Portion) and James Bay - New Edition - 26-SEP-1969 - Unknown

28-APR-2000.

Delete	legend "Racon"	58°46'30.0"N	094°10'30.0"W
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5449 - Hudson Bay / Baie d'Hudson, Northern Portion/Partie nord - New Edition - 15-AUG-1986 - Unknown

28-APR-2000.

Amend	Fl R to read "Fl RW 6s 218ft"	58°46'30.0"N	094°10'30.0"W
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Delete	legend "Racon"	58°46'30.0"N	094°10'30.0"W
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Section 4
SAILING DIRECTIONS AND SMALL CRAFT GUIDE CORRECTIONS

EDN 04/00

British Columbia, Volume 1, Sixteenth Edition, 1999 —

Page 3 — Under **FORMAT REQUIRED**

Insert in alphabetical order:

- MIKE** ISM, if applicable, and if any issued to the vessel:
1. What is the name of the Issuing Authority?
 2. ISM Safety Management Certificate:
 - (a) What is the date of issue? and
 - (b) What is the date of expiration?
 3. ISM Document of Compliance:
 - (a) What is the date of issue? and
 - (b) What is the date of expiration?
- NOVEMBER** Vessel MMSI Number.
- ROMEO** Have you tested your steering and propulsion (both ahead and astern) as required by regulation? YES or NO
- WHISKEY** Ballast Water – Has your vessel:
1. Conducted open ocean ballast water exchange at least 200 Nautical Miles offshore since your last port of call? YES or NO and
 2. Made the required notification and reports to Canada/United States as applicable? YES or NO.

(P00-26.1)

Page 48 — Paragraph 502, line 1

Delete: 1,852 m

Replace by: 1,853 m

(P00-28.1)

Page 69 — Paragraph 57, line 4 – after “Strait”

Insert: Submarine cables are laid in the U.S. waters of Juan de Fuca Strait.

(P00-26.2)

Page 171 — Paragraph 312, lines 2 and 3

Delete: 1,852 m in a 090° — 270°

Replace by: 1,853 m in a 089½° — 269½°

(P00-28.2)

Page 231 — Paragraph 292, line 1

Delete: **Light buoy**

Replace by: **Buoy**

Delete: “light” and “(371.5)”

(P00-26.3)

Section 4
SAILING DIRECTIONS AND SMALL CRAFT GUIDE CORRECTIONS

EDN. 04/00

British Columbia, Volume 2, Twelfth Edition, 1991 —“

Page 1 — Under **FORMAT REQUIRED** (Re: correction promulgated in Weekly Edition No. 45/93)
Insert in alphabetical order:

MIKE ISM, if applicable, and if any issued to the vessel:
4. What is the name of the Issuing Authority?
5. ISM Safety Management Certificate:
 (c) What is the date of issue? and
 (d) What is the date of expiration?
6. ISM Document of Compliance:
 (c) What is the date of issue? and
 (d) What is the date of expiration?

NOVEMBER Vessel MMSI Number.

ROMEO Have you tested your steering and propulsion (both ahead
and astern) as required by regulation? YES or NO

WHISKEY Ballast Water – Has your vessel:
3. Conducted open ocean ballast water exchange at least
200 Nautical Miles offshore since your last port of call?
YES or NO and
4. Made the required notification and reports to
Canada/United States as applicable? YES or NO.

(P00-27.1)

Page 127 — Paragraph 48, line 4 – after “heliport”
Insert: The light operates only during the hours of darkness.

(P00-27.2)

Page 144 — Delete paragraph 335.

(P00-27.3)

Page 148 — Paragraph 419
Line 1 — Delete: **Fog signal.** —
Lines 2 and 3 — Delete: “The fog signal” to end of paragraph.

(P00-27.4)

Page 190 — Paragraph 614.1, after “Nepean Rock light” (Re: correction promulgated in Weekly Edition No. 28/93)
Insert: and bell

(P00-27.5)

Section 5

EDN 04/00

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

752 G5812	Triple Islands	On the northwesterly rock of the Triple Islands. 54 17 40.7 130 52 49.8	Fl(2) W 9 s	28.0	16	White tower. 21.9	Flash 0.25 s; eclipse 2.5 s; flash 0.25 s; eclipse 6 s Emergency light. Year round.
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**Chart:3957
Edn 04/00**

**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/M No. _____ of 2000) _____ 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, Navigation Systems
Canadian Coast Guard
Department of Fisheries and Oceans
Ottawa, Ontario, K1A 0E6

In the case of information Canadian navigational aids or the List Department 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.