

Start Date: 04/27/04 End Date: 08/27/04

General Description:

Commander, International Ice Patrol (IIP) directed the conduct of the 2004 Ice Patrol in the North Atlantic. Successful operations resulted from excellent teamwork and support from Coast Guard commands, U.S. and Canadian agencies and the participation of hundreds of mariners at sea. During the 2004 Season, 262 icebergs were observed and monitored south of 48°N. IIP issued 184 bulletins describing the Limit of All Known Ice (LAKI) in the vicinity of the Grand Banks of Newfoundland. There were no reports of loss or damage to vessels heeding iceberg information provided by the International Ice Patrol in 2004.

Operational Data:

Pre-season preparations were intensive and included meetings as well as training. The IIP Annual Conference convened in Dec of 2003 and included many Coast Guard, federal, and international partners. Training included: Low-Pressure Chamber (Langley AFB, VA, Oct 2003) for newly reported personnel, C-130 egress training (Groton, CT, Oct 2003), swim/survival training (U.S. Coast Guard Academy, CT, Nov 2003), two weeks of IIP University (Groton, CT, Jan 2004), and IIP provided training to Air Station personnel (Elizabeth City, NC, Jan 2004). Preparations for the ice season were concluded with the Pre-Season Ice Reconnaissance Detachment (IRD) (29 Jan - 5 Feb 2004) to determine the prevailing ice conditions and conduct logistical visits.

IIP experienced a later than normal start to the Ice Season and iceberg conditions did not initially warrant regular IRD deployments. The ice conditions observed during the Pre-Season IRD did not warrant IRD 1. Subsequently, the conditions observed by IRD 2 (25 Feb - 4 Mar) did not warrant IRD 3. Early season operations were dominated by reconnaissance used to determine the iceberg population in the northern extent of the AOR. The 2004 Ice Season was officially opened on 27 APR with the 1200 UTC ice bulletin. In fact, 27 Apr is the latest season opening in the 92 years of Ice Patrol history. All other IRDs, beginning with IRD 4 (24 Mar - 1 Apr) and ending with IRD 11 (30 Jun - 6 Jul), were deployed for 7 days on an every other week basis. Post-season operations concluded with a single Post-Season IRD conducted in late-July (26 -30 Jul) to complete necessary logistics, vacate leased spaces, and to meet with partner agencies. A brief patrol for the evaluation of CASPER (C-130 Airborne Sensor with Palletized Electronic Reconnaissance) for Ice Patrol use was also conducted during the Post-Season IRD. A report is available SEPCOR.

The Operations Center broadcast 92 scheduled Ice Charts depicting the 1200Z LAKI and 184 scheduled text Bulletins detailing the 0000Z and 1200Z LAKI. Ice Patrol delivered 97.2% of its products on time. Six unscheduled safety broadcasts were sent for target sightings near or outside the published LAKI producing a product accuracy rate of 97.8%. The six safety broadcasts reported eight individual targets; three icebergs outside the LAKI, one iceberg near but inside the LAKI, and four radar targets.

Ice Patrol conducted a customer satisfaction survey during the season. The survey was provided to mariners and the marine industry via Inmarsat email as well as mail. The survey gathered data on mariner satisfaction with IIP products, perceptions regarding product accuracy, and information on which products mariners favor. IIP received 14 replies and will more fully analyze the results during the post-season.

Figures detailing IIP's operational data for the 2004 Season are available via the Ice Patrol's Internet site

(<http://www.uscg.mil/lantarea/iip/pdf/2004Data.pdf>) or via email (upon request) from iipcomms@rdc.uscg.mil.

Support Data:

IIP is funded annually through appropriated sources, but bills all nations based on their portion of total tonnage shipped across the North Atlantic. Operational (annually funded) costs include the aircraft support contract, travel costs, and Ice Patrol operating expenses (rent, uniform items, flight gear, equipment, etc.). Billed costs (i.e. those costs passed along to signatory nations) include all operational costs as well as the use of the HC-130H for iceberg reconnaissance. Financial data (including billed costs) for Ice Season 2004 are being tabulated and will be available at a later date.

The support received from the Coast Guard Research and Development Center's administrative, procurement, and contracting staff was excellent.

Location of Operations:

Groton, CT: IIP Operations Center

St. John's, Newfoundland and Labrador (NL): IIP Remote Operations Base

Location of Personnel:

Groton, CT

Elizabeth City, NC

Objectives and Major Lessons Learned:

See Lessons Learned Section

Limitations and Casualties:

No casualties to Coast Guard personnel or equipment occurred during the 2004 Season.

The SOLBORG, a commercial fishing vessel, struck an iceberg in near zero visibility in late June 2004. The vessel was well within the published LAKI and was approximately 10 NM off the coast of Newfoundland. There were no known personnel injuries and the vessel was able to transit to St. John's harbor under its own power.

Participants:

IIP

Air Station Elizabeth City - Home base for aircraft and crews for iceberg reconnaissance

Communications Area Master Station Atlantic - Broadcast conduit for majority of IIP products

National Weather Service - HF WEFAX converter for IIP Ice Chart

National Ice Center - Iceberg reconnaissance partner

National Geospatial Intelligence Agency - Broadcast partner for IIP products

Fleet Numerical and Meteorology Center - Environmental data provider for iceberg modeling

Canadian Ice Service - Iceberg reconnaissance and modeling partner

Provincial Airlines Limited - Contract iceberg reconnaissance provider

Canadian Coast Guard - Iceberg reports and WOCE buoy deployments

HMCS LEONARD COWLEY - WOCE buoy deployments

C-Core - Scientific research partner (satellite based reconnaissance and computer-based target identification experiments)

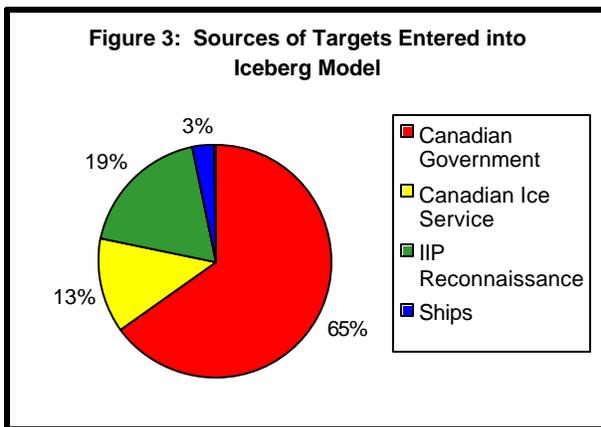
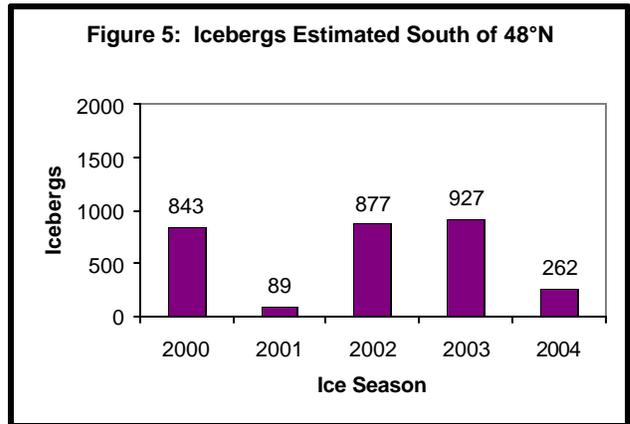
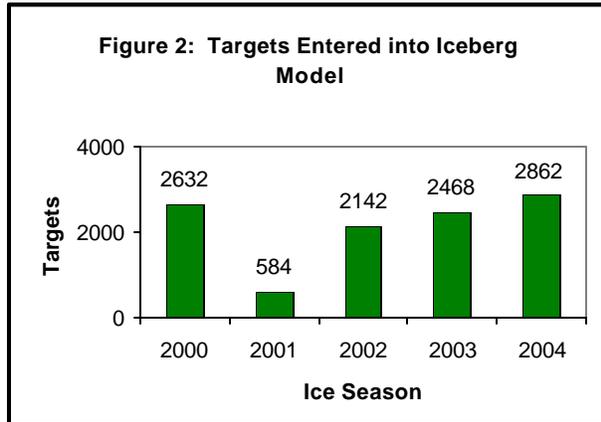
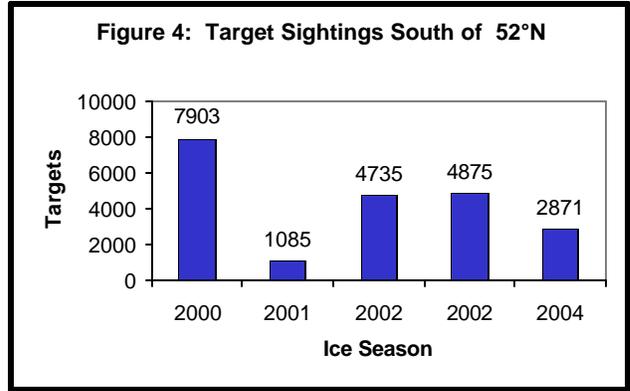
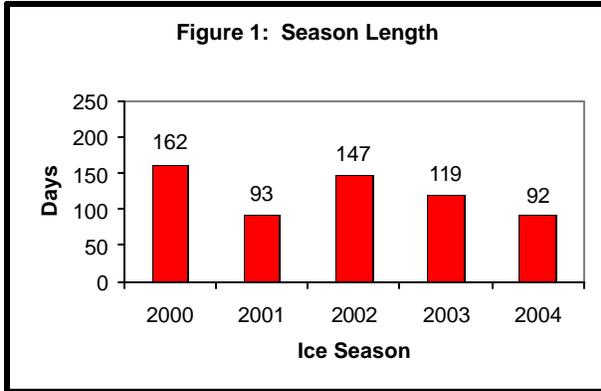
German Ice Service - Ice Chart broadcast partner

Merchant Vessels - SOLAS mandated iceberg and weather reporter(s)

Fishing Vessels - SOLAS mandated and voluntary iceberg and weather reporter(s)

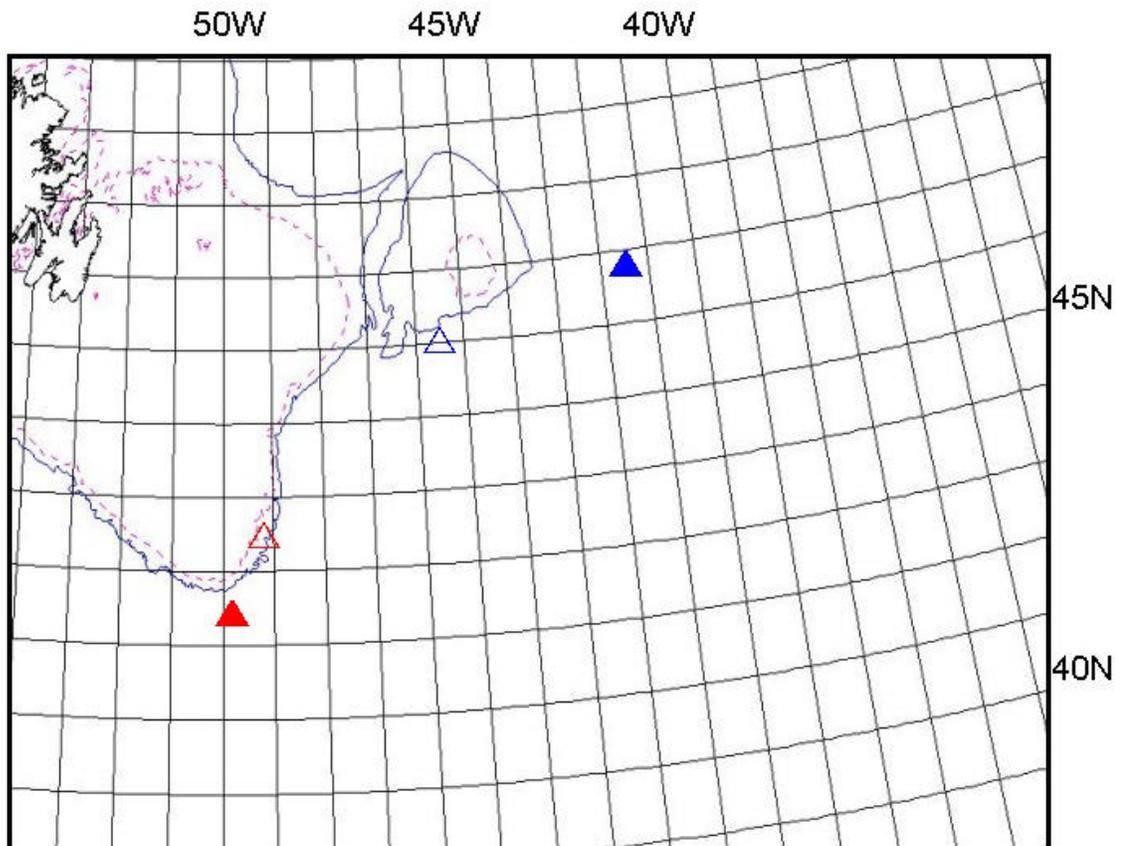
Operations Center Data

- Season Opened: 27 April
- Season Closed: 27 July
- Average Season Length (1987 - 2004) 141 Days
- Average Icebergs South of 48°N (1987 - 2004) 855



Geographic Iceberg Distribution

	Sighted Position (△)		Date	Drifted Position (▲)		Date
Eastern	46°00'N	45°36'W	19 Jun	46°47'N	41°22'W	01 Jul
Southern	43°22'N	49°17'W	02 Jul	42°31'N	49°56'W	11 Jul



Reconnaissance Operations Data

