



November 30, 2006

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Re: *Development of Video Exploration and Mapping Capability, Tools and Methods*, progress report.
Captains John Williamson and Bill Lee, co-Principal Investigators.

To date the Principal Investigators have accomplished approximately 30% of the project work plan. The remainder of the project will be completed in 2007.

The project was introduced to the fishing public at the 2006 Maine Fishermen's Forum in March. Example submersible video gear was available for inspection at the Thursday workshop on fishing gear innovation, and at a display table during the three-day event. A Friday morning presentation entitled *Low Cost Video Designs for Fishermen* was well received; Captain Lee demonstrated various designs used in past experiments and basic concepts for home-made underwater video technology. More than 50 people attended the 75 minute presentation and 30 people signed up to receive additional information. A second showing was offered to eight fishermen in the afternoon in response to request.

Between July and November, Captains Lee and Williamson completed fabrication of the video equipment for the project. Five individual video array packages have been assembled and are now available either as demonstration units or to be loaned to fishermen who wish to experiment with the gear. Each of these packages includes a self-contained kit with 12 volt battery, charger, video monitor, cords and connectors, 150 foot tether and video cable, dive lights, and camera mounted in a waterproof housing. Three units are equipped with digital VHS recorders.

Captains Lee and Williamson field tested the units in October and November.

Captain Lee has employed one video unit in conjunction with a sand lance study (also funded by NEC) to observe the orientation of the beam trawl being used and the behavior of sand lance in response to the gear.

Captain Williamson has demonstrated a video unit on his vessel to Captains Satch McMahon and Michael Perkins, and to researcher Peter Nelson. Further trips are planned.

A video unit is on loan to Captain Phil Michaud of Provincetown, MA. Phil, who was provided instruction by Bill Lee, will record a tape of his experimentation with the gear, and provide a written report on his experience.

Remaining work to be done in 2007:

Winter: networking with fishermen and researchers; demonstration at the Maine Fishermen's Forum.

April through July: further experimentation with gear design; at-sea demonstration for researchers.

April through October: outreach and instruction for fishermen; video gear available for trial.