Introduction to Sea Gliders Transcription

Now let's look at the Seagliders. Seagliders are different from Wave Gliders and very different. Wave Gliders as you recall sit at the surface; they move around on the surface around 10 to 6 meters. Seagliders are different in that they are buoyancy powered. They go relatively deep. Seagliders can go all the way down to 1000 or 2000 meters depth. The Seagliders are doing an undulating track that goes very deep, so we get some information about the deep water.

This particular picture shows the inside of the Seaglider. It shows this thing right here which is a bladder which controls the buoyancy, or how heavy or light the instrument is relative to the surrounding water. The Seaglider is basically what we call a Slocum Glider. It makes itself heavy and moves forward, and then makes itself light again when it gets deep, and continues to move forward. It's got ballast inside of it which moves around, which changes the angle of the flaps on the wings so that it is always moving in a forward direction. In that sense these Seagliders are always moving in a forward direction.

Here is one of our Seagliders that we deployed on our cruise on the Knorr back in September. You can see it's getting ready to be thrown over the side. That big orange thing at the top is the antenna through which it communicates with the outside world. Then you can also see wings here that it uses to direct itself, horizontal wings and vertical wings.