



# Role of Shipboard Marine Mammal Observers in the Arctic Ocean

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# Role and Purpose of MMOs

Marine Mammal Protection Act and implementing regulations provide authority to require monitoring and reporting of taking of marine mammals

## MMO Responsibilities:

- Document observed effects of activity on marine mammals
- Estimate when, where, how, and how many marine mammals, by species and cohort (e.g., cow/calf pairs), are “taken” by authorized activities
- Assist in minimizing impacts of activity on subsistence users (e.g., use of Inupiat-speaking subsistence monitors to communicate with whaling captains and Comm. Centers)

# Basic Purpose of MMOs

- Objectively and accurately gather and record data to satisfy monitoring goals and to assist in the implementation of mitigation measures (e.g., seismic survey shutdown) specified in incidental take authorizations.
- Observe and record the behavior of marine mammals
- Observe and record environmental and anthropogenic factors that may contribute to changes in variables being measured.
- Document the nature, location, duration, and scale of O&G activities that might affect marine mammals.

# Marine Mammal Observer Issues

- Possible mis-identification of species
  - Standards and guidelines for NMFS-approved MMO training.
- Potential difficulty in effectively observing exclusion zones from source vessel.

# Incident Command Center

- 2008- pilot program between MMS, NMFS, and FWS for “real-time” monitoring of OCS activities.
- 2009- hope to continue and refine ICC.
- Requires “real-time” communication from MMOs (both ship and aerial), Comm Centers, whaling captains, and Industry.

# Training, Certification, and Proficiency of MMOs

- Training of MMOs is a necessary component of a monitoring and reporting program under the MMPA.
- 2009- will require that MMO training curricula and instructor qualifications (i.e., field experience, training completed, educational background, etc.) be submitted to, and approved by, NMFS prior to training.
- MMOs must be approved by NMFS.
  - MMOs with B. Sc. or prior experience/MMO training will be automatically approved, pending completion of pertinent “refresher” training and submittal of their resumes to NMFS.

# Monitoring in Poor Visibility Conditions

- How can monitoring in poor visibility be improved?
- What information exists to support the conclusion that maintaining a mitigation air gun is effective at keeping animals out of Level A exclusion zones?

# What Changes Are Needed For This Program?

- Standardized, NMFS-approved MMO training.
  - Quality control expectations for MMO performance.
  - Successful completion of a standard exit exam.
- Standardized electronic MMO reporting form.
- NMFS needs source vessel locations during “active” periods. May require in future IHAs.
- Direct “real-time” (e.g., daily) reporting by MMOs to federal agencies (e.g., to help avoid unmitigable impacts to subsistence).

# What Changes Are Needed For This Program?

- Better coordination of communications between ship and aerial MMOs, Comm Centers, and inter-agency Command Center.
- Establishment of a “hot-line” (phone and/or email) for MMOs to report incidents of harassment or intimidation while performing their jobs.
- Use of Inupiat speaking MMOs to monitor potential impacts to subsistence hunting.
- Others?