

## AUV SENTRY Pre-Cruise Chief Scientist Checklist

**Overview:** This pre-cruise checklist is designed to ensure the Chief Scientist, the Sentry Program Manager, and the Sentry Expedition Leader understand and acknowledge the science requirements and vehicle expectations before the cruise. We encourage all Chief Scientists to follow the checklist and to meet all deadlines to improve the Sentry team's ability to fulfill the science objectives and increase the chance for a successful science cruise. Please note, some of the information below will also be required in MFP.

All communications for pre-cruise planning should be sent to [sentry-precruise@whoi.edu](mailto:sentry-precruise@whoi.edu). This email list will ensure the Sentry Program Manager, Expedition Leader & Engineering Leads are part of the planning process.

NOTE: Please include the cruise ID, PI name, and a description of the inquiry in the subject line.

### 6 - 12 Months Prior to Cruise

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- Send funded proposal to [sentry-precruise@whoi.edu](mailto:sentry-precruise@whoi.edu) to enable the Sentry Team to review the science objectives, cruise location, and proposal details.

#### Review [Website](#)

- [Sentry Vehicle Tour](#)
- [Vehicle Specification](#)
- [Systems, Sensors and Sampling](#)
- [User-supplied Equipment](#)
- [Sentry Capabilities](#)
- [Data Deliverable Document](#)
- [NDSF Data Policy](#)

#### Science-provided Equipment

- Determine if anyone in the science party has equipment (sensors, sampling gear, cameras, etc) to be installed **on** the submersible.
- Send details of the equipment, sizes, weight (in and out of water), and power requirements to [sentry-precruise@whoi.edu](mailto:sentry-precruise@whoi.edu).
- Send [implodable/explodable testing](#) certifications to [sentry-precruise@whoi.edu](mailto:sentry-precruise@whoi.edu).

### 4 - 6 Months Prior to Cruise

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**Develop detailed cruise and dive plans prior to the Sentry pre-cruise planning meeting. (scheduled 4-6 months prior to the cruise). Send [sentry-precruise@whoi.edu](mailto:sentry-precruise@whoi.edu) a *draft* document containing:**

- Science Objectives
- Expected dive targets (# of dives, approx. coordinates/ area, expected depths)
- Intentions for user-supplied equipment
- Intentions for facility-supplied equipment

**Attend pre-cruise planning meeting(s).**

#### Pre-cruise meeting agenda

- Cruise plan & cruise cadence (Chief Scientist)
- Daily routine (Dive day schedule, science meetings) (Sentry Program Manager, Chief Scientist)
- Plans for any engineering dives (Sentry Program Manager)

- Weather/contingency planning
- Lab space and deck layout
- Daily dive plan/launch and bottom targets**
  - Dive targets
  - Exact coordinates to be provided upon arrival to the vessel
    - \*Preference for decimal degrees
- Ensure work area is clearly defined so Sentry team can provide underlays/maps format/existing bathymetric and dive planning grids**
- Discussion of all user-supplied equipment (Chief Scientist)**
  - Confirmation that all pressure testing needed has been completed or is planned (Sentry Program Manager)
- Confirmation of all Sentry-supplied equipment to be installed on Sentry (Chief Scientist)**
  - Routinely installed equipment**
    - 120/240/520 Side Scan sonar
    - EM2040 Multibeam
    - Paro Depth Sensor
    - Camera
    - CTD
    - Dissolved oxygen
    - Magnetometer
    - ORP
    - Optical backscatter
    - SVP
    - Sub bottom profiler
  - Review standard Data Product
  - Review any planned media (Photojournalists, Documentary film crew, etc) participation
    - Chief Scientist to contact [Jayne Doucette](#) in the WHOI Communications Department

#### No later than 1 Month Prior to Cruise

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- Send draft dive plans including locations and coordinates to [sentry-precruise@whoi.edu](mailto:sentry-precruise@whoi.edu)
- Review training videos
  - [Sentry launch/recovery video](#)
  - Link to NDSF Underlay Tutorial page- *link coming soon*
- [Review Storage Media Recommendations](#)
- Review additional resources & informational pages
  - [Sentry User Guide](#)
- Confirm shipping, Travel plans with Sentry group
- Provide Berthing list
- Close out remaining action items

\* This list is for planning with AUV Sentry and does not include the broader overall cruise plan.

