U.S. Department of Homeland Security
United States Coast Guard

Commander
Coast Guard Ninth District

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16150
30 June 2020

MEMORANDUM

SMICKLAS.BRIAN.A.1075576915 Digitally signed by SMICKLAS.BRIAN.A.1075576915 Date: 2020.07.01 09:02:16 -04'00'

From: B. A. Smicklas, CDR
CGD Nine (dpw)

To: COMDT (CG-WWM)
Thru: CG LANTAREA (LANT-54)

Subj: 2019-2020 NINTH DISTRICT END OF SEASON ICE REPORT

Ref: (a) Domestic Icebreaking Operations Policy, COMDTINST 16151.1 (series)
(b) Ninth District Domestic Icebreaking Standard Operating Procedures Manual, D9INST M16150.3 (series)

1. Per references (a) and (b), the Ninth District's annual domestic ice operations commenced 11 December 2019 and concluded on 31 March 2020.

2. Narrative Summary:

a. Sector Sault Ste Marie commenced Operation Taconite on 11 December 2019. During the 111 days of icebreaking operations, the eight USCG cutters assigned to the operation spent a total of 763 hours of icebreaking to assist 250 commercial vessels transits; 40 of these transits required direct icebreaking assistance, which supported the movement of 4.9 million tons of cargo valued at approximately $176 million. These same icebreaking vessels put forth an additional 1,529 hours of preventative icebreaking to establish and maintain tracks in the ice-choked waterways of Green Bay, the Straits of Mackinac, the St Marys River, Georgian Bay, and western Lake Superior. Operation Taconite secured on 31 March 2020 (Enclosure 1).

b. Sector Detroit did not conduct Operation Coal Shovel this season. Due to extremely mild conditions in the southern Great Lakes, ice conditions were never substantial enough to hinder navigation (Enclosure 2).

c. In total, the eight USCG cutters expended 2,292 resource hours in support of Ninth District icebreaking operations. The 10-year average is approximately 5,000 resource hours annually. Canadian Coast Guard (CCG) ships provided another six hours of assistance in US waters. USCG cutters provided an additional 133 hours of assistance in Canadian waters.

d. The efforts of the cutters would not have been possible without the assistance of our valuable partners. NOAA and the Canadian Ice Service provided excellent forecasts and satellite imagery to further support operational planning. Lastly, our CCG partners offered their expertise and services throughout the season. The participation of CCGS SAMUEL RISLEY and available capability of CCGS GRIFFON, coupled with the shore side support in Sarnia, Montreal, Ottawa,

and Halifax ensured the successful execution of another icebreaking season. Enclosure (1) documents additional data on Canadian Coast Guard support to operations.

e. The Ninth District and Canadian Coast Guard co-hosted the annual Great Lakes Icebreaking Conference in October 2019 in Cleveland, OH, along with our maritime industry partners, laying the groundwork for a successful ice season and covering vital lessons learned from the previous year. Additionally, the Ninth District Ready for Operations team conducted ice rescue training for cutters to ensure safe & proficient SAR capability while underway.

f. Icebreaking teleconferences were held throughout the winter with our maritime industry partners, which allowed the CCG and USCG to ensure the best placement of assets based on forecasted predictions and scheduled vessel movements.

g. Due to the emerging threat of a coronavirus pandemic, Operation Taconite released all buoy tenders under their control by late March in order to initiate Operation Spring Restore. During this period, there was much uncertainty about how long the cutter fleet could maintain operational readiness while protecting crew health. The Ninth District strategically moved to complete the seasonal Aids to Navigation (ATON) mission early and quickly to mitigate the risk. Operation Spring Restore successfully ended approximately one month early without incident. The mild ice conditions facilitated this timely operational shift without sacrificing icebreaking service effort. Under more severe ice conditions, balancing icebreaking demands and simultaneously restoring the Aids to Navigation system would have been far more challenging.

3. Winter Severity:

a. The National Oceanographic Atmospheric Administration (NOAA) classified the 2019-2020 ice season as “below average,” with input provided by the Great Lakes Environmental Research Laboratory (GLERL). Both overall ice coverage and thickness were well below normal conditions. Great Lakes percentage of ice cover peaked at 19.5% on 21 February 2020. Enclosure (1) contains additional charts contrasting weekly and total accumulated ice coverage to the historical median.

b. The period of icebreaking operations was shorter than in an average winter. Freezing temperatures in early December called for a normal start of the icebreaking season, but they would not continue long enough to generate any significant ice growth. A cooling trend occurred briefly in mid-February that led to peak ice coverage on 21 February. These conditions would not persist and above average temperatures in March brought the end of operations weeks earlier than typically expected.

c. The following summarizes maximum ice conditions observed in key locations:

(1) Eastern Lake Erie: No significant ice conditions

(2) Western Lake Erie/Maumee Bay: 2-6” plate ice

(3) Detroit River: No significant ice conditions

(4) Lake St. Clair/St. Clair River: 2-6” plate ice

(5) Lake Huron: No significant ice conditions.

(6) Georgian Bay: 12-18” plate ice.

(7) Straits of Mackinac: 12-18” plate ice with 1-3’ windrows.

(8) Whitefish Bay: 12-18” plate ice with 6” snow coverage

(9) St. Mary’s River: 12-18” plate ice with 6” snow coverage

(10) Western Lake Superior: 12-18” plate ice

(11) Eastern Lake Superior: No significant ice conditions

(12) Thunder Bay: 18-24” plate ice with 6” snow coverage

(13) Green Bay: 18-24” plate ice with 6” snow coverage

4. Economic Value:

a. Operation Taconite: Estimated at $176 million, 4.9 million tons of dry bulk (iron ore, coal, stone, cement) and liquid (gasoline, diesel, heating oil) cargo.

b. The Lake Carriers Association (LCA) published monthly shipping data for the 2019-2020 ice season and reported a 19.9% decrease in cargo in December from the previous year. This number was also 15% below the five-year average. For the first three months of 2020, iron ore shipments were down 9.1% from 2019 and 10.7% behind their five-year average.

5. Performance Standards and Data Collection:

a. 98.9% of Domestic Icebreaking requests met.

(1) 186 ice breaking service requests made.

(2) 2 requests declined.

a. 11 January 2020: Sector Sault Ste. Marie received a request from Interlake Steamship Company asking for CGC ALDER to break out Howard’s Bay (Fraser Shipyard) ahead of M/V LEE A TREGURTHA’s arrival. The Incident Commander declined the Tier 4 icebreaking request. Both local icebreaking providers reported Coast Guard assistance was “not needed” as the waterway was already sufficiently broken up.

b. 26 March 2020: The master of the M/V JOSEPH L BLOCK notified VTS St Marys River of the vessel's departure from Fincantieri Shipyard (Sturgeon Bay, WI). The master requested CG icebreaking assistance. RADARSAT imagery showed ice in the bay would not hinder the vessel's bayside departure from the shipyard. Incident Commander denied the request for icebreaking assistance citing a lack of significant ice to justify an asset assignment.

b. Icebreaking Asset Availability:

(1) 2,292 total icebreaking operation hours.

(2) 6,048 scheduled Charlie hours.

(3) 206 unscheduled Charlie hours.

Class	Total Days of Ice Season	Scheduled Maintenance	Unscheduled Maintenance	Total Maintenance Days
WLBB (1)	111 days	28 days (25%)	>1 day (>1%)	28 days (25%)
WLB (2)	222 days	77 days (35%)	>1 day (>1%)	78 days (35%)
WTGB (5)	555 days	147 days (26%)	9 days (2%)	156 days (28%)

c. The fleet remained relatively healthy this season following several challenging years. Resource availability was optimal for a mild winter despite missing CGC BISCAYNE BAY, which spent the winter at the Coast Guard Yard in Baltimore, MD for the Service Life Extension Project (SLEP).

d. The Great Lakes fleet experienced 206 lost cutter hours due to the following casualties:

(1) MOBILE BAY: Main Motor, 1MC; 184 hours

(2) KATMAI BAY: Jacket water control, #2 MDE; 17 hours

(3) BRISTOL BAY: Loss of propulsion; 2 hours

(4) MACKINAW: #2 MDE gasket leak; 2 hours

(5) HOLLYHOCK: Controllable pitch propeller (CPP) hydraulics; 1 hour.

e. The Great Lakes fleet experienced 14 hours of non-mechanical delays:

(1) KATMAI BAY: Medical concerns; 8 hours

(2) NEAH BAY: Fuel contract delay; 6 hours

f. Enclosure (1) contains a detailed breakdown of cutter asset hours.

g. Tier 1 Waterways were open 100% of the ice season (5,328 of 5,328 total hours).

Waterway	Potential Availability	Actual Availability	Percentage Available
Straits of Mackinac	2,664 hours	2,664 hours	100%
St. Mary's River	2,664 hours	2,664 hours	100%
[redacted]	5,328 hours	5,328 hours	100%

(1) The Operation Taconite summary below lists waterway restrictions and closures.

(2) Tier 1 Waterways for Operation Coal Shovel (St. Clair River, Detroit River, and Pelee Passage) are not included because these waterways were not hindered by ice at any point during the season.

6. Operation Taconite:

a. Search and Rescue Response Requests: 1 case (MISLE case 1212004)

b. Urgent Vessel Response Requests: None

c. Exigent Community Service Requests: None

d. Vessel Direct Assists: 40 (14 US, 21 Canadian, 5 foreign flagged)

e. Icebreaking Service Requests: 186

f. Waterway Restrictions: None

g. Waterway Closures: None

h. Planned Waterway Closures: Per 33 CFR Parts 162.117 and 165.901, the following waterways were purposely closed or restricted by the Captain of the Port Sault Sainte Marie.

(1) Grays Reef Passage: 16 January 2020 to 26 March 2020 (70 days)
(2) South Channel: 19 January 2020 to 11 March 2020 (52 days)
(3) West Neebish Channel: 16 January 2020 to 24 March 2020 (68 days)
(4) Pipe Island Passage: 16 January 2020 to 11 March 2019 (55 days)
(5) Southern Green Bay: 22 January 2020 to 09 March 2020 (47 days)
(6) Little Rapids Cut (Ice Boom): 10 December 2019 to 16 April 2020 (128 days)

i. Tier 1 Availability: 100% (5,328 of 5,328 hours)

7. Statistical Summary: The Statistical Data Summary for Operations Taconite 2019-2020 is included as Enclosure (1).

8. Night Operations: U.S. Coast Guard Cutters assigned to Operation Taconite conducted 19 hours of icebreaking at night.

9. Future Plans and Recommendations:

a. The WTGB Service Life Extension Project ends with the scheduled return of CGC BISCAYNE BAY later this summer. The winter of 2020-2021 is expected to be the first season with all six Bay-class icebreaking tugs assigned to the Ninth District available for operations since CGC MORRO BAY began SLEP in 2014.

b. Recommend that SFLC-IBCT continue to actively pursue strategies to minimize delay in delivery of parts, supplies, and services to cutters that are not mission capable. With the end of SLEP, this is imperative for the aging WTGBs. This year, the longest period of unscheduled asset maintenance was for CGC MOBILE BAY, which lost 184 op hours due to a main motor casualty that required contractor support.

c. The Ninth District is preparing an update to its Domestic Icebreaking Policies and Procedures Manual, and will submit the completed instruction for consideration in an update to reference (a).

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Enclosures: (1) 2019-2020 Operation TACONITE End of Season Ice Report
(2) CG Sector Detroit memo 16155 of 15 April 2020

Copy: CGD One (dpw)
CGD Five (dpw)
CGC MACKINAW
CGC HOLLYHOCK
CGC ALDER
CGC MOBILE BAY
CGC BRISTOL BAY
CGC NEAH BAY
CGC BISCAYNE BAY
CGC KATMAI BAY
CGC MORRO BAY
CG Sector Buffalo
CG Sector Detroit
CG Sector Lake Michigan
CG Sector Sault Ste Marie
CG AIRSTA Traverse City
CG AIRSTA Detroit

U.S. Department of Homeland Security

United States Coast Guard

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16150
11 June 2020

MEMORANDUM

From: P. S. Nelson, CAPT
CG SECTOR Sault Sainte Marie (s)

To: CGD NINE (d)
Thru: (1) CGD NINE (dpw)
(2) CGD NINE (dp)

Subj: OPERATION TACONITE, END OF SEASON REPORT

Ref: (a) Domestic Ice Breaking Operations Policy, COMDTINST 16151.1D
(b) D9 Ice Breaking Standard Operating Procedures (SOP), D9INST M16150.2B

1. During the 2020 domestic ice-breaking season, the eight U.S. Coast Guard cutters and one Canadian Coast Guard ship assigned to Operation Taconite spent a total of 2,298 hours in ice and assisted 250 commercial vessel transits. Of these transits, 40 (14 US, 21 CA, 05 other foreign) required direct icebreaker assistance to complete their intended movements.

2. Operation Taconite commenced on 11 December 2019 and ended on 31 March 2020 (a total of 111 days). Great Lakes maritime industry stakeholders estimate 4.9 million tons of dry bulk (iron ore, salt, coal, stone and cement) and liquid (gasoline, diesel, and home heating oil) cargoes received ice-breaking assistance during the 2020 winter navigation season. These cargoes, valued at more than $176 million, provided critical industrial production and power generation capability for the Great Lakes region during the operational period. Within the Operation Taconite area of responsibility (AOR), U.S. Coast Guard cutters conducted 133 hours of ice breaking activity in Canadian waters and Canadian Coast Guard ships conducted 6 hours of icebreaking in U.S. waters.

3. The National Oceanographic Atmospheric Administration (NOAA), with input provided by the Great Lakes Environmental Research Laboratory (GLERL), classified the 2020 ice season as "below average." An analysis of the 2020 winter weather and ice thickness measurements appears in enclosure 1. Enclosure 2 contains the performance measures and statistical data required by references (a) and (b).

4. My point of contact for domestic icebreaking operations is Mr. Mark Gill, the Director of Vessel Traffic Service St. Marys River. You can reach Mr. Gill at (906) 635-3299.

#

Enclosures: (1) Weather Analysis and Ice Thickness Measurements
(2) 2020 Operation Taconite Statistics

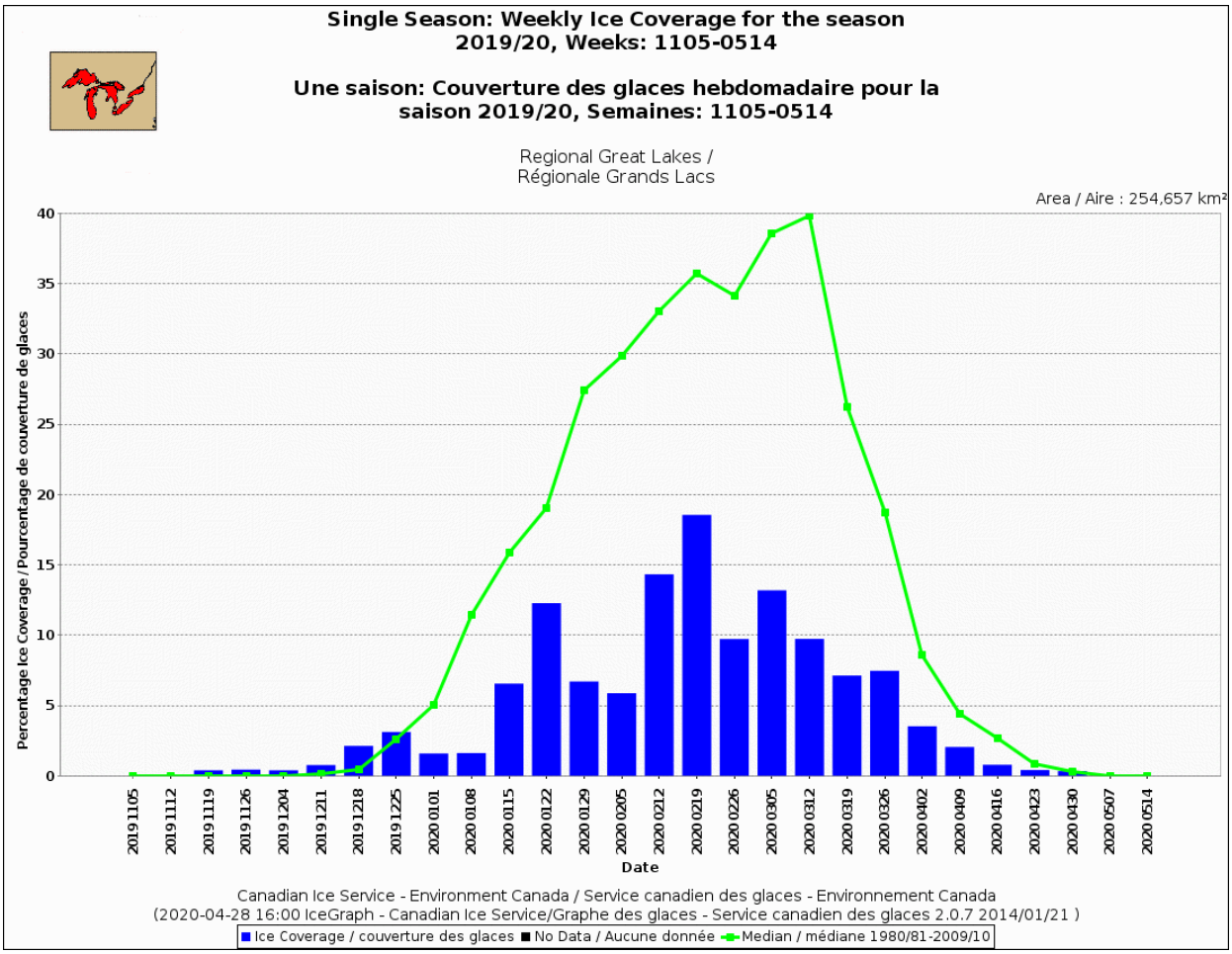
Copy: CG-5PW
CG-NAV-2
CG-WWM-3
CG SECTOR Lake Michigan
CG AIRSTA Traverse City
CGD9 Cutters

Weather Analysis and Ice Thickness Measurements:

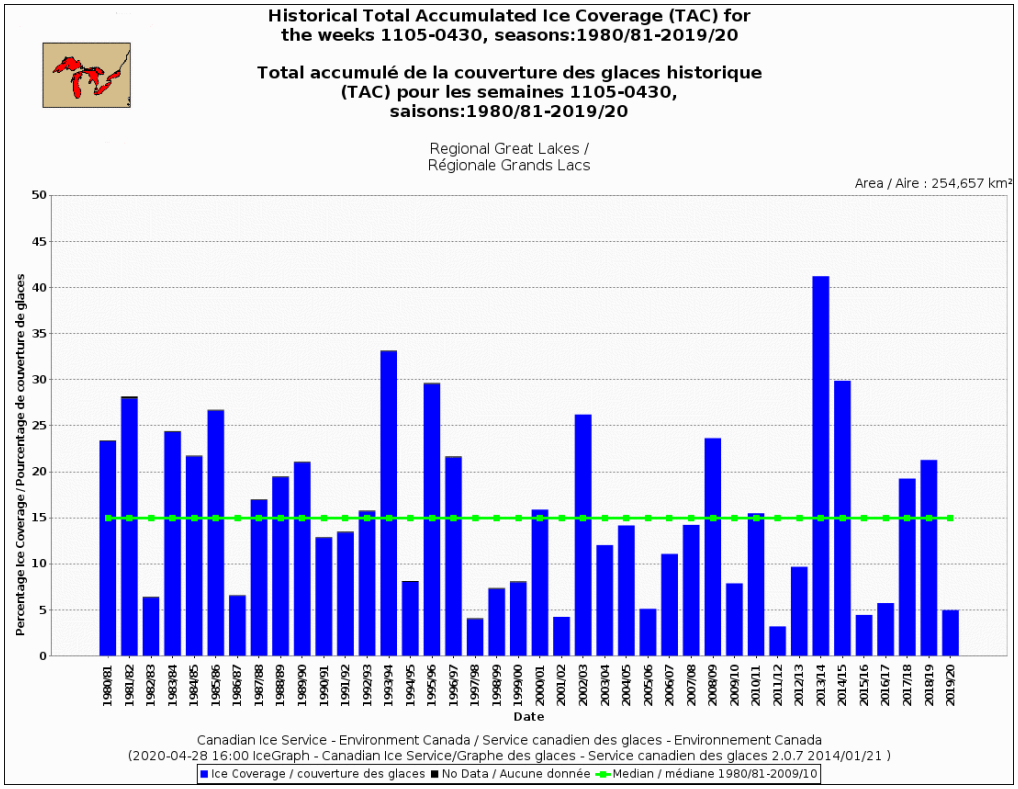
The National Oceanographic Atmospheric Administration (NOAA), with input provided by the Great Lakes Environmental Research Laboratory (GLERL), classified the 2020 ice season as "below average". Great Lakes percentage of ice cover peaked at 19.5% on February 21, 2020.

The following table summarizes the maximum ice conditions observed in key locations of the Operation Taconite area of responsibility.

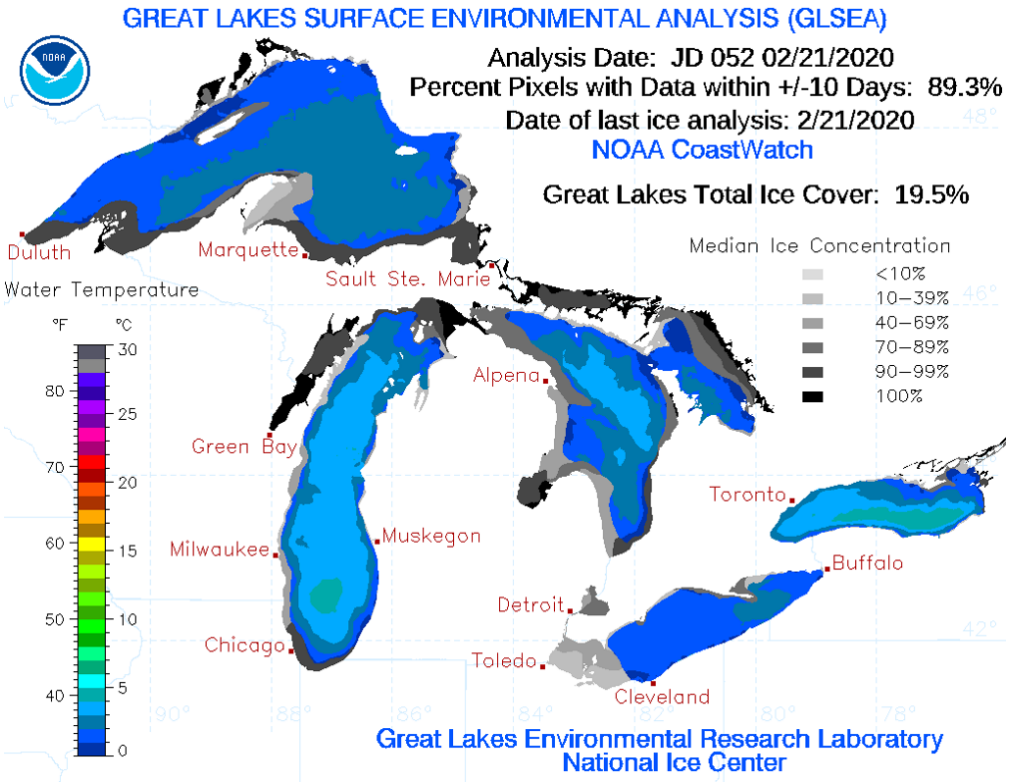
a. Thunder Bay: 18-24" plate ice with 6" snow cover.
b. Duluth-Superior: 12-18" plate ice.
c. Whitefish Bay: 12-18" plate ice with 6" snow cover.
d. St. Marys River: 12-18" plate ice with 6" snow cover.
e. Straits of Mackinac: 12-18" plate ice with 1-3' windrows.
f. Green Bay (North): 18-24" plate ice with 6" snow cover.
g. Green Bay (South): 12-18" plate ice with 6" snow cover.



Single Season: Weekly Ice Coverage
Compared to the Median (1981-2010)
Chart produced by the Canadian Ice Service



Great Lakes Total Accumulated Ice Coverage 1980-2020
Compared to the Median (1981-2010)
Chart produced by the Canadian Ice Service



2020 Great Lakes Total Ice Cover
Chart produced by NOAA/GLERL

Compiled By: Mr. Mark Gill
Contact: 906-635-3299
Revision Date: 26 May 2020

Sector Sault Sainte Marie Operation Taconite
2020 Statistics

Performance Measures:

A. **Search and Rescue (SAR) Response Requests**: One activity (MISLE 1212004). On 12 March 2020, Sector Lake Michigan coordinated the evacuation of 10 persons from an ice floe in Sturgeon Bay.

B. **Urgent Vessel Assistance Requests**: None.

C. **Exigent Community Service Requests**: None.

D. **Icebreaking Service Requests**: VTS St. Marys River (VTS SMR) received 186 requests for icebreaking assistance. Two of these requests were denied, as described below:

   1. **11 January 2020 –** Mr. Paul Christensen, Interlake Steamship Company, requested the CGC ALDER to break ice in Howards Bay in Superior, WI, for the M/V LEE A. TREGURTHA. The D9 Ice Breaking SOP classifies the waters of Howards Bay as Tier 4. Commercial ice breaking was available and reported that CG icebreaking was not needed; therefore, the icebreaking request was denied.
   2. **26 March 2020** – The master of the M/V JOSEPH L. BLOCK requested icebreaking assistance ahead of the vessel's departure from Fincantieri Shipyard in Sturgeon Bay, WI. RADARSAT imagery clearly showed that ice would not hinder bayside departure from the shipyard; therefore, the icebreaking request was denied.

E. **Vessel Transits Assisted**: Op Taconite resources assisted 250 vessel transits. Of the total transits assisted, 40 vessels (14 U.S. 21 CA 05 FF) required direct ice breaking assistance to complete their intended movements.

F. **Waterway Restrictions**: None.

G. **Waterway Closures**: None.

H. **Tier 1 Waterway Availability**: 100% of 2,664 total possible hours for both the Straits of Mackinac and St. Marys River (SMR).

   1. **Extended Navigation Season** – 100% of 948 hours for both the Straits and SMR.
   2. **Winer Navigation Season** – 100% of 1176 hours for both the Straits and SMR.
   3. **Spring Breakout** – 100% of 540 hours for both the Straits and SMR.

I. **Planned Waterway Closures:** Per 33 CFR parts 162.117 and 165.901, the following waterways were closed or restricted by the COTP Sault Ste. Marie:

   1. **Grays Reef Passage –** 16 January 2020 to 26 March 2020 (70 Days)
   2. **South Channel –** 19 January 2020 to 11 March 2020 (52 Days)
   3. **West Neebish Channel –** 16 January 2020 to 24 March 2020 (68 Days)
   4. **Pipe Island Passage –** 16 January 2020 to 11 March 2020 (55 Days)
   5. **Southern Green Bay –** 22 January 2020 to 09 March 2020 (47 Days)
   6. **Little Rapids Cut (Ice Boom) –** 10 December 2019 to 16 April 2020 (128 Days)

Statistical Summary:

A. **Aerial Support**: None.

B. **Cutter Employment**:

Area 4A (Lake Huron / Georgian Bay / North Channel) – 045 Hrs of Cutter Support

Cutter	DA VA PI FR FC MC	US CA FF
Neah Bay	02/029/000/00/00/014	01 00 00
Totals	**02/029/000/00/00/014**	**01 00 00**

Area 4B (Lake Huron / Alpena / Calcite Hbr) – 003 Hrs of Cutter Support

Cutter	DA VA PI FR FC MC	US CA FF
Katmai Bay	00/000/002/00/00/001	00 00 00
Totals	**00/000/002/00/00/001**	**00 00 00**

Area 5A (Straits of Mackinac) - 564 Hrs of Cutter Support

Cutter	DA VA PI FR FC MC	US CA FF
Mackinaw	000/033/049/00/00/051	00 00 00
Hollyhock	015/015/036/00/00/060	01 02 00
Katmai Bay	036/025/030/00/00/030	01 06 00
Mobile Bay	000/000/025/00/00/060	00 00 00
Neah Bay	015/025/021/01/00/037	02 03 00
Totals	**066/098/161/01/00/238**	**04 11 00**

Area 5B (Charlevoix / Grand Traverse Bay) - No Cutter Activity

Area 6A (Whitefish Bay) – 183 Hrs of Cutter Support

Cutter	DA VA PI FR FC MC	US CA FF
Mackinaw	004/025/041/00/00/052	01 00 00
Alder	000/000/005/00/00/020	00 00 00
Katmai Bay	005/018/000/00/00/000	00 01 00
Morro Bay	000/000/007/00/00/000	00 00 00
Samuel Risley	002/004/000/00/00/000	00 01 00
Totals	**011/047/053/00/00/072**	**01 02 00**

Area 6B (St Marys River - 957 Hrs of Cutter Support

Cutter	DA VA PI FR FC MC	US CA FF
Mackinaw	000/023/058/00/00/063	00 00 00
Bristol Bay	000/008/051/00/00/012	00 00 00
Katmai Bay	022/065/167/02/00/051	00 03 00
Mobile Bay	000/022/000/00/00/000	00 00 00
Morro Bay	003/049/098/00/00/114	00 00 00
Neah Bay	000/047/028/02/00/072	00 00 00
Totals	**025/214/402/04/00/312**	**00 03 00**

Area 7A (Eastern Lake Superior / Marquette) – No Cutter Activity

Area 7B (Central Lake Superior / Keweenaw) – No Cutter Activity

Area 8A (Duluth, Superior) - 100 Hrs of Cutter Support

Cutter	DA VA PI FR FC MC	US CA FF
Alder	00/043/019/00/00/009	00 00 00
Katmai Bay	00/029/000/00/00/000	00 00 00
Totals	**00/072/019/00/00/009**	**00 00 00**

Area 8B (Two Harbors, Silver Bay, Apostle Islands) - No Cutter Activity

Area 8C (Thunder Bay, Ont) - 88 Hrs of Cutter Support

Cutter	DA VA PI FR FC MC	US CA FF
Katmai Bay	20/035/000/00/00/000	00 05 00
Neah Bay	00/032/001/00/00/000	00 00 00
Totals	**20/067/001/00/00/000**	**00 05 05**

Area 9 (Green Bay, Escanaba, Marinette) - 358 Hrs of Cutter Support

Cutter	DA VA PI FR FC MC	US CA FF
Mackinaw	05/017/045/00/00/060	02 00 00
Mobile Bay	27/064/048/00/00/031	06 00 00
Neah Bay	00/000/018/00/00/043	00 00 00
Totals	**32/081/111/00/00/134**	**08 00 00**

Area 10A (Lake Michigan-West Milwaukee) - No Cutter Activity

Area 10B (Lake Michigan-South Calumet-Gary-Indiana-Burns Harbors) - No Cutter Activity

Area 10C (Lake Michigan-East Ludington) - No Cutter Activity

Op Taconite Totals

Cutter	**DA**	**VA**	**PI**	**FR**	**FC**	**MC**	**US**	**CA**	**FF**	**Total Hrs in Ice**
Mackinaw	009	098	193	00	00	0226	03	00	00	0526
Alder	000	043	024	00	00	0029	00	00	00	0096
Hollyhock	015	015	036	00	00	0060	01	02	00	0126
Bristol Bay	000	008	051	00	00	0012	00	00	00	0071
Katmai Bay	083	172	199	02	00	0082	01	15	05	0538
Mobile Bay	027	086	073	00	00	0091	06	00	00	0277
Morro Bay	003	049	105	00	00	0114	00	00	00	0271
Neah Bay	017	133	068	03	00	0166	03	03	00	0387
Samuel Risley	002	004	000	00	00	0000	00	01	00	0006
Totals	**156**	**608**	**749**	**05**	**00**	**0780**	**14**	**21**	**05**	**2298**

Night Operations:

U.S. Coast Guard and Canadian Coast Guard assets assigned to OPTAC completed 19 hours of nighttime icebreaking.

Icebreaking Asset Sufficiency:

Satisfactory. Although unplanned cutter unavailability totaled 206 hours, 89% of those hours involved CGC MOBILE BAY. The bulk of the casualty related work recorded for the main motor was post-SLEP deferred maintenance that required contractor support.

Seasonal Lost Cutter Hours			
Cutter	**Casualty Related**	**Other - Logistics**	**Casualty (Unsked Charlie)**
Mobile Bay	184 Hrs	00	Main Motor - 1MC
Katmai Bay	17 Hrs	08 Hrs	Jacket Water Control / 1-MC / #2 MDE / Medical
Neah Bay	00 Hrs	06 Hrs	Fuel Contract
Bristol Bay	02 Hrs	00	Loss of Propulsion (ASW)
Mackinaw	02 Hrs	00	#2 MDE Gasket Leak
Hollyhock	01 Hr	00	CPP_Hydraulics
Totals	**206 Hrs**	**14 Hrs**	**Totals**

MISLE Summary:

Planned Waterway Closures	Date Closed	Date Opened	Authority	Remarks
6890627	01/16/20	03/12/20	33 CFR 162.117	Pipe Island Channel - VTS SMR closed Pipe Island Channel until further notice. Pipe Island Course becomes an alternating one-way route.
6890634	01/16/20	03/24/20	33 CFR 162.117	West Neebish Channel - VTS SMR closed the West Neebish Channel until further notice.
6890621	01/16/20	03/26/20	33 CFR 165.901	Grays Reef Passage - COTP SSM closed Grays Reef Passage until firther notice.
6891585	01/19/20	03/12/20	33 CFR 165.901	South Channel - COTP SSM closed South Channel until further notice.
N/A	N/A	N/A	33 CFR 165.901	Moran Bay - COTP SSM closed the waters btwn Mackinac Island and St Ignace until further notice.
6892986	01/22/20	03/09/20	33 CFR 165.901	Southern Green Bay - COTP LM closed the southern Green Bay RNA until further notice.

Waterway Controls	Date Activated	Date Rescinded	Authority	Remarks
6871578	12/10/19	04/16/20	33 CFR 161.11	102100Z DEC 2019: The US Army Corps of Engineers commissioned Little Rapids Cut Lighted Ice Buoy 98B (LLNR 14105). The LIB marks the upstream end of the ice boom on the eastern side of the river, restricting the channel width to 385 ft. Due to the channel restriction, VTS ST Marys River directs no meeting or overtaking between LT 98 (LLNR 14100) and Mission Point Obstruction LT "C" (LLNR 14145). 161700Z Apr 20: USACE deactivated the ice control booms at Litytle Rapids Cut amd decommissioned LIB 98B. VTS rescinded the one-way traffic measure and restored two-way movement to the waterway.

Waterway Events	Start Date	End Date	Remarks
6874469	12/16/19	4/21/20	161200Z Dec 19: MacArthur Lock Closure - USACE closed the MacArthur Lock for winter maintenance. 211100Z APR 20: MacArthur Lock Reopened - USACE opened the MacArthur Lock for the 2020 Navigation Season.
6874460	12/11/19	3/31/20	111300Z DEC 19: Commenced Op Taconite 311200Z MAR 20: During the 111 days of the 2020 domestic icebreaking season (11 Dec – 31 Mar), the nine U.S. and Canadian Coast Guard vessels assigned to Operation TACONITE delivered 769 hours of icebreaking to the benefit of 250 vessel transits; 40 of these transits required direct ice breaking assistance. This work also served the needs of eight island communities and fulfilled 186 individual icebreaking service requests. These same icebreaking vessels put forth an additional 1,529 hours of preventative icebreaking to establish and maintain tracks in the ice choked waterways of Green Bay, the Straits of Mackinac, the St Marys River, Georgian Bay and western Lake Superior. Industry officials estimate more than 4.9 million tons of dry bulk and liquid cargoes shipped during the 111 days of this operational period. This translates to $176 million dollars of commodities critical to power generation, industrial productivity and public safety, moved during the winter months of the 2020 domestic icebreaking season. US Coast Guard assets delivered 133 hrs of icebreaking assistance to CA waters. Canadian Coast Guard assets delivered 6 hrs of icebreaking assistance to US waters. OPTAC assets conducted 19 hours of nighttime ice breaking. Statistically there were:

			01 SAR responses 00 Urgent Vessel Assistance Response 00 Exigent Community Service Requests 186 Icebreaking Service Requests (2 declined) 00 hrs of Waterway Restriction 00 hrs of Waterway Closure Tier 1 availability was 100% (Avg 2664 of 2664 hrs) Extended Season: 100% (948 of 948) Winter Season: 100% (1176 of 1176) Break Out Season: 100% (540 of 540)
1212004	3/12/20	3/12/20	1217001Z MAR 20: While grooming the ice in the bay of Green Bay, SEC Lake Michigan diverted CGC MOBILE BAY to assist with an active ice rescue operation IVO Sherwood Pt Lighthouse. The cutter was roughly 1.5NM from the location. A large ice floe sheared off from the shoreline taking an unknown number of ice fisherman with it. Strong southerly winds were causing the field of ice to drift rapidly offshore. Upon arrival MOBILE BAY located the lead of open water caused by the shear and followed it to the staging area for ice rescue responders. The ice conditions in that location appeared to be around 12 inches thick but looked weak and the surface was flooded from the current downpour of rain. Concerned their entry into the ice field could further destabilize the ice and/or cause fractures, MOBILE BAY held station in the soft water and served as the on-scene coordinator for the evacuation of the stranded persons. MISLE Case/IMA are 1212004/6925428 documents the response efforts.

Note: MISLE waterway management activities documenting “ice and wx analysis”, “industry outreach”, and “tfc management tasks” performed by the Sector staff are not listed in this summary, but are available upon request.

List of Acronyms:

DA – Direct Assistance

VA – Vessel Assistance

PI – Preventative Icebreaking

FR – Ferry Relief

FC – Flood Control

MC – Miscellaneous Ice Breaking

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16155
15 April 2020

MEMORANDUM

From: J. W. Novak, CAPT
CG SECTOR Detroit

To: CGD NINE (dpw)

Subj: 2019 – 2020 OPERATION COAL SHOVEL ANNUAL REPORT

Ref: (a) Domestic Icebreaking Policy and Reporting Requirements, COMDTINST 16151.1D
(b) Ninth District Icebreaking Policy and Procedures, D9INST M16150.3
(c) Operation Coal Shovel Standard Operating Procedures, SECDETINST 16150

1. This report is to formally recognize that Operation Coal Shovel did not commence during 2019-2020. All training, broadcasts and press releases were prepared for the season.

2. On a daily basis, Sector Detroit ice officers monitored conditions throughout the entire AOR to ensure the Tier I and II waterways were not hindered by ice. Due to significantly above average temperatures, ice did not accumulate to a point requiring ice breaking assistance.

3. Throughout the course of the winter, our ice officers participated in all ice calls, conducted multiple ride-alongs with Canadian Ice Breakers, setup five Laker Rides for USCG members and oversaw over 30 active duty and auxiliary ice flights to maintain an updated operating picture.

4. The Sector Detroit point of contact for this report is LT Austin Moran at (313) 568-9508.

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