

*Science, Service, Stewardship*



# Electronic Monitoring System Technology

A Pilot Study: Documenting and  
Estimating Catch on Commercial  
Fishing Vessels Using EMS  
Technology

August 3, 2010

**NOAA  
FISHERIES  
SERVICE**

NOAA



## Why conduct this study?

- In FY 2012 At-Sea Monitoring is expected to become an industry responsibility
- Electronic monitoring could be used in lieu of At-Sea Monitors, if deemed acceptable by NMFS
- Overall project goal..... “Test and evaluate EMS as a means to monitor bycatch real-time in the Northeast groundfish fisheries.”



## Archipelago Marine Research Ltd.

- Data collection programs
- EMS (Electronic Monitoring System Technology)
- Technology used around the world
- FSB playing an active role in project



## Electronic Monitoring Technology

- Passive electronic system (video cameras and automated computer systems)
- Catch by species analysis, fishing time and location, gear deployment, bycatch handling and catch enumeration





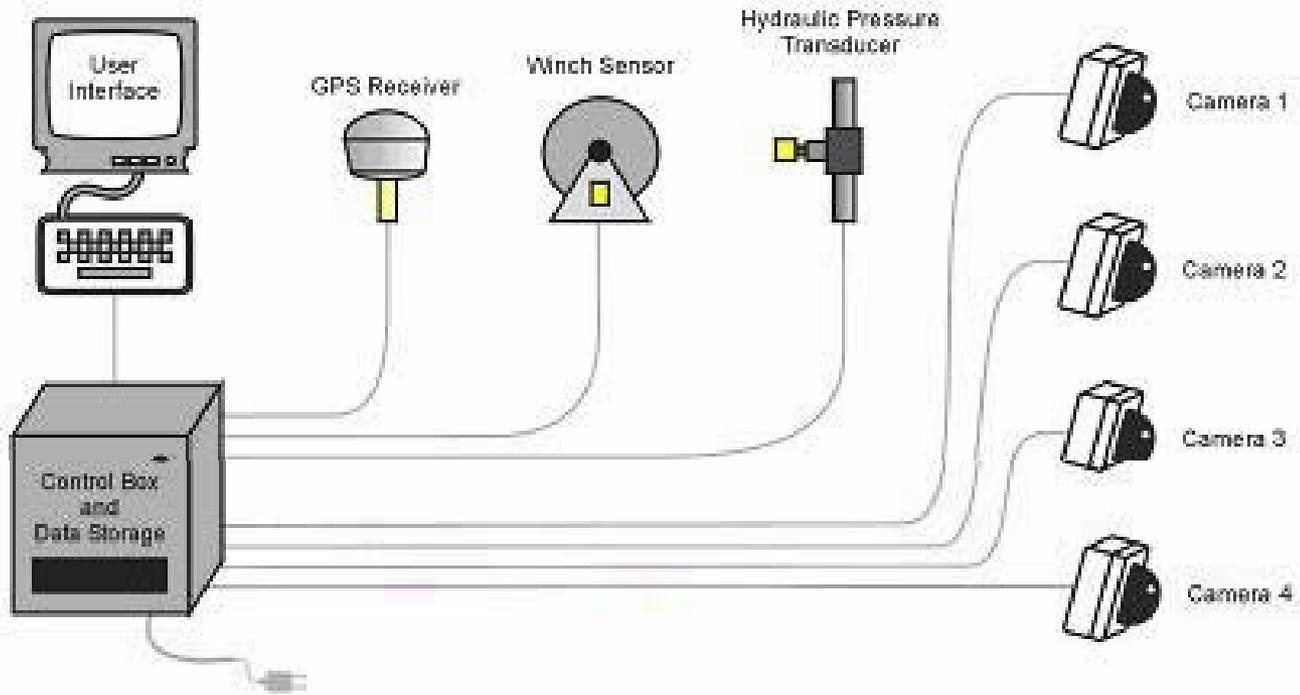
## Electronic Monitoring

- Success of EMS is dependent on fishing industry
- Vessel participation is voluntary
- Additional uses for the technology





# The Electronic Monitoring System







## Data Collection Objectives

### Long Line/Gillnet Objectives

#### Primary objectives:

- 1) Determine time and location of trips and fishing events
- 2) Ensure video recording during all catch handling events
- 3) Determine retained and discarded catch
- 4) Ensure discarding is in camera view

#### Secondary objectives:

- 1) Determine length of discarded quota species



# Data Collection Objectives

## Trawl Objectives

### Primary objectives:

- 1) Determine time and location of trips and fishing events
- 2) Ensure video recording during all catch handling events
- 3) Determine retained and discarded catch
- 4) Ensure all discarding is in camera view

### Secondary objectives:

- 1) Determine total catch volume
- 2) Determine length of discarded quota species



## Study Statistics

### Vessels

- 7 vessels equipped with equipment

### Gear Type

- 3 gillnet/longline vessels
- 4 trawl vessels

### Ports

- Chatham, MA
- Scituate, MA
- Gloucester, MA
- Point Judith, RI



## Confidentiality

- All data property of NMFS
- All data requests need to go through NMFS
- Data released to Archipelago is returned to NMFS or erased
- Copies of data may be requested by participants



## Compensation

-Compensation will be provided for participating vessels (per trip)

-Project requirements:

- Keep EMS powered for entire trip
- Monitor EMS system performance (function test)
- Notify personnel if problem detected (24hrs)
- Provide access to EMS service staff
- Work w/ staff to develop catch handling techniques
- Complete a vessel questionnaire after system removal



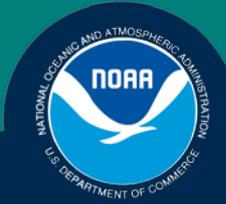
## What we hope to accomplish with this study

- Pilot program FY 2010, two additional option periods
- Data comparison
- Cost effective option
- Develop standards for consideration in monitoring plans



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## Questions or Comments ?

