

**MC252 Deepwater Horizon Oil Spill
Unscheduled HARP Recovery
February Mission Plan
February 14, 2011**

Originated as a requirement by:

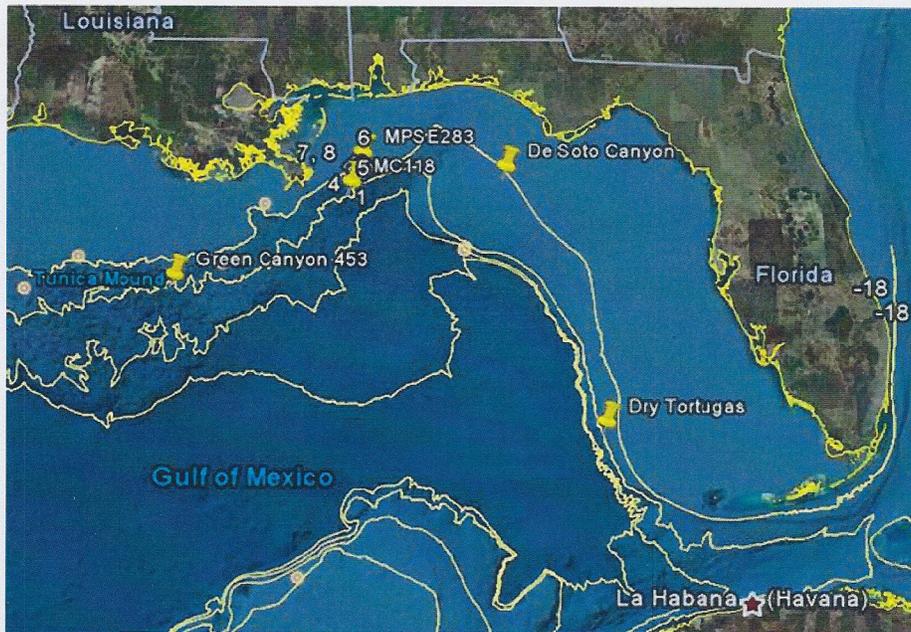
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Amended plan by:

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Background and Scope of Work

To monitor marine mammals and study ambient ocean noise over long periods, the Scripps Institution of Oceanography (SIO), Whale Acoustics Laboratory has developed High frequency Acoustic Recording Packages (HARPs), autonomous acoustic recording devices for marine environments. There are currently five HARPs associated with the MC252 Deepwater Horizon Oil Spill deployed in the Gulf of Mexico (see figure below).



The MPSE283 HARP located about (25NM to the northeast of the DWH) wellhead came to the surface prematurely on 6 February 2011. At this point it is not possible to ascertain conclusively what caused the HARP to release early. It's possible that a bottom trawl may have snagged it. The HARP is transmitting regular positions from its ARGOS transmitter and is apparently adrift and moving very slowly. As of 1630, 7 February 2011, the HARP was located approximately 100 miles from Mobile, Alabama and 90 miles from Gulfport, Mississippi.

It is important to expedite the recovery in order to forestall damage to or loss of the HARP unit and data collected to date.

Scope

This document describes the recovery, refurbishment and re-deployment of the HARP unit which was deployed for passive acoustic monitoring of marine mammals but was prematurely released on 6 February 2011.

HARP Recovery and Redeployment

Vessel Mobilization and Mission

The vessel being utilized for this project will be the M/V Rachel Bordelon.

Very little mobilization will be required for this mission. The M/V Rachel Bordelon is currently outfitted with an A-frame and winch capable of recovery and re-deployment of the HARP unit.

Mobilization will be conducted in two phases. The first phase involves confirmation that the following equipment and systems required for the recovery and deployment of the HARP unit are in place and functional:

1. Winch and hydraulic power unit (HPU)
2. Generator
3. Installation of navigation system
4. Miscellaneous hand tools and supplies

The second phase of the vessel mobilization involves arrival of Scripps personnel and equipment. One or two Scripps Institution of Oceanography technicians will accompany the mission in order to provide direction and support for the HARP retrieval, servicing (including battery change), and redeployment. During the vessel mobilization phase of the operation, it is anticipated that the CSA senior staff will communicate with SIMOPS personnel to establish operational parameters and communications protocols required during the recovery and subsequent deployment of the HARP unit.

Locate the HARP unit

- 1) The vessel will be taken to the last known position of the HARP. The last position may be several hours old at that point, so a visual search of the area will need to be carried out.
- 2) A search trackline will be agreed upon by the SIO personnel and the ship's captain to maximize the chances of sighting the instrument.
- 3) The ship will run the survey lines around the last satellite position of the HARP at a speed determined by the captain.
- 4) Two SIO personnel will be on watch at all times during the search to locate the instrument visually.

Recover/re-deployment Sequence

- 1) Safety brief and recovery plan with ship crew and previously established communications protocols with SIMOPS.
- 2) Approach HARP unit. All recovery gear and hardware will be prepared and ready for recovery operations.
- 3) The recovery vessel will approach the HARP (stern to) and a line will be attached to the HARP unit. Additional tag lines will be attached and the unit lifted to the deck.
- 4) It is estimated that it will take approximately 4 hours to service the instruments and to re-install the HARP unit (not including transit back to original location).
- 5) The HARP unit will be serviced while underway to the re-deployment location
- 6) Upon arrival at the prescribed station, the HARP unit will be redeployed. This is a relatively simple operation involving placement and release of the unit using the same A-frame utilized in the recovery.
- 7) If the HARP unit requires repair that must be carried out on shore, the ship will return directly to port upon recovery/assessment of the instrument, and the instrument will not be redeployed.
- 8) A report documenting the recovery, repair (if any) and re-deployment will be completed within 30 days of HARP recovery

Anticipated Schedule (2011)

As soon as possible.

Estimated Costs

HARPS Recovery Mission Cost Table	Units	Unit Cost \$	Quantity	Total
Mobilization Costs	ea	\$4,200	1	\$4,200
Vessel Costs (incl. estimated fuel)	ea	\$47,880	1	\$47,880
SCRIPPS and CSA Support	ea	\$8,400	1	\$8,400
Reporting	ea	\$5,000	1	\$5,000
			Total Estimated Cost	\$65,480

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Approvals

Approval of this work plan is for the purposes of obtaining data for the Natural Resource Damage Assessment. Each party reserves its right to produce its own independent interpretation and analysis of any data collected pursuant to this work plan.

BP Approval:

Cash Fay [Signature] 2/14/2011
Printed Name Signature Date

Federal Trustee Approval:

Jessica White [Signature] 2/14/2011
Printed Name Signature Date

Louisiana Trustee Approval:

KAROLISEN DEKUSSCENE [Signature] 2/23/11
Printed Name Signature Date

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