VPS Field Deployment
Checklists

Use these checklists to help you successfully deploy and retrieve your VPS array, and gather the information necessary for VPS processing. Please read the whole document before deployment.

Before Deployment AND Retrieval

■ Ensure that the **latest version of VUE software** (or **Fathom**, for HR2 receivers) is installed on your PC. Download the software (and manuals) at www.vemco.com.

■ Ensure PC **clock settings** are correct (time and time zone). VUE can be used to synchronize your PC with internet time. See "*Setting the Correct UTC Time*" in the manual.

Deployment

1. **Initialize Receivers**

   ☐ Ensure PC clock settings (time and time zone) are correct.

   ☐ Use VUE software (or Fathom for the HR2) to initialize each receiver, as close as possible to deployment time, ideally the same day.

NOTE: If possible, use the same PC for all receivers.

2. **Are you using a VR2Tx, a VR2AR, or an HR2?**

   ☐ Ensure the built-in transmitters are enabled and set to the synctag delay setting.

   ☐ Ensure the built-in transmitters are set to the appropriate power level for your study, based on VEMCO advice or testing.

3. Record all **Station Information**

   ☐ A - Receiver serial number

   ☐ B - Height of the receiver from the bottom

   ☐ C - Synctag ID

   ☐ D - Height of the synctag from the bottom

   ☐ E - Water depth

   ☐ F - GPS position and time (read **GPS Tips** on back side first!)

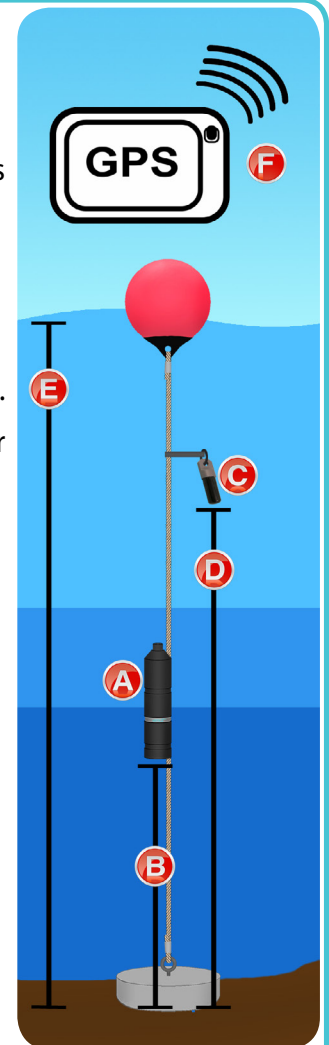   ☐ Date and time of deployment

NOTE: Remember to record Station Information of any reference tags.

4. Record **Water Temperature**

   ☐ If NOT using a device to record temperature data throughout the study (VR2AR, VR2Tx, HR2, or temperature logger), take a temperature measurement.

5. Record **Water Salinity**

   ☐ If unable to measure salinity, record "0" for **fresh** water or "35" for **salt** water.

MOORING TIP! Stations should have as little ability to move or sway as possible. Keep this in mind when choosing line length for the moorings.

Retrieval

1. **Record GPS position of each station before retrieval**

   ☐ Take a new GPS measurement, even if you do not think there has been any change in position. Stations can sometimes move unexpectedly.

2. **Record any array changes**

   ☐ Make note of any observed changes to the initial array setup. **Examples**: Mooring tipped over, synctag separated from its receiver, receiver not fully submerged.

3. **Retrieve the receiver**

   ☐ Record date and time of the retrieval.

4. **Offload Receivers**

   ☐ Ensure PC clock settings (time and time zone) are correct.

   ☐ Use VUE software (or Fathom for the HR2) to offload each receiver, as close as possible to retrieval time, ideally the same day. If possible, use the same PC to offload all receivers.

NOTE: If redeploying, verify that all data were successfully offloaded, and proceed with **Deployment** steps as described on the front side of this document.

GPS Tips

■ Try to limit **both overhead and adjacent** obstructions from the GPS antenna (e.g. boat structures).

■ **Allow sufficient time after turning on your GPS** device for it to connect with several satellites before beginning to collect waypoints.

VPS Specification Sheet Tips

For VEMCO to conduct a VPS analysis, station information and deployment/retrieval data will need to be entered in the **VPS Specification Sheet**. In addition to the instructions found in the spreadsheet, here are some tips for entering the data.

1. Station information from the **Deployment** section (front page) is entered in the **Stations** tab as follows:

   a. **Each station entry** has one or more devices (e.g. receiver serial number (3A) , synctag ID (3C))

   b. **Receiver device depth** = Water depth (3E) – Height of the receiver (3B)

   c. **Synctag device depth** = Water depth (3E) – Height of the synctag (3D)

2. **GPS coordinates from deployment AND retrieval** should be listed in the **GPS Measurements** tab along with the time at which they were collected.

3. Include any **notes about the study period** in the **User Comments** section of the **README** tab. **Examples:** Observations collected about individual stations, weather events, flooding, disruptions due to boat traffic, etc.