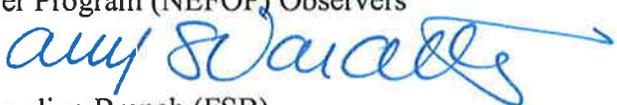




UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543-1026

December 18, 2010

MEMORANDUM FOR: A.I.S., Inc.
East West Technical Services (EWTS),
MRAG Americas,
At-Sea Monitors (ASMs),
Northeast Fisheries Observer Program (NEFOP) Observers

FROM: Amy S. Van Atten 
Branch Chief, Fisheries Sampling Branch (FSB)

SUBJECT: Electronic Monitoring Pilot Revised Cheat Sheet

The purpose of this pilot study is to explore the use of Electronic Monitoring System (EMS) technology, through the use of cameras and gear sensors, to collect real time catch data in the Northeast multispecies groundfish fleet. Amendment 16 of the NE multispecies fisheries management plan states "...Sectors would be required to develop an adequate independent third party at-sea/electronic monitoring program beginning in FY 2013". To evaluate options for this requirement, the Fisheries Sampling Branch (FSB) is conducting a multi-year pilot study in conjunction with Archipelago Marine Research, Ltd.

The EMS Cheat Sheet is a reference guide for observers and At-Sea Monitors (ASM). The cheat sheet includes general information about project study goals and EMS equipment, identifies observer/ASM responsibilities on EMS vessels, lists participating vessels and contact information for EMS staff, and **observer sampling instructions on EMS vessels**.

NEFOP observers and ASMs have the following responsibilities when observing on EMS vessels:

- Be aware of the location of cameras and avoid obstructing cameras when possible.
- NEFOP/ASM duties take precedence over avoiding obstruction of cameras, specifically on limited gillnet trips.
- If the captain and crew are discarding in a certain location, discard any sampled fish in this location as well (see attached cheat sheet for gear specific sampling instructions)

- ***Pay particular attention to changes in sampling protocols on trawl vessels using conveyor belts.***
- EMS's primary objective is to fully account for discards. Vessels have "discard control points" to help completely account for all discarded catch and cameras focus on these control points. Modifications to observer sampling protocols assist video reviewers in the quantification of discarded and kept catch.
- Please recycle the former EMS cheat sheet and replace with the revised cheat sheet. Each participating vessel will have copies of this cheat sheet as well as a vessel sampling plan available for your reference.

Please utilize the following tips when using "the bathroom" on an EMS vessel. On gillnet or longline vessels equipped with EMS, view the computer screen to determine if the cameras are recording (horizontal red bar above camera views is present). While on trawl EMS vessels, consult with the captain to determine an appropriate location. Captains have been asked not to turn the EM systems off during fishing operations to avoid corrupting the data; however, they can temporarily block a camera view for privacy. EMS cameras are programmed to turn on at the beginning of each fishing event and turn off following the end of each fishing event (including processing time) on gillnet and longline vessels. Cameras installed on trawl vessels are set to record the entire trip following the first fishing event to account for longer processing times.

Be aware of winch or hydraulic sensors (see photos, attached cheat sheet) and avoid interaction with this equipment. At no time will you be required to troubleshoot problems with the cameras or associated equipment; this is the sole responsibility of the captain/crew or field staff working on this project. When uploading data from your IPAQ on trips made with EMS (see cheat sheet for a list of participating vessels), note this by checking the 'EMS Used' box on the Observer Upload webpage. Outside of these requirements, complete all NEFOP/ASM duties as you would on any other trip. Check with your program manager or consult the cheat sheet for a current listing of vessels participating in this study.

Expected benefits of this pilot study include the production of cost-effective data produced with minimal invasion of privacy and inconvenience. Data from traditional sources will be compared to pilot study results to determine EMS's effectiveness.

If you have any questions concerning the study or cheat sheet please contact Amy Van Atten at 508-495-2266, or email Amy.Van.Atten@noaa.gov or Nichole Rossi at 508-495-2128 or email Nichole.Rossi@noaa.gov. If you are interested in EMS data analysis or video reviewing processes please feel free to check-in with Kelly Neville or Glenn Chamberlain while visiting Tech Park.

Attachments:
EMS Revised Cheat Sheet; 10 Dec 2010