## Mini-ROV Field Data Sheet Step-By-Step Guide

## **General Trip Information:**

This section should be filled out at the beginning of your trip. If you are deploying from shore (e.g. pier, jetty, beach or rocky shore), take a few moments BEFORE putting the mini-ROV in the water to fill out the basic info about this trip. If you are using a vessel, fill out this information before leaving shore.

- What is the date?
- What is the start time? (Be sure to indicate whether AM or PM, or use military time, for example: 15:00)
- When you return from the trip, remember to write down the end of trip time.
- List the names of all crew (people who are participating in the deployment)
- If using a vessel, provide the type of vessel (Example: sailboat, Boston whaler, aluminum boat).
- If using a vessel, give the vessel length.

## Weather and Ocean Conditions:

This section should be filled out just before your first deployment. If you are deploying from shore, you will likely want to fill this section out immediately after completing the General Trip Information section. If you are using a vessel, then fill out this section when you have reached your deployment site.

- Secchi depth: This measurement can be used to estimate transparency or turbidity in bodies of water. A Secchi disk can be purchase for about \$30. It is a black and white plastic disk that can be lowered into the water on a string. It is preferable to lower the disk on the shady side of your boat (if deploying from a vessel). Slowly lower the disk into the water until you can no longer see the disk. The depth at which the disk disappears is the Secchi depth. You can use a measuring tape to determine the length of rope if the rope itself does not have a measurement guide on it. Take note of the Secchi depth and record it on your data sheet.
- <u>Wind direction</u>: What direction is the wind coming from? Choose a cardinal direction (N, NW, W, SW, S, SE, E, NE). It can be helpful to look around for a "telltale", some object like a string, flag, or rope that shows you what direction the wind is coming from. Also, note where on your face and arms

you feel the wind. You can turn your head different directions until you notice that the sound of the wind is the same in both ears. Another way is to wet your finger and feel what side of your finger feels colder as the wind hits it. Once you determine the direction the wind is coming from, use a compass, if necessary, to determine the cardinal direction.

Beaufort scale: The Beaufort scale is used to estimate wind strengths. Look closely at the ocean surface in the location of your deployment. Use the Beaufort scale reference sheet to determine which description under "Observed sea conditions" matches what you currently see. Based on this, select your Beaufort number. (You will likely not be operating the mini-ROV during wind strengths equal to Beaufort numbers 6-10.)

## **Deployment Information:**

This section should be filled out at the time of deployment. When you pull the mini-ROV out of the water and then put it back in again, you are beginning another deployment.

- What is the purpose of the trip? Please be as specific as you can. For example: to conduct a live stream for outreach purposes with the PORTs program, or to survey an MPA for ghost traps, or to survey an estuary for seagrass beds.
- Please indicate the deployment location. What is the name of the MPA you are deploying in? If not deploying in an MPA, please indicate the name of the area, or make reference to a known location (Example: offshore from Coal Oil Point).
- If the habitat type is known, please indicate the type. Example: soft bottom, rocky reef, estuary, kelp forest, intertidal.
- For EACH deployment please indicate the GPS coordinates of the location where you placed the mini-ROV in the water (if you drift or move during the same deployment, there is no need to record the change in location). If you do not have a GPS, please make reference to a known location.
- For EACH deployment please indicate the start time and the end time.
- Describe the challenges you encountered for this trip. This can be either technical difficulties with the mini-ROV, or mini-ROV impacts on the environment.
- Please write down any solutions you found to resolve these problems OR make recommendations for achieving a smoother, more successful trip.