Cooperative Research Meeting Summary, January 31, 2014 (rev 4)

Attending:

Doug DeMaster Jim Balsiger
Farron Wallace Martin Loefflad
Chris Rilling Dan Falvey
George Mannina Linda Behnken
Tom Meyer Steve Ignell

Research goal: "Advance EM as part of an integrated at sea monitoring program [that] shall serve as an alternative to observers for vessels carrying such electronic monitoring systems." Appropriation language

Research metrics:

- 1. Meeting fishery specific data/management needs
- 2. Compatibility with fixed gear fleet (physical, operational, and cost considerations)

<u>Research design</u>: Cooperatively develop and test functionality of multiple approaches for integrating EM systems into the NPGOP.

System 1- "Standard" EM digital systems with manual video review (multiple providers)

System 2 - Stereo camera EM systems with automated review.

NMFS/AFSC Proposed Cooperative Research EM Plan—The proposed plan introduces the concept of testing multiple EM system approaches and describes the utility of currently identified EM approaches to fisheries management. The proposed plan is not prescriptive regarding field work design or analysis details associated with each approach. Details and parameters of field tests and analyses for both approaches will be cooperatively developed by NMFS/AFSC and fixed gear industry participants for this year's field work, which is anticipated to begin in April 2014 or earlier if possible. ASFC will take lead in proposing details associated with System 2 and the fixed gear industry will take lead in proposing details associated with System 1. Incorporation of comments from the OAC and Council are anticipated following next week's Council meeting in Seattle.

EM cooperative research will address data quality, costs, species identification capabilities, and the reliability of hardware. Research will also test the accuracy and precision of estimating the length of fish brought on board: System 1 will test various approaches, including proxy weight, measuring boards, estimation during video review, dockside monitor/EM comparisons, and observer/EM comparisons on a subset of trips; System 2 will estimate length using stereo camera systems, sorting tables, discard chutes, and observer/EM comparisons on all trips. Data from the field work will be used to accelerate the operational implementation of EM in the fixed gear fisheries, including informing a management strategy evaluation (MSE) of how data quality, fleet compatibility, and costs associated with various EM

systems and observer programs effects the ability of managers to meet sustainable management goals (e.g., avoid overfishing) established by the Council.

EM Fixed Gear Workshop- Purpose: To collaboratively identify plausible approaches for using EM technology as an integrated component of the NPGOP including logistical details necessary to support successful and creditable field work associated with each approach. Industry/AFSC will jointly host an EM workshop originally scheduled for February 17th and 18th, possibly moved to February 20-21st (to be confirmed) or held on just the 18th of February, at the Ted Stevens Marine Research Institute in Juneau, AK. Details of this cooperative research framework will be developed, including plausible performance standards for monitoring objectives, operator responsibilities, and details of field work and data review. To the extent possible, results of the workshop, as well as input from the OAC and Council, will guide 2014 cooperative research. It was agreed that workshop conveners would secure approval from the Council regarding data collection objectives and performance standards. Items requiring further Council deliberation will be presented at the April Council meeting.

Requested Council action:

- 1) Endorse conceptual framework for Cooperative research in 2014 between NMFS and fixed gear industry. That is, does the Council endorse the proposal to cooperatively develop and test the functionality of multiple approaches for integrating EM systems into the NPGOP (i.e., a standard camera system with manual review and a stereo camera system with automated review) in the spring and summer of 2014.
- 2) Support NMFS/AFSC and fixed gear industry convening February EM Fixed Gear Workshop to develop details and parameters of 2014 cooperative research.
- 3) Establish EM Workgroup to create an on-going forum for EM discussions (initial fixed gear focus) and to inform Council decisions/recommendations to NMFS on EM integration.