

**Prospective Protected Species Observer (PSO) candidates seeking approval for the first time (please see section below for renewals) should provide the following:**

- 1) Certificate(s) of successful completion of training within the last 18 months. If training completion was greater than 18 months prior to submittal of qualifications, experience during the intervening time period should be detailed in resume (see below). PSOs must successfully complete relevant training, including completion of all required coursework and passing (80 percent or greater) a written and/or oral examination developed for the training program. Training requirements are described in Baker et al. (2013) (Note: Detailed course syllabus may be requested).
- 2) Education. PSOs must have successfully completed a bachelor's degree with a major in one of the natural sciences. The educational requirements may be waived if the candidate has acquired the relevant skills through alternate experience. Requests for such a waiver must be submitted with written justification. Requests will be granted or denied (with justification) by NMFS within two weeks of receipt of the waiver request. Alternate experience that may be considered in lieu of education includes, but is not limited to:
  - a) Secondary education and/or experience comparable to PSO duties;
  - b) Previous work experience conducting protected marine species surveys;
  - c) Previous work experience as a PSO for which a record of consistently good performance must be demonstrated (e.g., via letter of recommendation); or
  - d) Traditional knowledge (where relevant).
- 3) Previous PSO Experience. Applicants must provide a resume describing any previous PSO experience. Experience in U.S. waters should be highlighted.

**List of items to include in resume:**

- Type of survey for which candidate served as a PSO (i.e., airgun survey, high resolution geophysical [HRG] survey; Note: General descriptions such as "Offshore Wind" are not adequate and will not be considered towards unconditional approval);
- Tier of survey for each deployment (see tiering scheme below; Note: Unconditional approval requires a minimum of 90 days per role (visual or acoustic) and by tier;
- Number of days on duty per deployment, dates of deployment, and location of deployment
- Experience (list most recent first) acting as either a Visual PSO or Acoustic PSO/Passive Acoustic Monitoring (PAM) operator including number of days in each role (duty days should not be double-counted as both visual and acoustic, and remote PAM operation should be distinguished from at-sea PAM operation);
- If the candidate worked in both acoustic and visual roles, they should identify separately the number of days of experience in each role per deployment. Even if

both roles are worked on the same day, experience may accrue for only one role per day. (e.g., 40 day survey; 20 days PSO; 20 days PAM)

- If submitting experience as an acoustic PSO that includes remote PAM, please separately identify remote PAM from shipboard PAM
- Optional (please include if known): Notation of regulatory document or agency (e.g., incidental harassment authorization [IHA], letter of authorization [LOA], or biological opinion [BiOp]) for which the project requires PSOs, or the project name and date the incidental take authorization and/or Biological Opinion was issued.

The table below provides an example that a candidate can use:

Project type (describe the survey type)	Geophysical survey Category	Client	Contractor	Vessel	Location	Position (PSO or PAMO)	PAM operation- at sea or remote	Mitigation	Dates	Duration
3D Wide Azimuth seismic	1	Name of company	Name of company	Name of vessel	Gulf of Mexico	visual PSO	NA	observed exclusion zone for marine protected species: shutdowns and ramp ups	March 15, 2020 - April 30, 2020	42 days

Approval status ranking requirements:

	<b>Visual PSO Tier 1</b> (includes Tier 2)	<b>Visual PSO Tier 3</b>	<b>Acoustic PSO/PAM operator</b>
<b>Conditional</b>	Education/PSO Training	Education/PSO Training	Education/PSO and PAM training
<b>Unconditional</b>	90 days experience deployed with Visual Lead PSO on Tier 1 survey in U.S. waters	90 days experience deployed with Visual Lead PSO on Tier 3 survey in U.S. waters	90 days experience deployed with Acoustic Lead PSO on any geophysical survey
PSO experience associated with offshore wind turbine foundation installation will be considered as equivalent to Tier 1 geophysical survey PSO experience. However, as an additional prerequisite to gaining unconditional approval, candidates with 90 days or greater tier-specific experience must also have at least one deployment on a geophysical survey associated with the tier for which unconditional approval is sought.			

Note: Following 18 months of inactivity for geophysical surveys in U.S. waters, PSOs will revert to conditional status. To keep the conditional approval valid, PSOs will need to have remained active at-sea in a PSO role, or provide an updated refresher training certificate to be approved as PSO for US waters. For new candidates whose training is older than 18 months and who do not have relevant experience in the prior 18 months, a refresher training will be required before being issued an approval letter.

**PSO experience relevant to the NMFS evaluation process:**

- Offshore geophysical surveys (e.g., wind or conventional energy) or other activity required to have PSOs under an incidental take authorization and/or Biological Opinion), including surveys using airguns and other impulsive sound sources (e.g., boomers/sparkers).
- Offshore wind turbine foundation installation pile driving/construction PSO work required under an incidental take authorization and/or Biological Opinion.

Please note: Experience not related to geophysical surveys should be noted separately and will not count towards consideration of “unconditional” status. However, the experience listed below may be considered in making a decision for an education waiver:

- ❖ Geotechnical surveys
- ❖ Vessel strike avoidance observer
- ❖ UXO surveys (unless using HRG survey equipment at frequencies <180 kHz)
- ❖ Research surveys
- ❖ Site trawling

**Survey tier categories for NOAA Fisheries review:**

- Tier 1—Large airgun arrays (>1500 cu in or >12 elements) (i.e., deep penetration or high energy surveys); Tier 1 for this process includes sources categorized as Tier 2: Small airgun arrays ( $\leq$ 1500 cu in and  $\leq$ 12 elements) or single airguns (i.e., shallow penetration or low energy surveys); and zero offset (or other stationary source) VSP surveys, regardless of array size.
- Tier 3—Surveys using electromechanical sources (e.g., sparker, boomer) (i.e., high resolution geophysical surveys).

**Applicants with prior experience submitting for upgrades or updated approvals:**

- For status upgrades (e.g., “conditional” to “unconditional” status), PSOs should present the same information described above for all experience as a PSO on a geophysical survey in U.S. waters within the last 18 months.