## GPS Practice at Basket Slough's Mt Baldy

These drills start from the trailhead parking lot for Mt. Baldy. Some of the GPS drills require compass work, if your compass skills are rusty (or non existent) complete the compass drills first.

Before you start you'll need to load the following two waypoints into your GPS. These are the minimum you'll need for these drills. You may load the rest of the waypoints listed on the "Compass/GPS Work Sheet Key" (page 3) and use them for more practice.

BS ROAD B 44, 57.560 -123,15.441 +SMITHF BT 44, 59.179 -123,16.616

I. Tracking to a waypoint by following the GPS's bearings.

For this drill you will find the field location of a waypoint that was previously taken from the field or copied from a map. You'll be trying to find the road bend on Coville road south of the Mt. Baldy trailhead parking lot.

- 1. Make sure you can find your way back, take a waypoint in the parking lot. Remember the name.
- 2. Find the BS ROAD B (44, 57.560 -123,15.441) waypoint on your GPS.
- 3. Setup your GPS to track to the waypoint.
- Start walking following your GPS guidance.
  If setup correctly your GPS should lead you down the road to the bend (give or take 10 to 20 feet). If not go back to the parking lot, and reference you GPS instruction book and try again.
- II. Finding a waypoint/location using the GPS and compass.

Now you'll find your way back to the parking lot. Drill 'I' is a good way to find a waypoint but it does have its draw backs. Tracking with the GPS on uses battery power and sometimes depending on terrain (ridges and trees) the GPS signal can be lost or degraded which makes the GPS guidance unreliable. This drill will get a compass bearing from the GPS and then use your compass skills to cover most of the distance to the waypoint.

- 1. Find the parking lot waypoint you took earlier on your GPS.
- 2. Setup the GPS to track to the waypoint.
- 3. Read the bearing/course to the waypoint off the GPS display.
- 4. Dial the GPS bearing into you compass. Your GPS can be setup to display ether magnetic or true bearings. If its setup for magnetic then you can start tracking to the waypoint. If the GPS is setup for true bearings than you'll need to convert the true to magnetic (rotate the compass bezel 17 degrees clockwise).
- 5. Use the compass to track to the parking lot. (as in compass drill II.4)
- 6. As you near the parking lot, stop and turn the GPS back on, ether;
  - a. Follow the GPS guidance to the waypoint.
  - b. Update you compass bearing from the GPS, turn it off and continue with the compass. On a long leg you might do this several times to correct for drift (dodging boulders, trees, creeks, etc.).

III. Confirming or finding a field location.

Sometimes in the field it is hard to determine that the feature found on the map is what you are really looking at. The GPS can help. You can load waypoints of the features you want to find, ie. Mountains, into the GPS and then use the GPS bearing with your compass to find them. Using this drill you will find Smithfield Butte. This is basically the same as compass drill 'II' except that you'll get the compass bearing from the GPS instead of the map.

- 1. Hike up to the observation platform on Mt. Baldy.
- 2. Find the +SMITHF BT (44, 59.179 -123, 16.616) waypoint on your GPS
- 3. Set your GPS to track to the waypoint.
- 4. Take the bearing from the GPS and Dial it into your compass. (remember to correct for magnetic variation). The bearing should be about 335 true or 318 magnetic.
- 5. Standing in place turn yourself until the compass orienting arrow is centered under the north end of the magnetic needle.
- 6. Sight down the base of the compass, Smithfield Butte should be in view. It's the oak covered butte with a farm house at its base.
- Note: Waypoint naming conventions. For waypoints not taken in the field, those downloaded from mapping software or manually entered in, I preface the name with a + sign. The BS ROAD B waypoint was taken while standing on the road bend. + SMITHF BT was take from a map. There can be slight differences in position between waypoint take from a map and those actually taken in the field. With the plus sigh I can tell which is which.

## **Compass/GPS Work Sheet Key**

