

Follow the Polar Expedition

*2012 Chukchi Sea Offshore Monitoring in Drilling Area (COMIDA)
Hanna Shoal Ecosystem Study*

Aboard the US Coast Guard Cutter Healy



...with Ms. Wheeler
2012 PolarTREC Teacher

August 5 – 25, 2012
www.polartrec.com



To follow the expedition: Click on the expedition at www.polartrec.com
To ask a question: Click on "Ask the Team" and "New Topic"



Name: _____ Teacher: _____

Useful Nautical Terms—Good to know	
Aboard: On a ship	Aft: Towards the stern
Ballast: Weights in the bottom of the ship	Beam: Width of ship
Bearing: Compass direction	Bow: Front of ship
Bridge: Command center of ship	Bulkhead: Inner wall of ship
Buoy: Floating marker	Cabin: Room in the ship
Cable: Strong wire rope	Cruise: A trip at sea
Course: Direction ship is travelling	Cutter: USCG vessel over 65 feet long
Debark: Leave the ship	Deck: Flat surface on ship, like a floor
Fore: Towards the bow	Galley: Ship's kitchen
Gangway: Doorway into ship	Gangplank: Walkway onto ship
Hangar: Large room for aircraft	GPS: Global Positioning System
Head: Bathroom on ship	Hatch: Opening in a deck
Hull: Shell and framework of ship	Helm: Device to steer ship, (e.g. wheel)
Knot: Nautical mile per hour (1.15 mph)	Keel: Bottom centerline of ship
Port: Left side when facing forward	Leeward: Downwind from ship
Radar: Radio Detection and Ranging	Porthole: Small round window in ship
Scuppers: Drains in decks	Roll: Side-to-side movement of ship
Sounding: Taking depth measurements	Sonar: Electronic system to measure depth by timing sound pulse echoes
Stern: Back end of ship	Starboard: Right side if facing forward
Swell: Open ocean waves	Superstructure: Upper portions of ship
Wake: Turbulent water behind ship	USCG: United States Coast Guard
Waterline: Level where water ends on hull	Watch: A work shift on duty
Windward: Upwind from ship	Winch: Device to reel cable in or out

USCGC Healy Ship's Characteristics

Length, Overall 420'0" (128 meters)

Beam, Maximum 82'0" (25 meters)

Cruising Speed 12 knots @ 105 RPM

Max Speed 17 knots @ 147 RPM

Icebreaking Capability 4.5 ft @ 3 knots (continuous) 8 ft (2.44 m) Backing and Ramming

Draft, Full Load 29'3" (8.9 meters) (The part of the boat that is under water)

Displacement, Full Load 16,000 LT (35,840,000 lbs.)

Fuel Capacity 1,220,915 GAL (4,621,000 liters)

Propulsion Diesel Electric, AC/AC Cycloconvertor

Auxiliary Generator EMD 16-645F7B, 2400kW

Generating Plant & Drive Motors 4 Sultzer 12Z AU40S, 2 AC Synchronous, 11.2 MW

Shaft Horsepower 30,000 Max HP

Propellers 2 Fixed Pitch, 4 Bladed

Date: _____ Weather: _____ Temp: _____

Daily Journal Theme: _____

What did you learn from the journal? _____

What questions do you have? _____

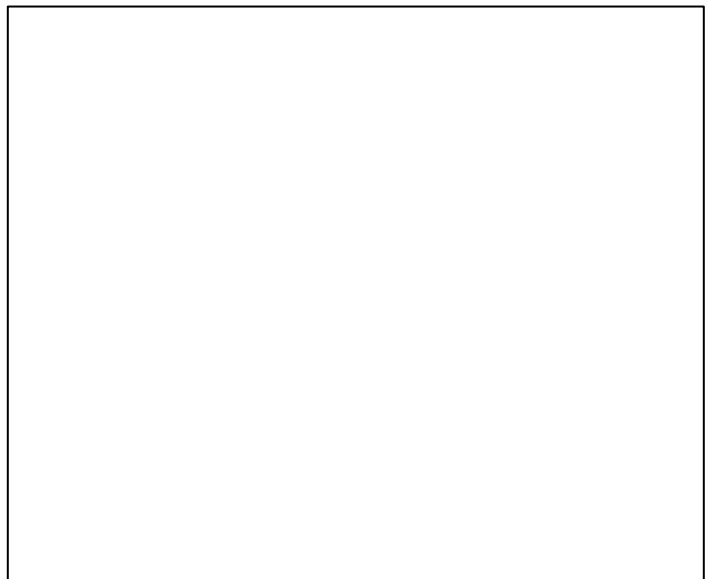
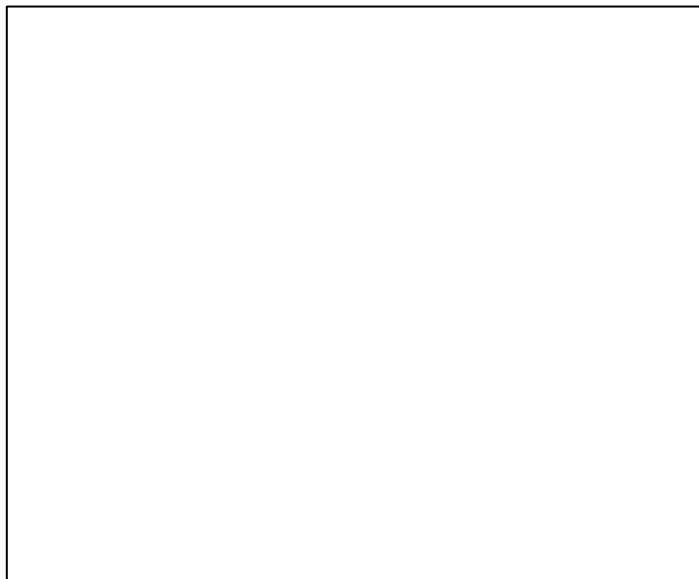
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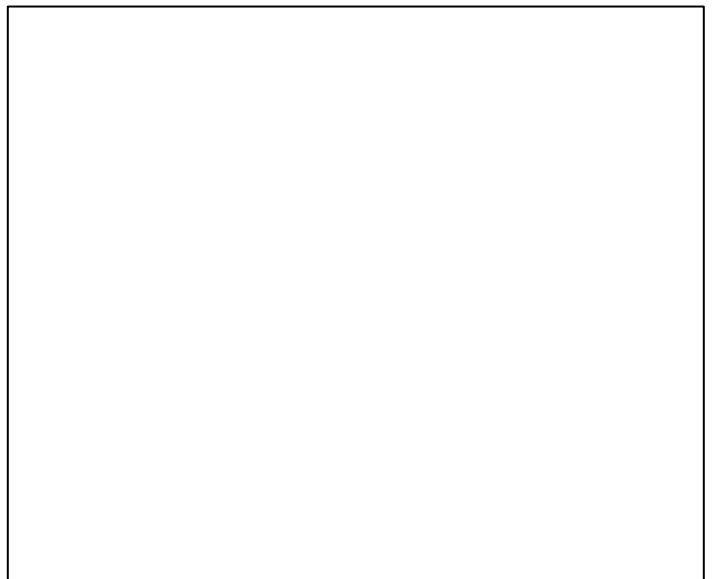
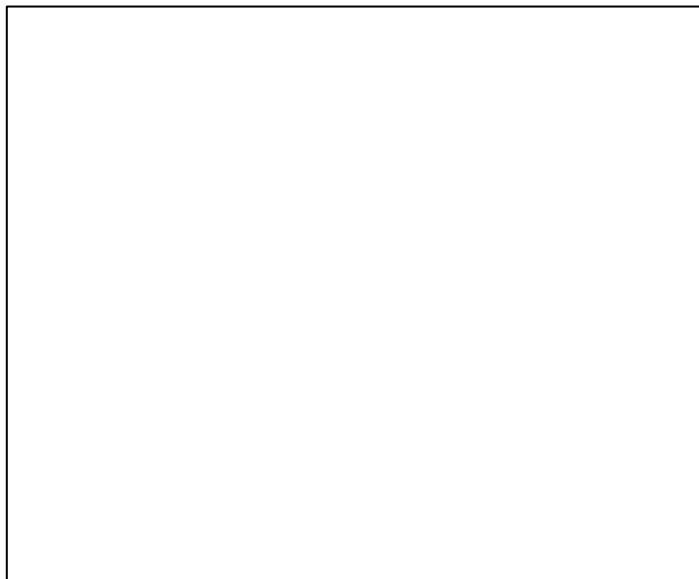
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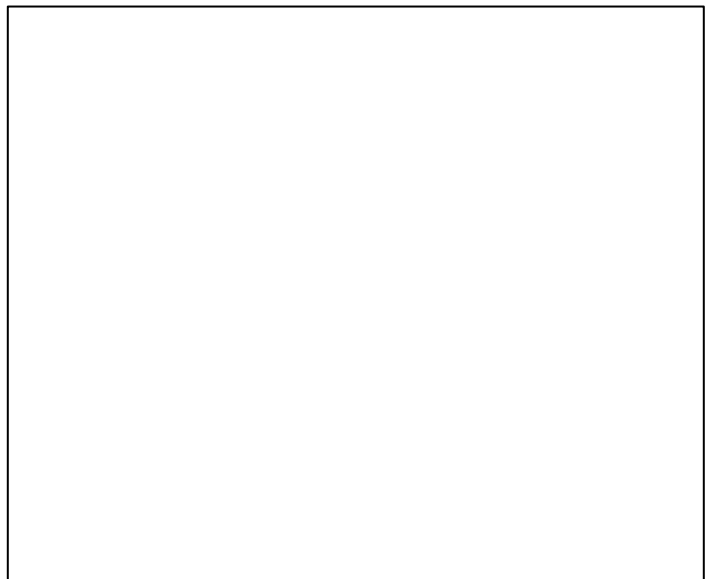
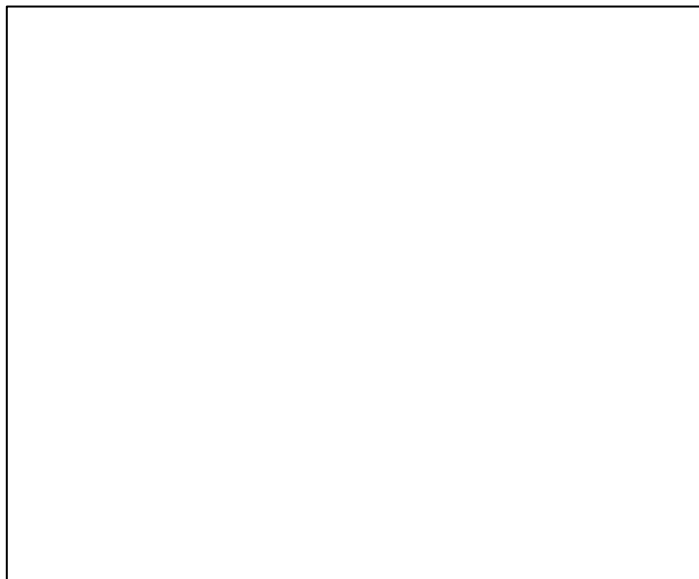
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