



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
**National Marine Fisheries Service**  
Northeast Fisheries Science Center  
Woods Hole Laboratory  
166 Water Street  
Woods Hole, MA 02543

#2

30 March 2020

Mr. Thomas Nies  
Executive Director  
New England Fishery Management Council  
50 Water Street, Mill 2  
Newburyport, MA 01950

Dear Mr. Nies,

Included is a Contingency Plan for Loss of HabCam During the 2020 Survey Season. This plan has been prepared in response to a request made at a past New England Fishery Management Council Meeting.

I would be happy to discuss briefly at the upcoming Council meeting if you feel it is appropriate.

Sincerely,

Jonathan Hare  
Director, Northeast Fisheries Science Center

## **Contingency Plan for Loss of HabCam during the 2020 Survey Season**

During the 2019 NEFSC Sea Scallop Survey, the towed Habitat Camera Mapping System (HabCam v4) struck a large, uncharted rock while deployed in the Great South Channel. The weak link in the tow cable broke as it is designed to do under increased tension. Using the installed acoustic pinger system, the vehicle was located in less than 12 hours. A dive salvage team was organized and the vehicle was recovered 3 days later.

Over the past several years, the NEFSC has taken several steps to reduce the risk of losing the HabCam v4 vehicle and will take additional measures prior to the 2020 survey. These steps include:

- The installation of a weak link that will break under increased tension. This prevents damage to the winch, fiber optic cable, and vehicle in case an obstacle is hit while the vehicle is deployed.
- A pinger has been installed on HabCam which allows the vessel to locate the vehicle if it becomes separated from the tow cable.
- A full-time HabCam engineer is being hired at the NEFSC. Having both the necessary expertise and spare parts aboard the vessel during each survey leg will enable most repairs to be made at sea without losing valuable time steaming back into port.
- During the 2020 survey, the areas that are the most challenging for HabCam deployment (i.e. the Great South Channel) will be covered near the end of the survey to minimize impacts to survey coverage in case the vehicle is lost or damaged.
- Prior to the 2020 survey, the NEFSC will review historical trawl and dredge data to identify possible locations of unmarked obstacles.
- The Hugh R. Sharp will be contacted regarding the use of their multi-beam system in hard bottom areas.

In the event that the vehicle is lost again and is unable to be located or recovered, the NEFSC can utilize the following options to avoid impacts to survey coverage:

- WHOI has indicated that the NEFSC would be able to borrow the HabCam v2 vehicle as a replacement. Discussions on compatibility between the two vehicles are ongoing, with the intent of being able to run v2 aboard the Hugh R. Sharp.
- If v2 were to be unavailable or unusable, the NEFSC would need to pursue other options such as chartering alternate vessels and/or optical surveying systems to complete coverage of any remaining areas.
- If there are no alternative optical systems available, the remaining option would be to increase dredge sampling in the necessary areas.