

## **ANNOUNCEMENT OF 2021 INTERNATIONAL ICE PATROL SERVICES**

The International Ice Patrol (IIP) commenced operations on January 21, 2021 by resuming production of the North American Ice Service (NAIS) daily iceberg warning products at the IIP Operations Center in New London, CT. During a typical calendar year, IIP generates the iceberg warnings from February through August. This is when icebergs pose the greatest threat to transatlantic shipping. The Canadian Ice Service (CIS) generates the iceberg warning products for the remainder of the year. The Iceberg Limit is published in a daily bulletin (NAIS-10) and graphical chart (NAIS-65) and distributed through a variety of methods including radio broadcasts and the internet (Table 1). Additionally, CIS will continue their traditional distribution mechanisms.

The NAIS iceberg bulletin and chart advise mariners of the iceberg extent in the vicinity of the Grand Banks of Newfoundland, Canada, along the Labrador Coast, and the southern end of Greenland, providing both an Iceberg Limit and an iceberg density distribution within the limit. Reports of ice in this area originate from various sources, including passing ships, satellite imagery, and reconnaissance flights. The Danish Meteorological Institute (DMI) updates the estimated limit around Greenland twice per week using satellite imagery from February through August, and provides a climatological-based limit from September through January. IIP and CIS continue to advance the use of satellite imagery to detect and identify icebergs around Newfoundland, though aerial reconnaissance will remain the primary method for detection and identification. Iceberg sighting data (position, time, size, description, etc.) is entered into a computer program that models iceberg drift and deterioration. As the time after sighting increases, so does the probability of error in estimated positions. This is accounted for when developing the Iceberg Limit. Additionally, numbers within each grid sector inside the Iceberg Limit are intended to provide mariners an awareness of the density of icebergs. Navigating among icebergs inside the limit based solely on the NAIS iceberg products is strongly discouraged.

After the onset of the COVID-19 pandemic in March of 2020, IIP's aerial reconnaissance patrols were reduced and degraded due to international travel restrictions. This resulted in lower confidence products that were more conservative in estimating the extent of the iceberg limit. Warnings were posted on all daily products that alerted the mariner to the reduced coverage. Should IIP experience similar challenges at any point during the upcoming season, the same measures will be taken to communicate any degraded reconnaissance to the public.

While NAIS strives to provide mariners with the most accurate iceberg warning products, it is not possible to ensure that all icebergs are detected and reported. Mariners are urged not to rely entirely upon one source of information for iceberg detection. Iceberg size and shape can limit the effectiveness of radar to detect icebergs especially in areas of significant sea state. When operating near sea ice and icebergs, there is no substitute for the due vigilance and prudent seamanship required by the ordinary practice of mariners.

Ships are encouraged to immediately report sightings of icebergs or stationary radar targets that may likely be icebergs to IIP as part of the Vessel of Opportunity Observation Program (VOOP). When reporting icebergs or stationary radar targets, please attach any photographs taken of the iceberg and include the following information:

- 1. Vessel Name and Call Sign**
- 2. Vessel Contact Information**
- 3. Zulu (UTC) Time of Report**
- 4. Zulu (UTC) Time of Sighting**
- 5. Ship Position** (Latitude, Longitude)
- 6. Ship's Course & Speed**
- 7. Visibility**
- 8. Iceberg/Radar Target Position** (Specify either the Geographic Coordinates or Range/Bearing from Ship's Position)
- 9. Method of Detection** (Visual, Radar, or Both)
- 10. Length of Iceberg at Waterline**
- 11. Shape of Iceberg** (Tabular or Non-tabular – see Table 3 for examples)

Report iceberg sightings to IIP.COMMS@USCG.MIL, through INMARSAT, U.S. Coast Guard Communication Stations, or Canadian Coast Guard Marine Communications and Traffic Services (see Table 4 for guarded frequencies). Use Service Code 42 when reporting iceberg sightings to IIP through INMARSAT C, as there is no charge when using this code.

Vessels participating in a Voluntary Observing Ship (VOS) program should continue to report weather and sea surface temperature (SST) to their respective programs. Vessels interested in providing weather and SST reports to the U.S. National Oceanic and Atmospheric Administration's VOS program can contact [vos@noaa.gov](mailto:vos@noaa.gov) or visit [www.vos.noaa.gov](http://www.vos.noaa.gov) for guidance.

### **Instructions for sending INMARSAT Code 42 Warnings:**

#### **INMARSAT-C (General instructions)**

1. Access the 2-digit code service on SES as instructed in your manufacturer's information.
2. Using the SES text editor, prepare the message.
3. Enter the 2-digit code of the service required (42).
4. Select the CES (01, Vizada, AORW).
5. Transmit the message.
6. Wait for acknowledgment from the CES.
7. The message will be forwarded, at no charge, from the mariner to IIP by Vizada Satellite Services.

Telephone communications are available to the IIP Office throughout the year. The IIP Duty Officer can be reached 0700-2000 EST.

**International Ice Patrol in New London, CT**

Phone: (860) 271-2626  
Fax: (860) 271-2773  
Email: [iip.comms@uscg.mil](mailto:iip.comms@uscg.mil)  
Web: <http://www.navcen.uscg.gov/IIP>

**Canadian Ice Service in Ottawa, ON**

Phone: (613) 971-2090  
Fax: (613) 737-1638  
Email: [ec.cisiceberg-scgiceberg.ec@canada.ca](mailto:ec.cisiceberg-scgiceberg.ec@canada.ca)  
Web: <https://www.ec.gc.ca/glaces-ice/>

**TABLE 1: NAIS BROADCASTS**

Product Type	Transmission Means	Broadcast Station	Broadcast Time (UTC)	Frequencies (kHz) or Location
<b>NAIS NAVAREA IV ICEBERG BULLETIN</b>	SafetyNET Broadcasts as NAVAREA IV messages	AOR-W Satellite	1000, 2200	SafetyNET
			Urgent Broadcasts of targets outside limit sent upon receipt	
	NAVTEX Broadcast	Canadian CG Marine Communications and Traffic Service Placentia (VCP)	1820 (Winter) 2220 (Summer) (Changes with DST)	518 F1B
			Urgent Broadcasts of targets outside limit sent upon receipt	
	SITOR/NBDP Broadcast	USCG Communication Command Chesapeake/NMF	0140-0230	6312.3, 8414.8, 12577.3 F1B
			1630-1720	8414.8, 12577.3, 16804.8 F1B
Internet	International Ice Patrol Website	updated daily by 2200	<a href="http://www.navcen.uscg.gov/IIP">http://www.navcen.uscg.gov/IIP</a>	
	National Geospatial-Intelligence Agency Website		<a href="http://msi.nga.mil/NGAPortal/MSI.portal">http://msi.nga.mil/NGAPortal/MSI.portal</a>	
<b>NAIS ICEBERG CHART</b>	Radio Facsimile Broadcast	USCG Communication Command Chesapeake/NMF	0438, 1039	4233.1, 6338.6, 9108.1 F3C
		Offenbach, Germany via Pinneberg/DDK	1600, 2239	6338.6, 9108.1, 12748.1 F3C
		Offenbach, Germany via Pinneberg/DDK	0930, 2100	3855, 7880, 13882.5 F1C
		Canadian CG Marine Communications and Traffic Service Sydney/VCO	1741	6915.10 J3C
	Internet	International Ice Patrol Website	Updated daily by 2200	<a href="http://www.navcen.uscg.gov/IIP">http://www.navcen.uscg.gov/IIP</a>
		National Weather Service Website		<a href="http://tgftp.nws.noaa.gov/fax/PIEA88.gif">http://tgftp.nws.noaa.gov/fax/PIEA88.gif</a>
		Email On Demand*		<a href="mailto:nws.FTPMail.OPS@noaa.gov">nws.FTPMail.OPS@noaa.gov</a>
<b>F1C10</b>	Radio Telephone	Canadian CG Marine Communications and Traffic Service Goose Bay (VOK)	0107, 0907, 1907 & as required	2598 J3E
			continuous	VHF Channel 21B & 83B
<p>*To prompt email on demand send an e-mail to <a href="mailto:nws.ftpmail.ops@noaa.gov">nws.ftpmail.ops@noaa.gov</a> with any subject line. The body of the text should read as follows (please note the text is case sensitive and must be sent in plain text format):</p> <p align="center">                     open                      cd fax                      get PIEA88.gif ---or--- get PIEA88.TIF                      quit                 </p> <p>The e-mail server will then automatically send a GIF or TIF formatted image of the facsimile back to the sender's e-mail address.</p>				

**TABLE 2: SIZE DESCRIPTIONS USED BY NAIS**

<u>DESCRIPTIVE NAME</u>	<u>HEIGHT (m)</u>	<u>LENGTH (m)</u>
Growler	< 5	< 5
Bergy Bit	1<5	5<15
Small Berg	5-15	15-60
Medium Berg	16-45	61-120
Large Berg	46-75	121-200
Very Large Berg	> 75	> 200

**TABLE 3: SHAPE DESCRIPTIONS USED BY NAIS**

**Tabular:**

Flat top, most show horizontal banding.



**Non Tabular:**

Meets any of the below characteristics:



**Domed:** Smooth and rounded on top.



**Pinnacled:** Central spire or pyramid, with one or more spires.



**Wedged:** Steep vertical side on one end, sloping to lesser sides on the other.



**Drydocked:** Eroded such that a U-shaped slot is formed near or at water level, with twin columns or pinnacles.



**Blocky:** Flat topped with steep vertical sides



**Ice Island:** Very large ice floe.

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**TABLE 4: REPORT RECEIVING STATIONS**

**CANADIAN STATIONS**

The following Canadian Coast Guard Marine Communications & Traffic Service (MCTS) Centers (Receiving Stations) monitor and transmit on VHF 16 & HF 2182 J3E:

**Bold indicates the Coast Guard Radio call name.**

<b>Labrador NL (VOK)</b> Email: ecagoy@innav.gc.ca Phone: 709-896-2252	<b>Placentia NL (VCP)</b> Email: safety.placentia@innav.gc.ca Phone: 709-227-2181 or 709-227-2182
<b>Port aux Basques NL (VOJ)</b> Email: paxtfc@innav.gc.ca Phone: 709-695-2167	<b>Sydney NS (VCO)</b> Email: mctssyd@dfo-mpo.gc.ca Phone: 902-564-7662
<b>Dartmouth/Halifax NS (VCS)</b> Email:supervisor.mcts-halifax@dfo-mpo.gc.ca Phone: 902-426-9750 or 902-426-9751	<b>Goose Bay NL (VOK)</b> Email: ecagoy@innav.gc.ca Phone: 709-896-2252

Visit [http://www.vos.noaa.gov/vos\\_resource.shtml](http://www.vos.noaa.gov/vos_resource.shtml) for instructions on sending INMARSAT 2-digit access code reports. For all iceberg reports use access code 42 instead of 41.