Grounding at Gros Cap Reef

M/V ROGER BLOUGH

Flag: US

Length: 833'

Cargo: Taconite

LPOC: Two Harbors, MN



NPOC: Conneaut, OH





27 May 2016 Conditions

- Sky Conditions: Clear
- Wind Speed: 6 Kts ESE
- Visibility: 10 NM
- Air Temp: 62 F
- Water Temp: 42 F
- Wave Height 2 Ft



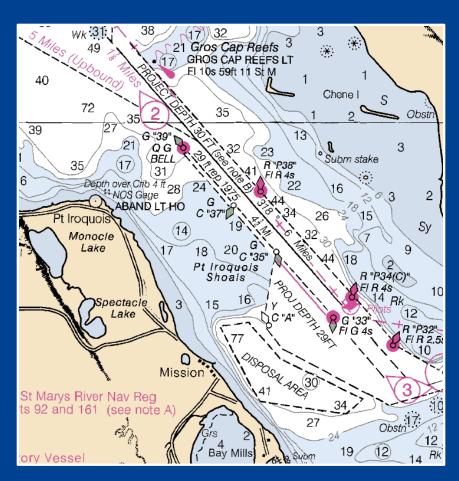




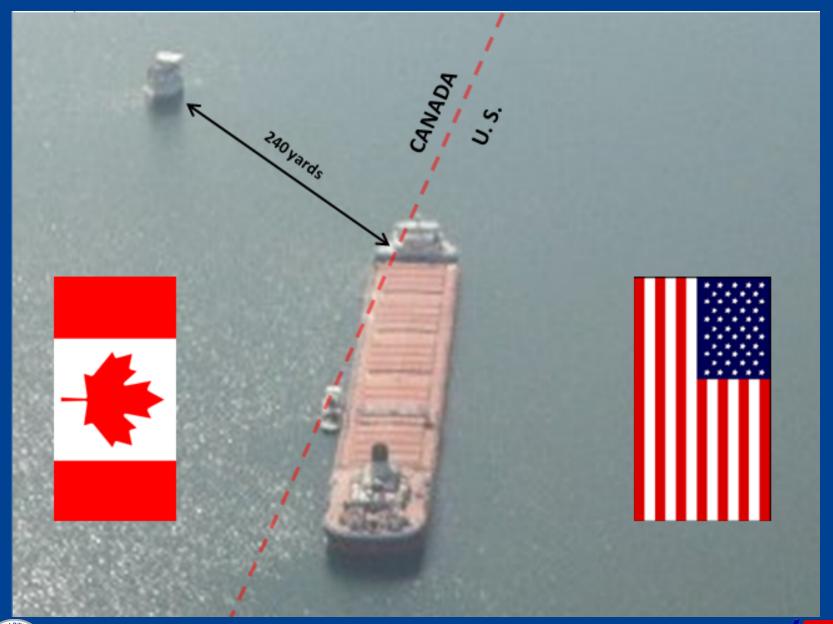
Circumstances of Grounding

- Left of track down bound
- Overtaking vessel in tow
- Was not using depth sounder nor chart plotter
- Using seaman's eye









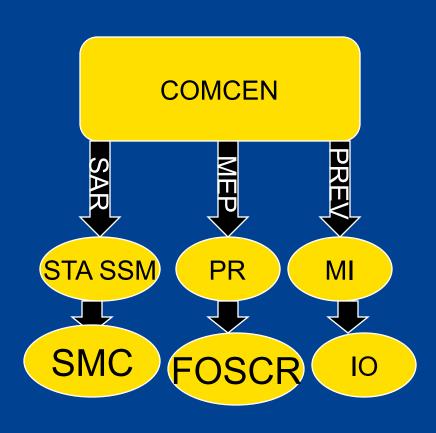


Initial Response

- SAR: SMIB issued
- Mass Rescue
- Launched 25' RB-S and MH-65
- Deployed team of FOSCR, PR, IO, and MI

CANUSLAK







CANUSLAK

- Activated 29 May at 1021
- Potential threat to the environment







NT-VRP

Applicability:

Self-propelled;

Uses oil as fuel for main propulsion;

400 GT (ITC) or greater;

Operates on the Navigable Waters of the U.S.











Plan Facilitation

QI: Qualified Individual

- -Designated in writing
- -Be available 24/7
- -English
- -US (or Canada)

Activate OSROs

Liaise w/FOSC

Obligate funds
Homeland
Security





Plan Components

- (1) General information and introduction.
- (2) Notification procedures.
- (3) Shipboard spill mitigation procedures.
- (4) Shore-based response activities.
- (5) List of contacts.
- (6) Training procedures.
- (7) Exercise procedures.
- (8) Plan review and update procedures.
- (9) Geographic-specific appendix for each COTP zone in which the vessel or vessels operate.
- (10) An appendix for vessel-specific information for the vessel or vessels covered by the plan.





Booming Ops

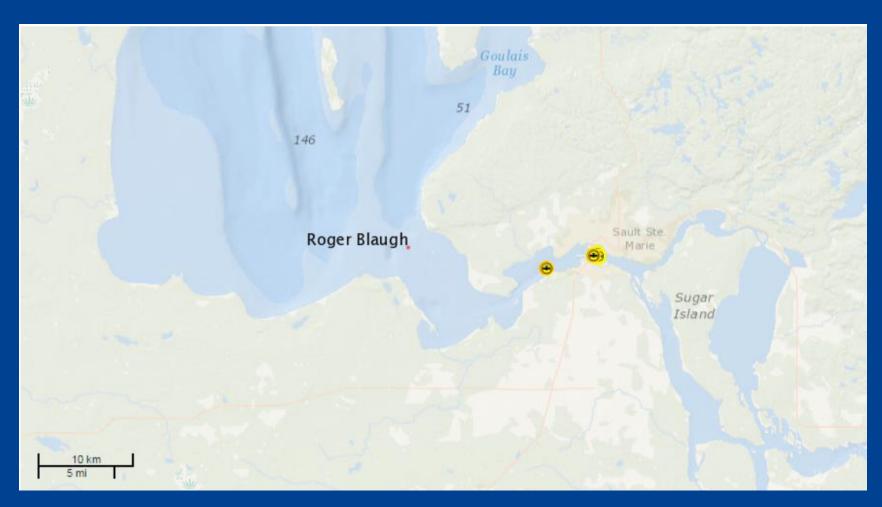
- 30 May booming operations commenced
- OSRO staged 6,000' of containment boom O/S
- Stern of BLOUGH boomed off- 500'







Freshwater Intake Locations







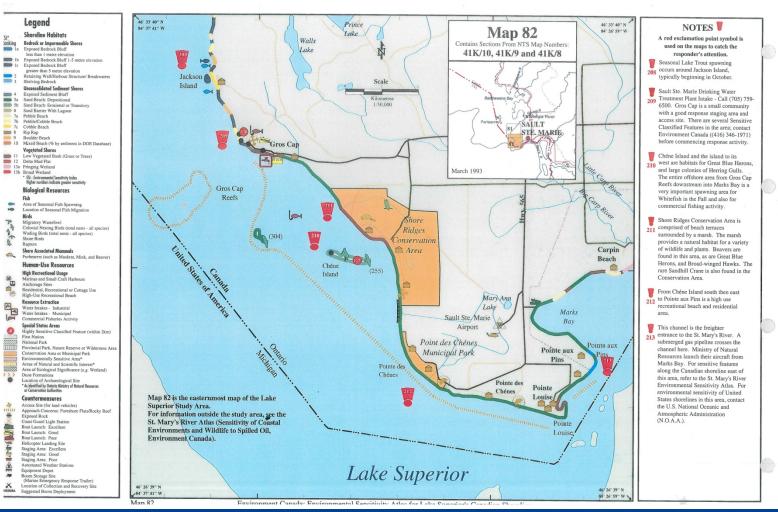
Environmental Sensitivity Atlas







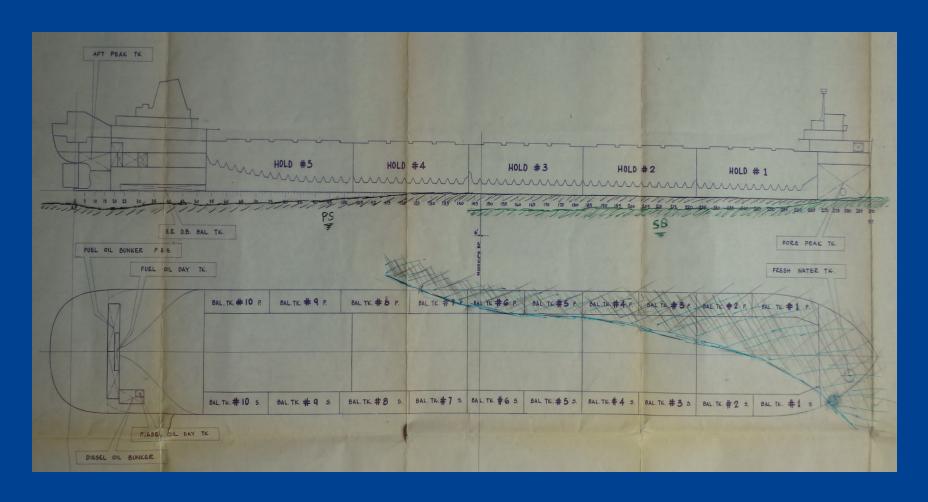
Environmental Sensitivity Atlas







Vessel Schematics

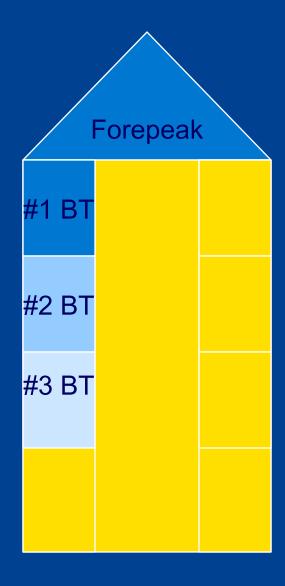






Initial flooding:

- Port forepeak fully flooded
- #1 void tunnel fully flooded
- #1 port ballast tank flooded to 26'
- #2 port ballast tank flooded to 12'
- #3 port ballast tank flooded to 7"







USCG Salvage Engineering Response Team

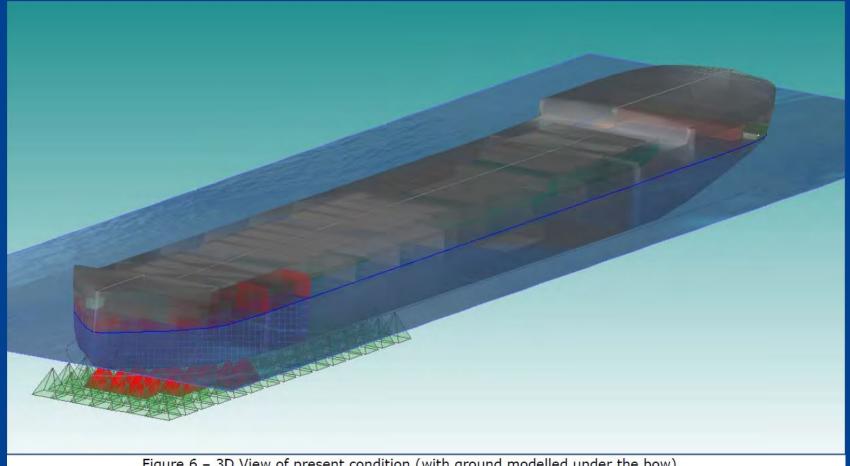


Figure 6 – 3D View of present condition (with ground modelled under the bow)





Lightering Sequence @ Anchor

ROGER BLOUGH - Lightering Sequence - Waiski Bay, rev A

Lightering Sequence ROGER BLOUGH 04-06-16

Cargo Holds												
Con diktor		Arrival	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
Condition		Waiski Bay	#4 Hold	#2 Hold	#5 Hold	#1 Hold	#4 Hold	#3 Hold	#5 Hold	#2 Hold	#4 Hold	Final
No.1 Cargohold	[LT]	4300	4300	4300	4300	0	0	0	0	0	0	0
No.2 Cargohold	[LT]	5800	5800	2800	2800	2800	2800	2800	2800	0	0	0
No.3 Cargohold	[LT]	4200	4200	4200	4200	4200	4200	0	0	0	0	0
No.4 Cargohold	[LT]	9800	6800	6800	6800	6800	2800	2800	2800	2800	0	0
No.5 Cargohold	[LT]	8900	8900	8900	5900	5900	5900	5900	0	0	0	0
This	condition:	33000	30000	27000	24000	19700	15700	11500	5600	2800	0	0
Water Ballast Tanks												
Fore Peak Tank	[LT]	breached	breached	breached	breached	breached	breached	breached	breached	breached	breached	breached
Side Tank # 1 P	[LT]	breached	breached	breached	breached	breached	breached	breached	breached	breached	breached	breached
Side Tank #1S	[LT]	80	80	80	80	80	80	80	80	80	80	800
Side Tank # 2 P	[LT]	breached	breached	breached	breached	breached	breached	breached	breached	breached	breached	breached
Side Tank # 2 S	[LT]	1300	1300	1300	1300	1300	1100	1100	1100	700	700	400
Side Tank # 3 P	[LT]	70	70	70	70	700	700	700	700	700	700	1300
Side Tank # 3 S	[LT]	350	350	350	350	700	700	700	700	700	700	1300
Side Tank # 4 P	[LT]	10	10	700	700	700	700	700	700	700	700	1300
Side Tank # 4 S	[LT]	10	10	700	700	700	700	700	700	700	700	1300
Side Tank # 5 P	[LT]	10	700	700	700	700	700	700	700	700	700	1300
Side Tank # 5 S	[LT]	10	700	700	700	700	700	700	700	700	700	1300
Side Tank # 6 P	[LT]	10	10	10	10	10	10	1000	1000	1000	1000	1000
Side Tank # 6 S	[LT]	10	10	10	10	10	10	1000	1000	1000	1000	1000
Side Tank # 7 P	[LT]	10	10	10	10	10	10	10	700	700	1300	1300
Side Tank # 7 S	[LT]	10	10	10	10	10	10	10	700	700	1300	1300
Side Tank # 8 P	[LT]	10	10	10	10	10	800	800	800	800	1600	1600
Side Tank #8 S	[LT]	10	10	10	10	10	800	800	800	800	1600	1600
Side Tank # 9 P	[LT]	10	10	10	10	10	10	10	1300	1300	1300	1300
Side Tank # 9 S	[LT]	10	10	10	10	10	10	10	1300	1300	1300	1300
Side Tank # 10 P	[LT]	10	10	10	1200	1200	1200	1200	1200	1200	1200	1200
Side Tank # 10 P	[LT]	10	10	10	1200	1200	1200	1200	1200	1200	1200	1200
Aft Peak Tank	[LT]	40	40	40	40	40	40	40	40	40	40	40
Ballast Trunk	[LT]	985	985	985	985	985	985	985	985	985	985	50
This	condition:	2965	4345	5725	8105	9085	10465	12445	16405	16005	18805	21890
				Hydrost	atic and Stre	ength summ	ary					
Draught Fwd Marks	[ft]	30.5	26.0	23.5	23.2	16.6	15.3	13.2	14.7	10.1	10.1	15.3
Draught MS Marks	[ft]	27.1	24.7	23.9	23.6	21.7	20.5	19.5	18.7	17.0	17.0	18.9
Draught Aft Marks	[ft]	26.6	23.5	24.2	24.0	26.8	25.8	25.7	22.8	23.9	24.0	22.4
GMt	[ft]	10.3	11.4	12.2	13.9	18.4	20.1	25.0	30.1	37.8	41.0	35.4
Heel	[degr]	0.1 P	0.9 P	0.1 P	0.0	0.3 S	0.1 P	0.2	0.1 S	0.3 P	0.2 P	0.1 S
BM, % of Sea Allowable	[-]	72.0	70	67	80	71	44	66	74	67	67	77





Lightering Operations







PHILIP R. CLARKE







PHILIP R. CLARKE







ARTHUR M. ANDERSON







VTS

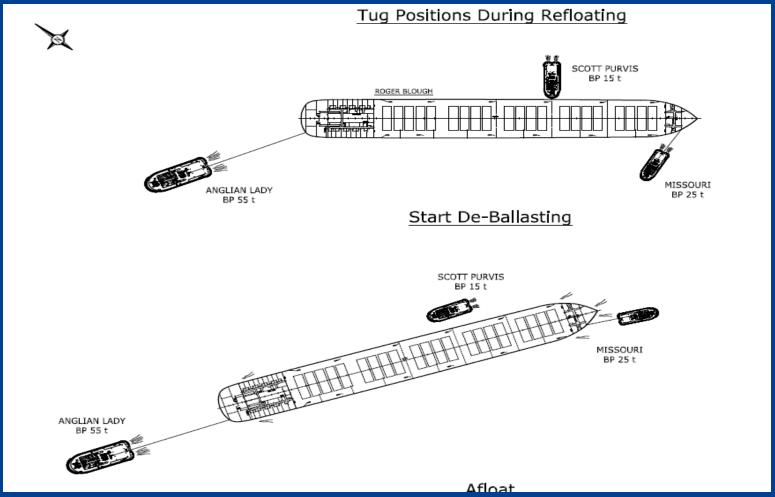
- 500 yd Safety Zone
- No meeting nor overtaking in the vicinity of the safety zone
- Transit the area at minimum safe speed
- Expanded to 750 yds during lightering OPS







Refloating Tug Positions







Tug escort







Safe Transit

- Transited to designated anchorage area in Waiska Bay
- Authorized transit to Potagannissing Bay anchorage
- Transit to Stugeon Bay,WI







Dive Ops

- Assess hull damage
- Contacted Divers Alert Network
- Two diver integrity
- Surface Air Supplied dive equipment







CG Involved

- SEC SSM
- AIRSTA TC
- STA SSM
- ANT SSM
- CGC MOBILE BAY
- CGC BUCKTHORN

- D9 DRAT
- IMAT
- SERT
- MSU Duluth





Other Involved Parties

- NTSB
- ACOE
- Canadian CG
- Transport Canada
- NOAA
- NRC

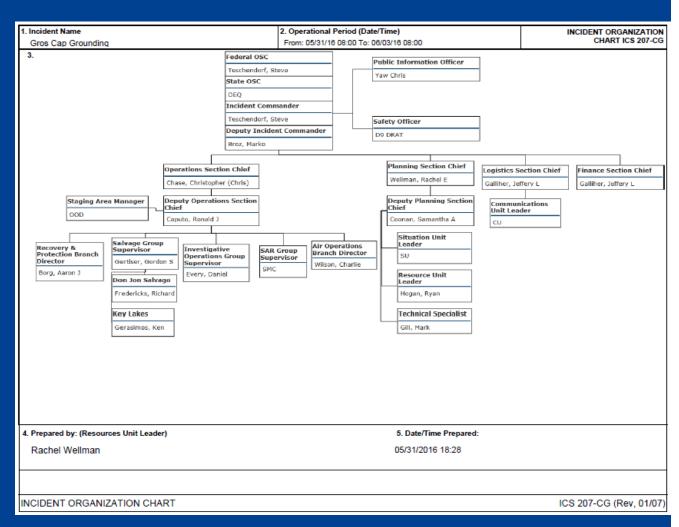
- DonJon Salvage
- Canadian National Railroad -Key Lakes Shipping
- M/V PHILIP R. CLARKE
- M/V ARTHUR M. ANDERSEN
- T/V SCOTT PURVIS
- T/V ANGLIAN LADY
- T/V MISSOURI





ICS

- Case Load
- Int'l Incident
- COMCEN conducted42 cases(29 SAR)







Questions?





