**8. DIVE PLAN**

PROJECT : Two (2) pod search/recovery dives

DATES: 01/01/2018 to 01/31/2018

 SCIENTIFIC SUPERVISOR: Mike Muglia

 DIVE MASTER Mike Muglia

PURPOSE: Scientific

MODE: SCUBA

BREATHING GAS: Nitrox EAN30

DIVE SITE(s):

1. 2017 B1 -- “Hatteras Bay” Frame (aka 102 Tower or offshore of Oregon Inlet)

Frame Coordinates  -- 35 46.776 N, 075 05.574 W (35.7796, -75.0929)

Depth 115’ (~35 m)

2. 2017 B2 -- Raleigh Bay Frame

Frame Coordinates  -- 34 46.832 N, 075 56.509 W

Depth 98’ (30 m)

MAXIMUM DEPTH(s) & BOTTOM TIME(s) ANTICIPATED : 105-115’, 15 minutes/ site

APPROXIMATED NUMBER OF PROPOSED DIVES \_\_\_\_\_4\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

INDIVIDUAL REPETITIVE DIVE SCHEDULE: Daily: \_\_\_\_\_\_\_\_2 dive/day\_

Weekly: \_\_\_\_no more than 8 per week \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SUMMARY OF PROPOSED WORK (List equipment & boats to be employed, a description of site conditions, and details of any hazardous conditions anticipated. Use additional paper as needed.):

The objective of the dive operation is to recover bottom frames if all other methods of recovery fail which include acoustic release failure and trawling.

The two (2) pods to be recovered will be search dives. Both pods had very good coordinate fixes when deployed. They each have a Benthos Underwater Acoustic Transponder (UAT-376/EL) which can be interrogated and relocated using the Benthos Dive Ranger (DRI-267A), a diver-held gun, to accurately find the range and bearing to the target. Before diving commences, the pods will be relocated from the ship, either using the Benthos gun to the frame transponder and/or ranging the acoustic release, to determine the closest location to the pod to drop a marker buoy.

The objective is to drop a marker buoy on a line sufficient enough for retrieval of the pod. Dive the marker buoy line, search for the target using the Benthos gun and/or search line, and fix the marker buoy line to the pod so that the pod can be retrieved with the boat winch after the dive has been completed.

Hazardous conditions – cold water 45 degrees, dry suits will be used north of Cape Hatteras, and as necessary. Temps south of Cape Hatteras will range from 40-60 degrees F. Diving will be done from a tender, not directly from the large RV Armstrong vessel, and will be limited to conditions safe enough to launch and recover the tender – waves of 4’ or less.

REQUIRED CONTACT INFORMATION (List location, telephone number and, if prudent, detailed directions):

Hospital: Outer Banks Regional Hospital\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ambulance: 911\_\_

Law Enforcement: \_\_\_

Divers Alert Network: (919)684-8111

EQUIPMENT OR SUPPORT REQUESTED FROM THE DIVING SAFETY OFFICE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PARTICIPANTS: \_\_\_\_\_\_\_\_Mike Muglia (CSI), Sara Haines (UNC CH), Gabe Matthias (SKIO)
Topside support: R/V Armstrong dive tender with Captain and two deck hands.

\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PREPARED BY \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

APPROVED BY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_