

## 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.

**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) before the chart action. Please note that Nautical charts are not hand amended by the Canadian Hydrographic Service for Temporary (T) and Preliminary (P) Notices. It is recommended that mariners chart these corrections in pencil. Listing of charts affected by Temporary and Preliminary Notices are revised and promulgated quarterly in Section 1 of the Monthly Edition.

**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*.

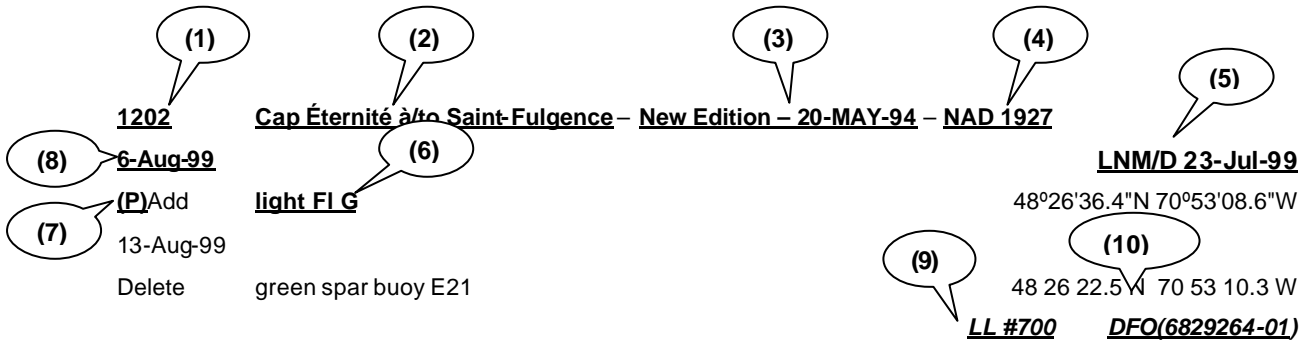
**Monthly edition of Notices to Mariners** - *Notices to Mariners* are issued free of charge on a monthly basis. Mariners now have a choice between specific *Regional* issue(s) they wish to receive. Requests to be placed on or removed from the mailing list should be made by using the form inserted on 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.**

## CHART CORRECTIONS - SECTION 2

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 2 chart correction.



- 1 - Chart Number
- 2 - Chart Title
- 3 - Chart's latest New Edition date
- 4 - Horizontal Chart Datum
- 5 - Last Correction

- 6 - Chart action
- 7 - Notice type
- 8 - Weekly chart correction date
- 9 - List of light number
- 10 - Record reference number

The last correction number is identified with the **LNMD** or Last Notice to Mariners Number / Date. This number is expressed in either old notice number format (ex.: 594/99) or in day-month-year format which is the date known as the weekly chart correction date shown in the above diagram as item (8).

## 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) 772-5369

#### **Maritimes**

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

#### **Quebec**

Quebec Regional Operations Centre GC\SO\COR  
Operational Information Officer  
Phone: (418) 648-5410  
Fax: (418) 648-7244  
E-Mail: [OPSAVIS@dfo-mpo.gc.ca](mailto: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**

Pacific Regional Marine Information Centre  
Phone: (604) 666-6011  
Fax: (604) 666-8453  
E-mail: [RMIC-Pacific@pac.dfo-mpo.gc.ca](mailto:RMIC-Pacific@pac.dfo-mpo.gc.ca)  
Notice to Shipping information  
[www.pacific.ccg-gcc.gc.ca/mcts-sctm/notship/index\\_e.htm](http://www.pacific.ccg-gcc.gc.ca/mcts-sctm/notship/index_e.htm)

## DGPS FULLY OPERATIONAL SERVICE

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

FOS 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.

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.

| <b>Table of DGPS Reference Stations in Canada</b> |                                     |                       |                |           |                    |       |
|---------------------------------------------------|-------------------------------------|-----------------------|----------------|-----------|--------------------|-------|
| Station Name                                      | Id. Nos<br>of reference<br>stations | DGPS<br>Station<br>ID | Geog. Position |           | Frequency<br>[kHz] | Bit/s |
|                                                   |                                     |                       | Latitude       | Longitude |                    |       |
| Cape Race, NL                                     | 338,339                             | 940                   | 46 46 N        | 53 11 W   | 315                | 200   |
| Cape Ray, NL                                      | 340,341                             | 942                   | 47 38 N        | 59 14 W   | 288                | 200   |
| Cape Norman, NL                                   | 342,343                             | 944                   | 51 30 N        | 55 49 W   | 310                | 200   |
| Rigolet, NL                                       | 344,345                             | 946                   | 54 11 N        | 58 27 W   | 299                | 200   |
| Partridge Island, NB                              | 326,327                             | 939                   | 45 14 N        | 66 03 W   | 295                | 200   |
| Pt. Escuminac, 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   |
| Hartlen Point, NS                                 | 330,331                             | 937                   | 44 36 N        | 63 27 W   | 298                | 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   |
| Rivière-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   |
| 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   |

### **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.

## **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: \_\_\_\_\_ 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: Aids to Navigation / Aides à la navigation
  
- 2) Mail / Par la poste: Director, Navigation Systems Branch  
Department of Fisheries and Oceans  
200 Kent Street, Station 5130  
Ottawa, ON  
K1A 0E6  
  
Directeur, Direction des 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.

**MONTHLY EDITION OF NOTICES TO MARINERS**

**MAILING LIST RENEWAL/CHANGES**

Leader, Notices to Mariners  
 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  
 Internet [www.notmar.gc.ca](http://www.notmar.gc.ca)

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Please indicate which edition you would like to receive.

**EASTERN EDITION** (Comprised of Arctic, Newfoundland, Maritimes, Gulf & River St. Lawrence and Central areas)\_\_\_\_\_

**WESTERN EDITION** (Comprised of Arctic and Pacific areas)\_\_\_\_\_

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