An S-VDR is required aboard certain cargo ships engaged in international voyages. Inside this fixed capsule, a 12 hour duration of data is recorded. This data includes audio from microphones on the bridge, Very High Frequency (VHF) radio communications, images captured from an onboard radar every 15 seconds, and Automatic Identification System (AIS) traffic broadcasts data (if not possible to record radar). Lastly, vessel parametric data are recorded, which includes date, time, GPS position, speed, and heading. The fixed capsule is certified to 6,000 meter depth (about 20,000 feet). In the case of El Faro, the S-VDR was mounted on the antenna mast support structure above the bridge of the vessel.

How is a simplified VDR different from a VDR?

Simplified VDRs are targeted at the retrofit market (cargo ships built prior to 2002).

Simplified VDRs record bridge audio and basic parametric data, but are generally not required to record more extensive parameters such as engine, steering, alarm, or wind data.

Exemplar fixed capsule for the S-VDR installed on the El Faro.