

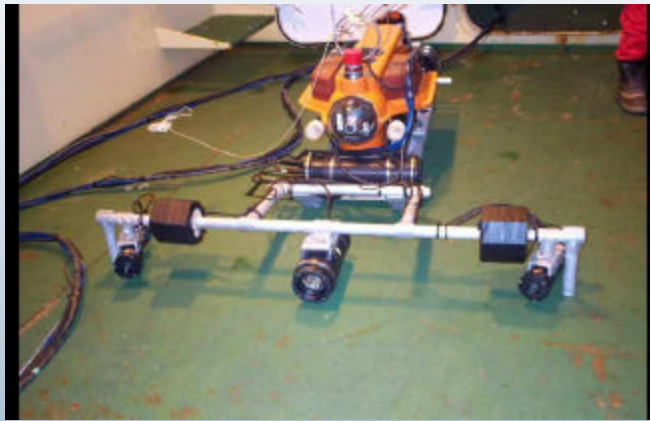
# Flying Fish Video Plankton Recorder: A Systems And Operational Overview

Joshua Eaton

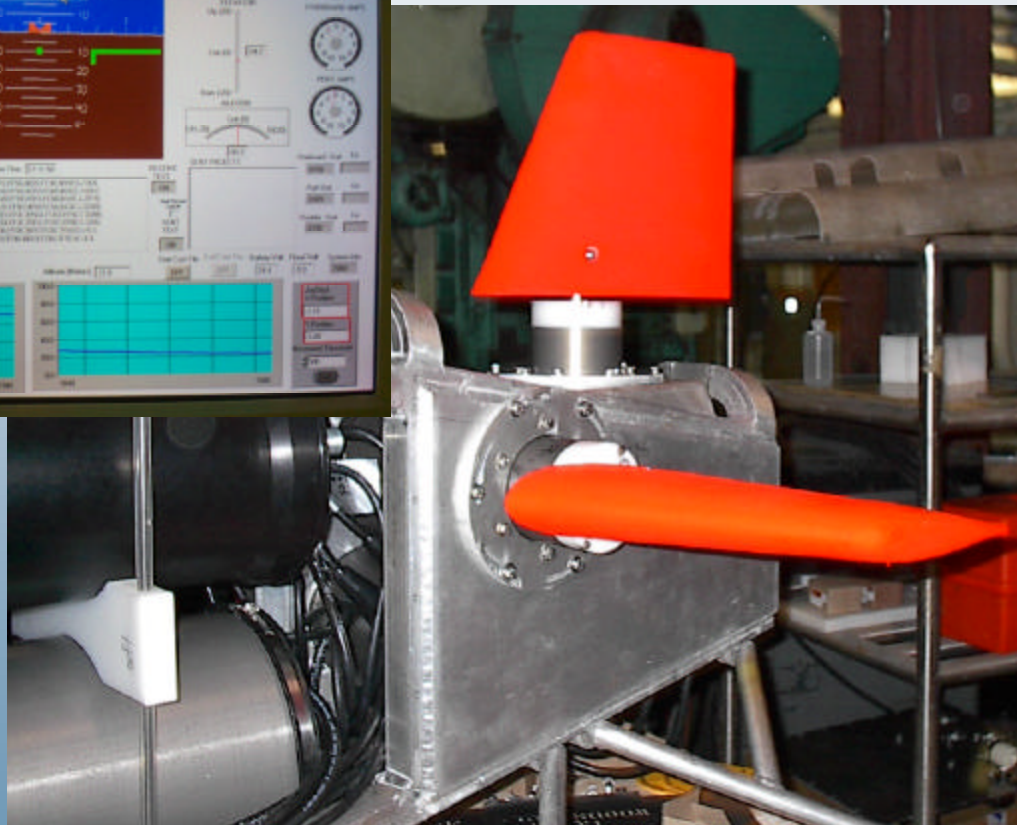
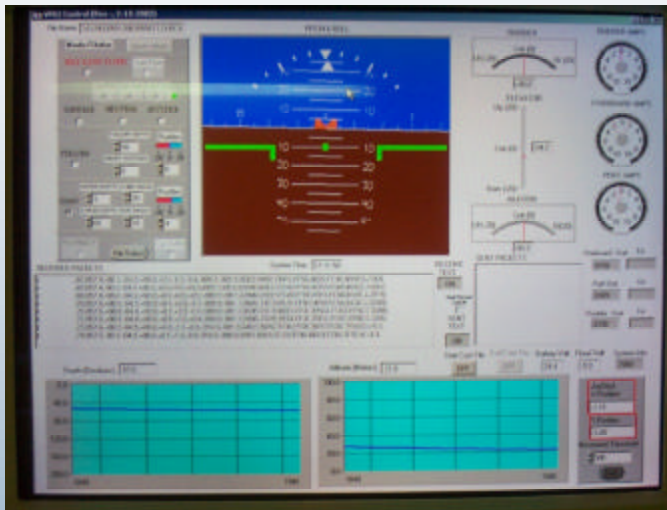
INMARTECH 2006, Woods Hole, MA



# Various types of VPRS

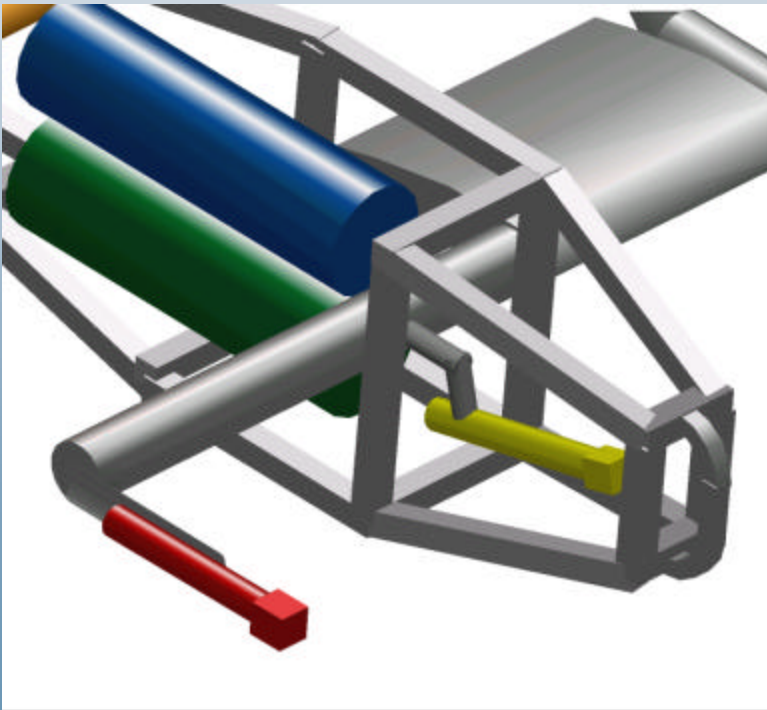


# Flight Control

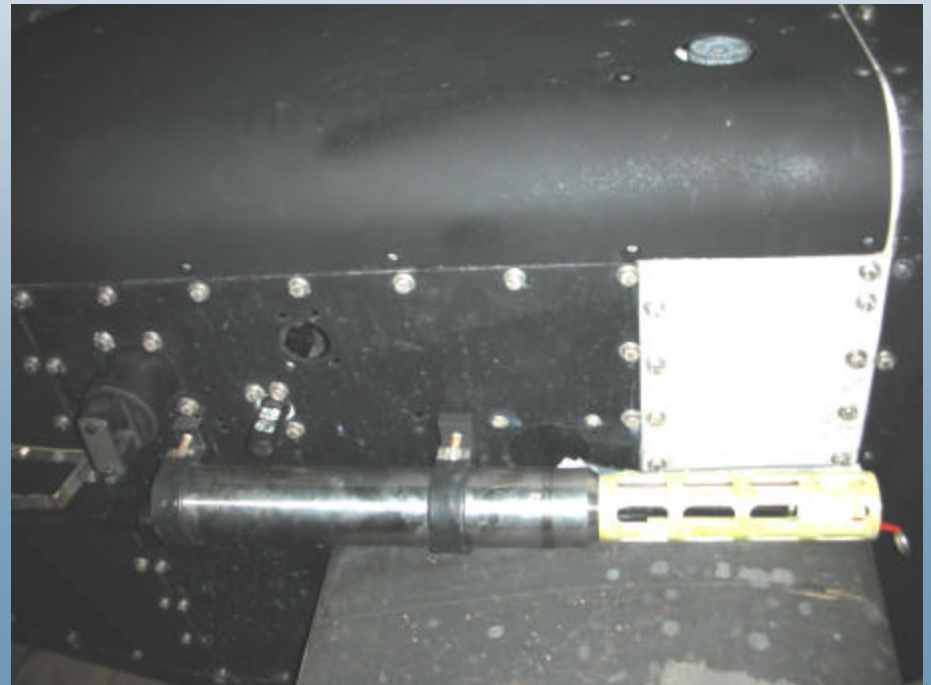


# VPR Systems

Camera and Strobe



Instrument Suite





# Surface Operations

Power Supply



Data Collection

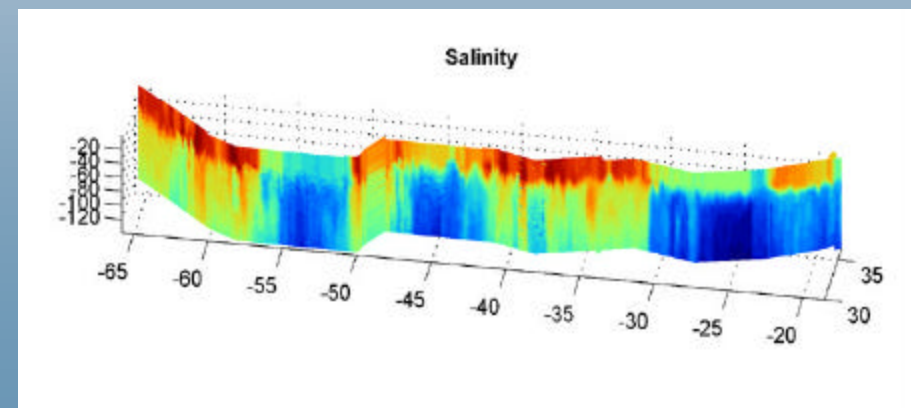
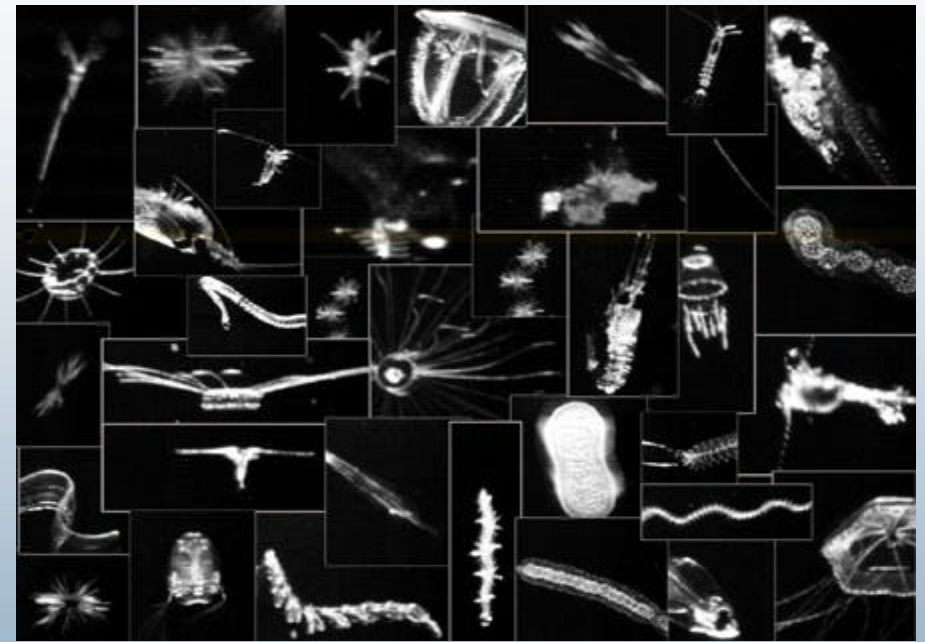


Winch



# Need for the Instrument

Actual Pictures of Plankton  
Real Time Environmental Data  
Long Range Survey Tool



# Typical Deployment

## Launch

- 6 Knots
- 7 People
- 45 Minutes
- 600 Meters of Wire out



## Operations

- 10 Knots
- 2 On Watch Plus Gawkers
- Low Ship Maneuverability





# Typical Deployment

## Recovery

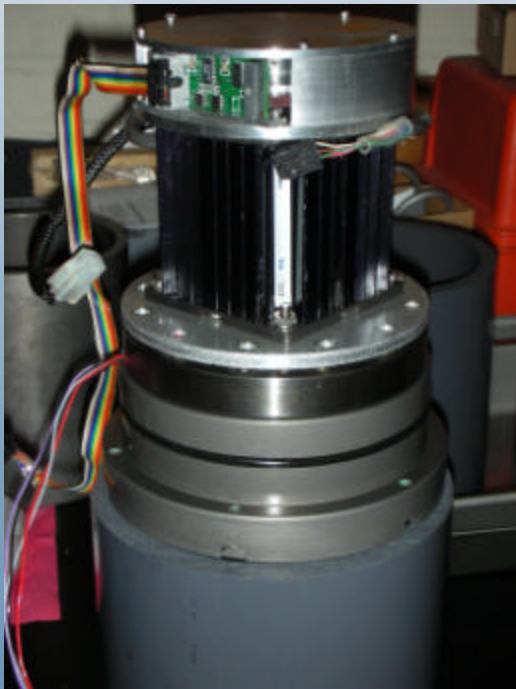
- 6 Knots
- 8 People
- 45 Minutes





# Typical Problems

- Dirty Fiber Optic Connection
- Servo Leak
- Loose Fairing
- Termination



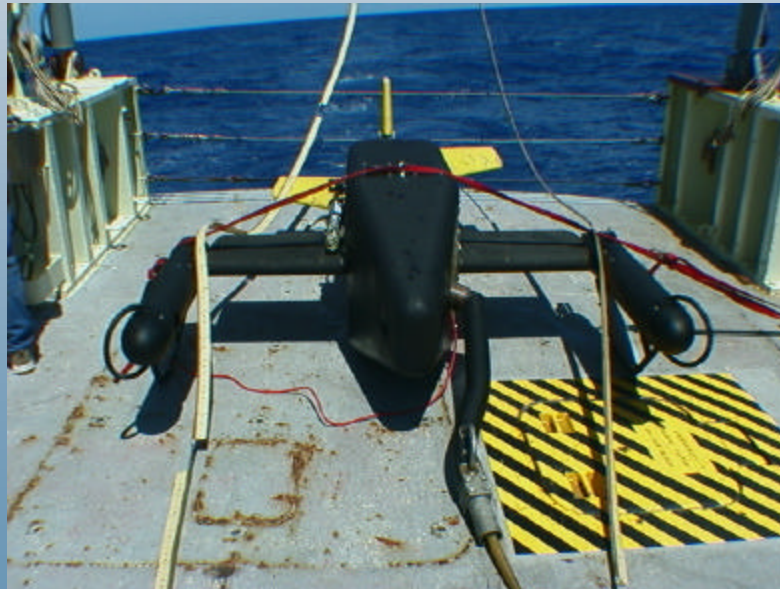
# System Improvements

## Science Requested

- Mission Specific Sensors
- Oxygen Sensor
- PH Sensor
- Greater Depth

## Engineering

- Roll Control
- Larger Winch



# Questions

