



VESSEL OF OPPORTUNITY OBSERVATION PROGRAM (VOOP)

The North American Ice Service (NAIS), a partnership comprised of the International Ice Patrol (IIP), the Canadian Ice Service (CIS), and the U.S. National Ice Center (NIC), provides year-round maritime safety information on iceberg and sea ice conditions in the North Atlantic Ocean. The daily NAIS Iceberg Limit, valid at 0000Z, along with the daily Sea Ice Limit, valid for 1400Z the previous day, will be distributed as a NAVAREA IV warning in the format of a text Iceberg Bulletin and as a graphic Iceberg Chart.

The purpose of the NAIS Iceberg Bulletin and Chart is to advise mariners of the estimated iceberg extent within the region. On the Chart, numbers within each grid sector inside the Iceberg Limit are intended to provide mariners an awareness of the relative density of icebergs. IIP produces the NAIS iceberg warning products from January through August when icebergs typically threaten the transatlantic shipping lanes, and CIS produces the products from September through December when icebergs typically only threaten Canadian coastal waters. To access the current iceberg warnings as well as more information on the Iceberg Bulletin and Iceberg Chart visit www.navcen.uscg.gov/iipCharts. NAIS reconnaissance is conducted in the North Atlantic Ocean with a focus on the Grand Banks of Newfoundland and the east coast of Labrador due to the location of the transatlantic shipping lanes. Ice conditions south of Greenland are not monitored by NAIS. For iceberg conditions off of Greenland, visit the Danish Meteorological Institute's website at <http://www.dmi.dk/en/groenland/hav/ice-charts/>. While NAIS strives to be as accurate as possible in reporting the presence of icebergs to mariners, it is not possible to ensure that all icebergs are detected and reported. There is no substitute for due vigilance and prudent seamanship, especially when operating near sea ice and icebergs.

Reports of icebergs in the North Atlantic originate from various sources, including passing ships, reconnaissance flights, and space-borne reconnaissance. Once position, time, size, and shape of icebergs detected are received, the data is entered into a computer model that predicts iceberg drift and deterioration. As the time after detection increases, so does the uncertainty in estimated positions. This uncertainty is taken into account when the Iceberg Limit is determined. If an iceberg or radar target is detected and reported outside the published NAIS Iceberg

Limit, a Notice to Shipping (NOTSHIP) will be sent by the Canadian Coast Guard Marine Communications and Traffic Service (MCTS) and an urgent NAVAREA IV message will be distributed on SafetyNET via the U.S. National Geospatial-Intelligence Agency (NGA) as the NAVAREA IV Coordinator. These warnings will remain in effect for 24 hours. Iceberg warning products will be revised shortly after notification between 1200Z and 0000Z or by 1400Z if reported between 0000Z and 1200Z.

Ships are encouraged to immediately report sightings of icebergs or stationary radar targets that may likely be icebergs to the nearest Canadian Coast Guard MCTS Station or through INMARSAT using Service Code 42, 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 or visit www.vos.noaa.gov for guidance.

When making iceberg reports, please include **SHIP NAME** and **CALL SIGN, ZULU TIME, SHIP POSITION** (latitude, longitude), **COURSE, SPEED, VISIBILITY, ICEBERG/RADAR TARGETS POSITION** (Specify either the geographic coordinates or range/bearing from ship's position), **ZULU TIME OF SIGHTING, METHOD OF DETECTION** (Visual, Radar, or Both), **LENGTH** (in meters), **SHAPE OF ICEBERG** (See Table 3), and **VESSEL CONTACT INFORMATION**. If possible, please attach any photographs taken of the iceberg to the report. (Repetition NTM 1(4)13)

International Ice Patrol in New London, CT



Phone: (860) 271-2626
Toll free: (877) 423-7287
Fax: (860) 271-2773
Email: iipcomms@uscg.mil
Web: <http://www.navcen.uscg.gov/IIP>
Office hours: 0800 - 2000 EST

Canadian Ice Service in Ottawa, ON



Phone: (877) 789-7733
Fax: (506) 451-6010
Email: ec.cisiceberg-scgciceberg.ec@canada.ca
Web: www.ice-glaces.ec.gc.ca
Office Hours: 0730 - 1730 EST

TABLE 1: NAIS BROADCASTS

Product Type	Transmission Means	Broadcast Station	Broadcast Time (UTC)	Frequencies (kHz) or Location	
NAIS NAVAREA IV ICEBERG BULLETIN	SafetyNET Broadcasts as NAVAREA IV messages	AOR-W Satellite	1000, 2200 Urgent Broadcasts of targets outside limit sent upon receipt	SafetyNET	
	NAVTEX Broadcast	Canadian CG Marine Communications and Traffic Service Placentia (VCP)	1820 (Winter) 2220 (Summer) (Changes with DST) Urgent Broadcasts of targets outside limit sent upon receipt	518 F1B	
	SITOR/NBDP Broadcast	USCG Communication Command Chesapeake/NMF	0140-0230 1630-1720	6314, 8416.5, 12579 F1B 08416.5, 12579, 16806.5 F1B	
	Internet	International Ice Patrol Website	updated daily by 2200	http://www.navcen.uscg.gov/IIP	
		National Geospatial-Intelligence Agency Website		http://msi.nga.mil/NGAPortal/MSI.portal	
	NAIS ICEBERG CHART	Radio Facsimile Broadcast	USCG Communication Command Chesapeake/NMF	0438, 1039 1600, 2239	4235, 6340.5, 9110 F3C 6340.5, 9110, 12750 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	http://www.navcen.uscg.gov/IIP	
		National Weather Service Website		http://tgftp.nws.noaa.gov/fax/PIEA88.gif	
		Email On Demand*		nws.FTPMail.OPS@noaa.gov	
F1C10	Radio Telephone	Canadian CG Marine Communications and Traffic Service Goose Bay (VOK)	0107, 0907, 1907 & as required continuous	2589 J3E VHF Channel 21B & 83B	

*To prompt email on demand send an e-mail to nws.FTPMail.OPS@noaa.gov 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):
 open
 cd fax
 get PIEA88.gif ---or--- get PIEA88.TIF
 quit
 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.

TABLE 2: REPORT RECEIVING 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.

Labrador NL (VOK) Email: LABRADOR.MCTS@DFO-MPO.GC.CA Phone: 709-896-2252	Placentia NL (VCP) Email: PLACENTIA.MCTS@DFO-MPO.GC.CA Phone: 709-227-2181
Port aux Basques NL (VOJ) Email: VOJ@DFO-MPO.GC.CA Phone: 709-695-2167	Sydney NS (VCO) Email: SYDNEY.MCTS@DFO-MPO.GC.CA Phone: 902-564-7685
Dartmouth/ Halifax NS (VCS) Email: HLXECAREG1@INNAV.GC.CA Phone: 902-426-9754	Goose Bay NL (VOK) Email: VOK@DFO-MPO.GC.CA Phone: 709-896-2252

Visit 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.

TABLE 3: ICEBERG SHAPES



Non-Tabular: This general shape category includes blocky, pinnacle, dry dock, wedged, dome, or any iceberg that does not meet characteristics of a tabular iceberg.



Tabular: Flat-topped, most show horizontal banding.