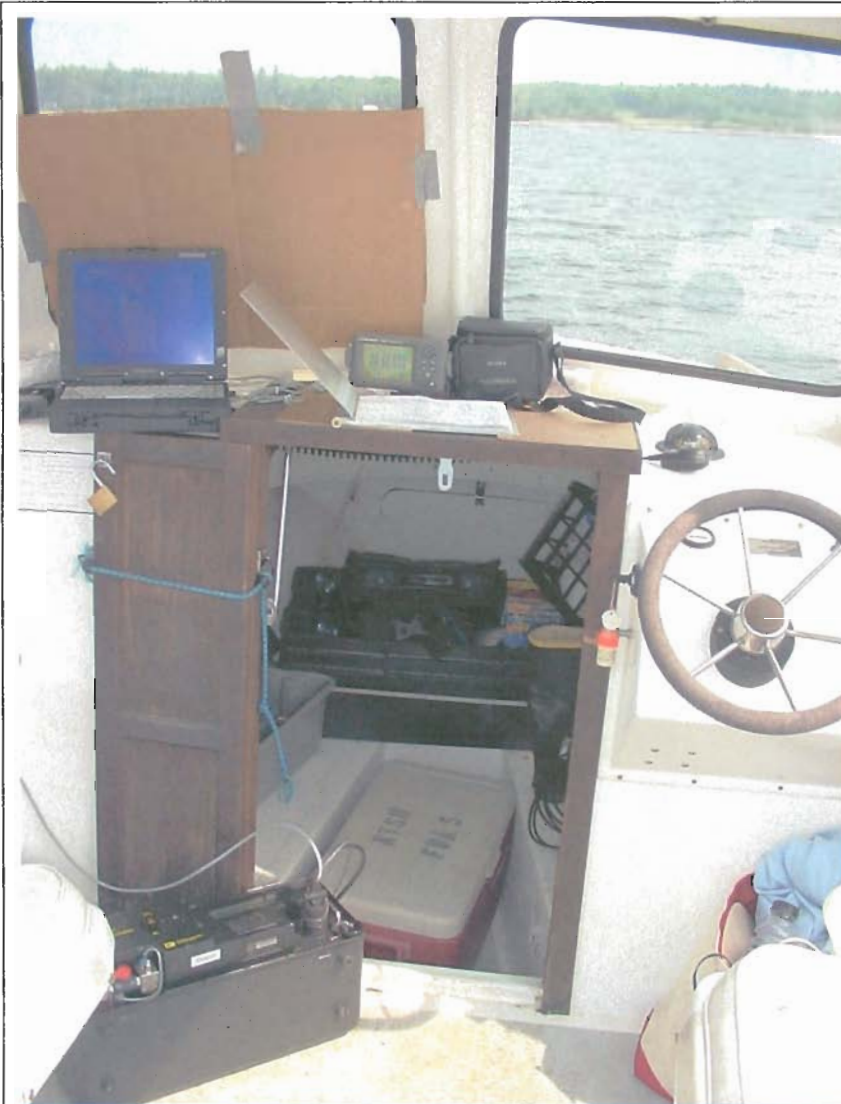




A portable computerized data acquisition and charting system used for FDA-DCP hydrography. Shown are a PC with electronic charts and *ChartView Pro* software; a dual serial, PCMCIA card with connections to a Turner Designs 10-AU fluorometer and a Furuno 35 DGPS; an antenna extender supporting the GPS and differential antennas; a 12V DC battery powering the DGPS, fluorometer, and PC; and a second battery powering the submersed DC seawater pump and CTD (not shown). The PC serial port is available for the CTD. A multiplexer rather than a serial card will allow logging of more than 3 instruments. The shelves provide compactness for small boats, PC access, and support for a cover.

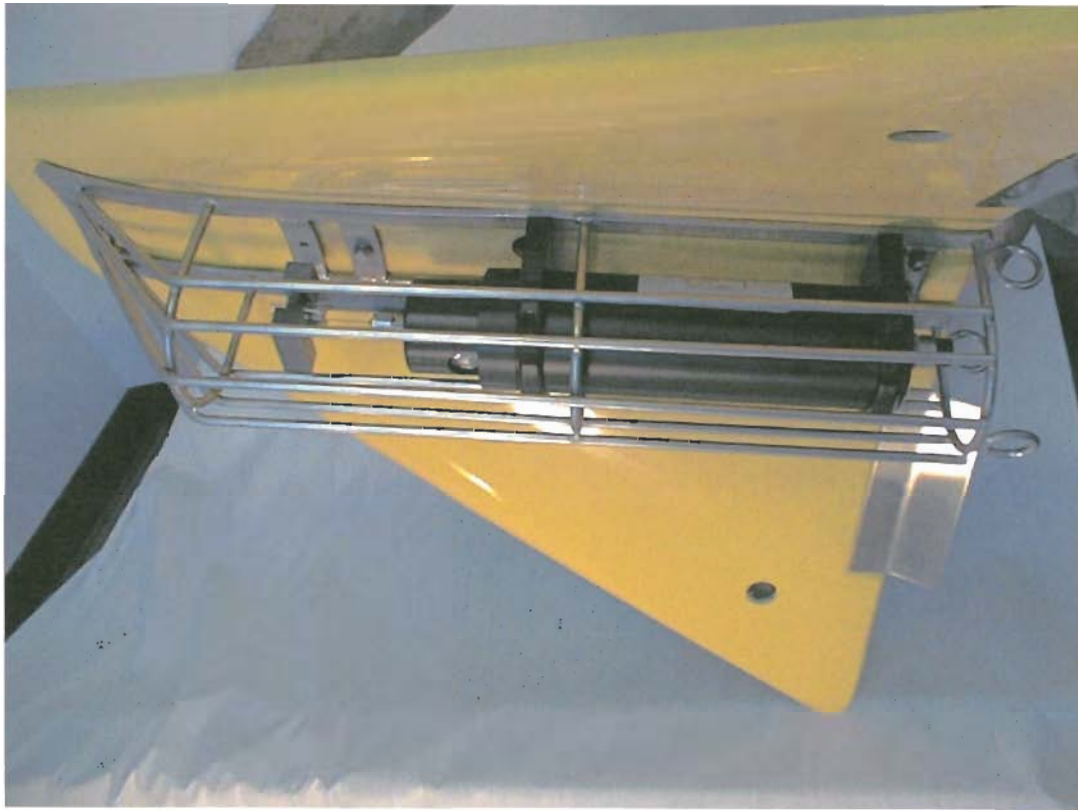


FDA computerized hydrography system as rigged on the Maine DMR study vessel. Shown are the notebook PC, DGPS, and fluorometer. The partial cabin protected the electronics from rain, spray, and glare.

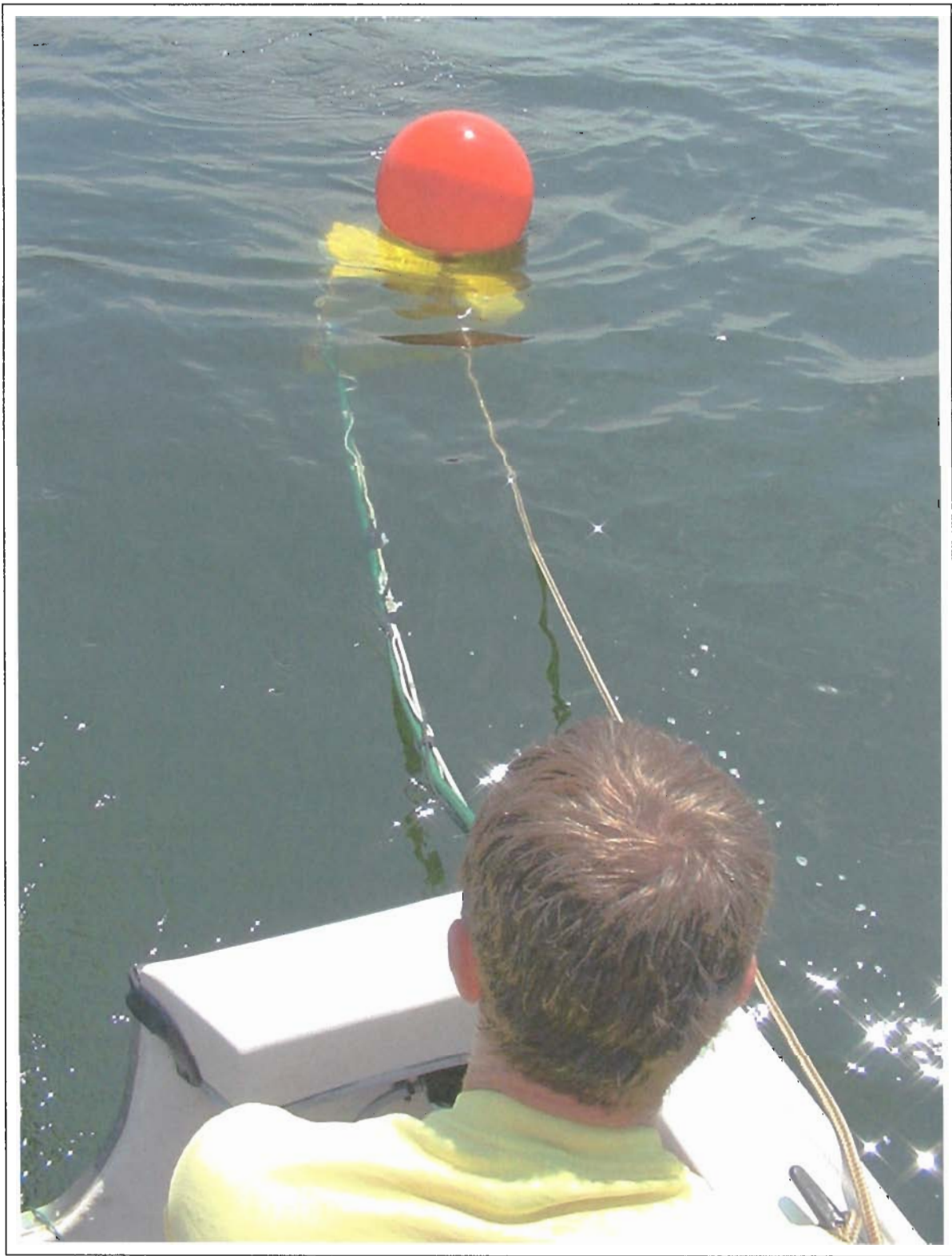


Maine DMR study vessel showing the two antennas for the DGPS. The vessel was deployed daily from land storage for the data acquisition.

FDA computerized hydrography system onboard the Maine DMR study vessel.



Custom configuration of "V-Fin" towed vehicle with CTD sensor in protective cage.



Maine DMR rigging of towed V-Fin with CTD sensor mounted below (vessel not in motion). Shown are the towing line and green hose taped to electric wires between the DC pump and CTD underwater and the fluorometer and PC onboard the vessel.



V-Fin towed vehicle was deployed by hand onboard the DMR study vessel.



Included is one of the two Captains of the DMR vessel for the study.

Maine DMR personnel not pictured elsewhere in this report.



Above: Study continued on DMR vessel during rain without harm to electronics.
Below: Maine DMR Lamoine laboratory and offices necessary for the study.