**RESEARCH VESSEL WEATHERBIRD II – BACK DECK**

*Professor: Teresa Greely, Ph.D*

[MUSIC PLAYING] Good morning, and welcome to the Florida Institute of Oceanography. My name is Rob Walker. I'm the marine operations manager here at FIO. The Florida Institute of Oceanography is a consortium of 30 institutions around state of Florida. And we provide facility services for the oceanographic community here in Florida.

Our facilities include the research vessel, Weatherbird II, which we will be touring today, the research vessel Bellow, and the Keys Marine Lab, which is a full service marine lab in the Florida keys. The Weatherbird II is 115-foot research vessel that operates here in the gulf of Mexico, the Florida keys, and the northern Atlantic.

We provide ship board services for a lot of different scientists. We essentially provide a platform for researchers. We have marine biologist on board, marine chemists, physical oceanographers, marine geologists, and a variety of other educational programs that are offered through the university system.

On today's tour, we're going to start on the back deck of the Weatherbird. And we're going to talk a little bit about the equipment that we use on board the vessel to deploy the instrumentation. We'll speak a little bit about the instrumentation we use on the vessel. We'll go in through the inside of the vessel and then up to talk to the captain. And the captain can give us an overview of how the ship is operated and manned and how we provide these services to the science community.

To start off, a lot of the equipment that we deploy from the vessel is quite heavy, so we have three different winches we use to deploy this equipment. The main winch, which is used for deploying large buoys, towing of nets and trawls. We also have a secondary winch, which is our CTD winch, which is a conducting cable. So we can actually deploy instrumentation and have real-time communications with those instruments. The third winch we have on deck is the hydrographic winch, which is a light weight, general purpose winch for smaller plankton tows and smaller sentiment grabs.

The majority of the research that the Weatherbird II has been conducting over the last five years has been out here in the Gulf of Mexico. We've provided ship board support for a number of the research consortium that are working in the Gulf of Mexico, including the C-Image consortium, which is located here at the University of South Florida.

We have several different researchers from different backgrounds that are working on the area in and around where the deep water horizon event occurred back in 2010. We have folks on board that are looking at water quality issues. We have fisheries scientist on board that are looking at the impacts on the fisheries. We also have sediment researchers, geologists on board that are looking at the final disposition of this oil, whether or not it wound up in the sediments or has moved on out of the area.

Operating oceanographic research vessels is a very complicated procedure. We have, obviously, a lot of support from our crew and our captains on board the vessels. There's a lot of problem solving. We have to deal with a lot of different issues when we are scheduling the vessel, including hurricane season, weather.

Our red tide events that occur out here in the gulf of Mexico are not always scheduled. And we try and respond to those as quickly as possible. We have scientists that fly in from all over the world to use our vessels. So there's a lot of scheduling and logistics involved to provide the vessels to our research community.