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May 6th, 2010

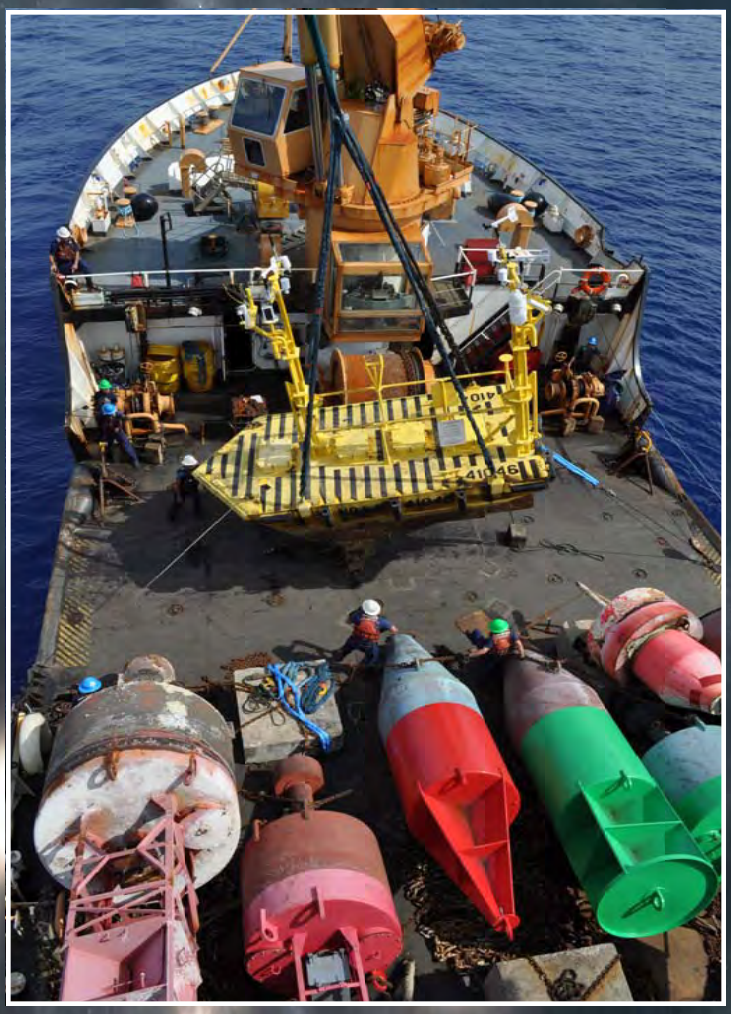
Lil' Shade Tree

CGC OAK (WLB-211)

Acorn Edition

Deep Water Horizon
Oil Spill Response

ENS Rad Productions



The Coast Guard Cutter OAK, a 225' Buoy Tender left her homeport of Charleston, S.C. on April 5th 2010 for a deployment to Puerto Rico & the U.S. Virgin Islands to perform Aids To Navigation (ATON) work on numerous buoys. After a series of setbacks, including a diversion to catch an adrift NOAA Weather Buoy before it ran aground, the crew wrapped up the long and grueling patrol then headed home.

As the Cutter neared Miami on April 29th, she was diverted to Key West, FL and ordered to offload the buoy deck then take on fuel, food, and water. Preparations had to be made quickly for OAK's next tasking, which may prove to be another unprecedented experience in the Cutter's history. OAK's next stop placed her in Pensacola, FL at the Naval Air Station pier; deck force members situated and inventoried the ship's Spilled Oil Recovery System (SORS) equipment.

The crew had heard of the Deep Water Horizon oil rig explosion on April 20th, 2010 and the ensuing oil leak response in the Gulf of Mexico. As the response grew, the crew half expected OAK would respond yet dreamed of returning home to their families. Once the official call came that OAK was needed in the Gulf, everyone's focus turned to oil skimming operations. Local, National, and International media outlets took notice prior to OAK departing for the spill site. Commander Glander hosted a large press conference with reporters from Gulf coast states and as far away as Norway. Sam Champion, from ABC's Good Morning America, brought OAK into the national spotlight by performing the show's live weather hits from our buoy deck.

The **Spilled Oil Recovery System,** or **SORS** as we call the machinery and equipment, is the meat and potatoes of this operation. The system is comprised of a few key parts including the Fast Sweep V Boom, the Sea Slug Canflex Storage Bladder, and the large transfer hoses and pump that takes oily water from collection to storage points.

As the ship steers along the left side of an oily water patch, the V-Boom collects the product on the right (starboard) side. A nice thick layer of oil is prime for the skimmer device to suck in and mince the oily substance on the uppermost layer of sea water. The skimmer head is outfitted with sharp blades that will take in and mince objects up to 2 inches in diameter. Look closely at the lower left photo and you'll see plenty of floating wooden debris.

As the oily water is taken in, the mixture is deposited into a large storage bladder attached to the left (port) side of the ship. Just one of our large bladders can hold up to 26,400 gallons of oily water. Once a sea slug bladder is full, a support vessel can come along side and tow the unit to a disposal site.

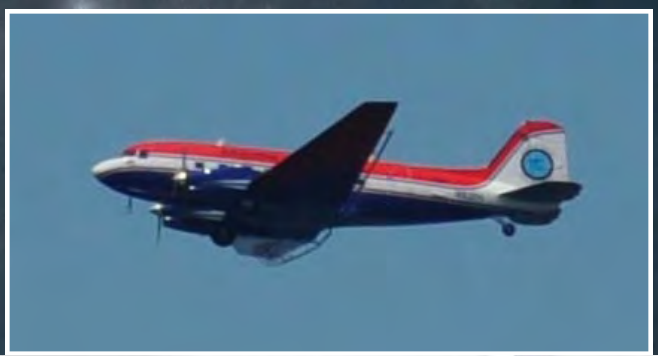
Top Left: The 60 foot inflatable boom sections are lifted up and out of their storage crates using our buoy deck crane.

Top Right: Chief Difrancesco inflates the boom sections with a converted back pack leaf blower.

Middle Left: The massive storage bladder waits to be filled with oily water.

Middle Right: Deploy the Boom– this apparatus works best with only 1 knot or less of headway through the water.

Lower Left: Three rigid floats keep the skimmer device right at surface level. It has a reverse function to clear the intake of obstructions.

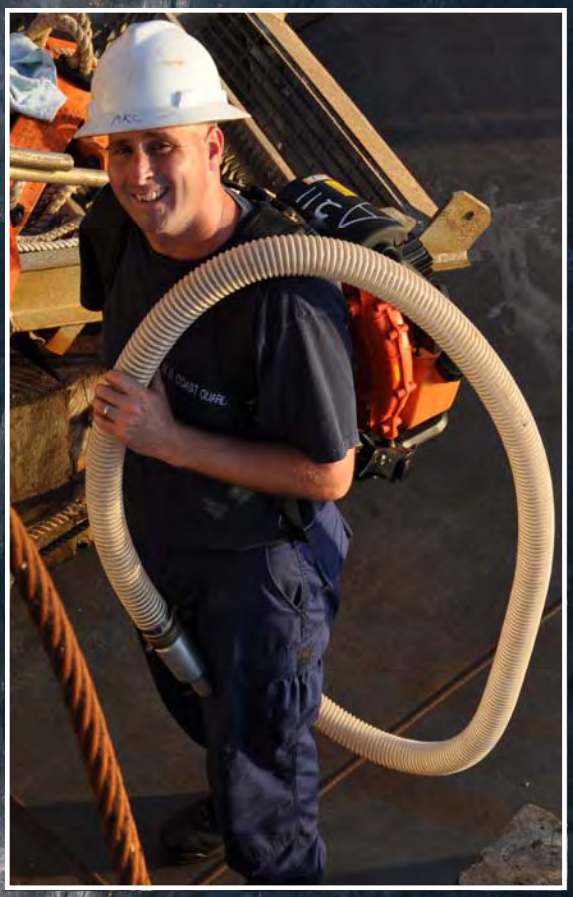


The Gulf of Mexico, as OAK quickly discovered, is huge and to effectively track down and capture ribbons of oil- a little help goes a long way. Timely reports from aircraft and vessels around the area helped guide the ship towards denser areas of oil drifting towards Louisiana's Chandeleur Islands. Searching with binoculars as ENS English and ET1 Hernandez found, may be better as a solo-activity.

Chief Warrant Officer Gilmore, or BOSN as the crew calls him, is the buoy deck authority for OAK's embedded media personnel. OAK is currently hosting a photographer for National Geographic and a reporter from the Associated Press.

Along with embedded members of the media, OAK is hosting a handful of Coast Guard environmental & SORS machinery experts for the duration of this trip. Pictured in the lower left is Chief Carns operating the skimmer control panel. Many members of the crew have already been directly involved with this unique & relatively rare operation.

Chief Difrancesco, pictured lower right wearing a modified backpack inflator unit also gets to accomplish his childhood dream of being a professional Ghostbuster. Sadly, halfway through humming the theme song, someone informed him it was, in fact, just a backpack leaf blower.



Hey Kids!

Shackles the Bear here- I can't wait to visit your classrooms soon. Until then, wrap your brains around this!

OAK's Auxiliary Sea Water System returns salt water to the ocean with a rare & vibrant splash of color in the night. Marine Plankton blooms, found naturally in the environment, are called 'bioluminescent dinoflagellates' which emit neon blue flashes when disturbed or broken apart.

Photographed & produced by
ENS Jason Radcliffe, USCG