#### LOUISIANA STATE UNIVERSITY

# Field Support Group



A university-wide collaborative unit based on Colleges of Coast & Environment, Science, Engineering, Humanities & Social Sciences, Agriculture and others

#### **FSG Mission**

# To provide:

- A quality data product that fulfills the scientists, engineers and others needs.
- All necessary assistance to the research effort from the proposal to the final presentation.

10/19/2017 2

### Facility

 10,000 sq foot facility with a wood shop, a metal shop, and a fully functional machine and CNC shop.



### Truck & Boat Fleet

• Ford F-350

4X4



• 26' Catamaran



• 22' Boston Whaler

• 23' Carolina Skiff



### LSU RV Coastal Profiler

#### 41' Multi-Purpose Research Vessel



### For the Adventurous Researcher



### Tools and Equipment

- Side Scan Sonar
- Calibration equipment
- Seismic "chirp"
  Equipment
- Magnetometer
- Etc.









### Machine Shop

- Bridgeport horizontal end mill
- Grizzly vertical end mill
- Clausing 600 metal lathe
- Clausing 1300 metal lathe



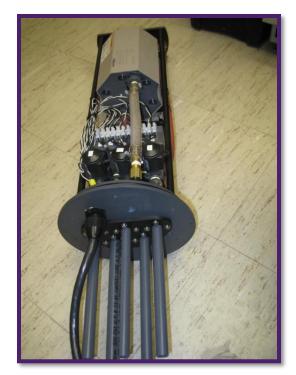
#### **Machine Work**

#### From simple sensor housings



to complicated pumping systems







## Welding

- MIG, TIG, and stick capable
- Ability to weld all commonly used metals





### **Fabrication Capabilities**

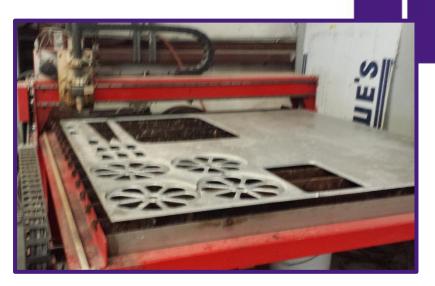


From a simple sensor deployment module to an entire real-time monitoring station.



### **CNC** Fabrication

• CNC Plasma cutting of most sheet metals.



 3-D CNC Milling of most metals and exotic plastics.

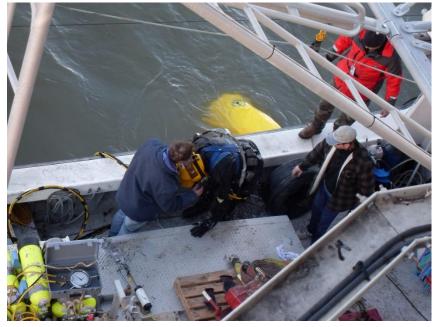




### Specialty/Difficult Diving

 All FSG members are certified Haz-mat and decontamination diving certified.

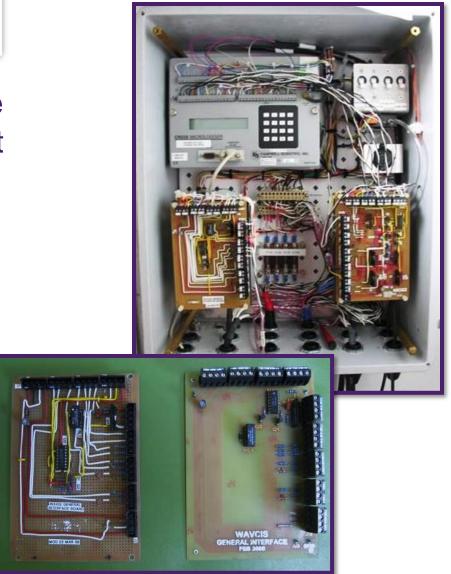




#### **Electronics**

Interface cards were engineered and built in-house

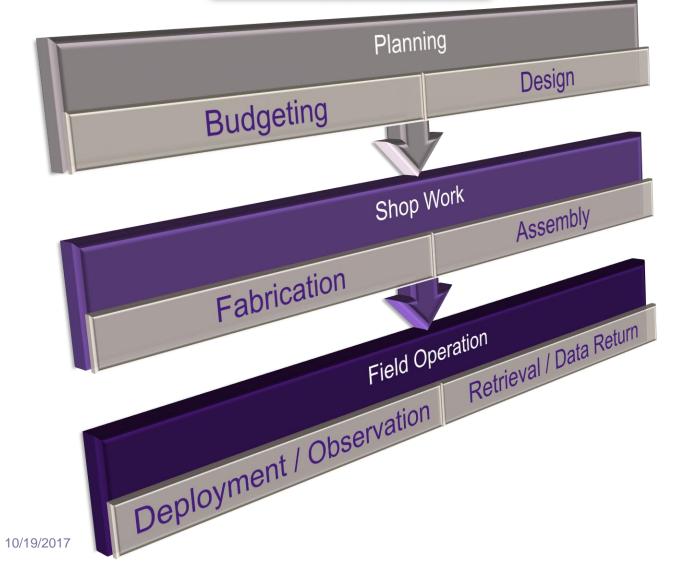
As the technology became available, a photo-resist method was adopted to ensure card uniformity



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Before After

#### What We Offer



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#### Past Work Experience

- Event specific observations
- Fabrication solutions
- Temporary sensor package deployments
- Model Correlations (ground truth)
- Deep Sea Moorings
- Side-Scan Sonar, Seismic, etc. transects
- Real-time sea state monitoring stations

## Our personnel at work









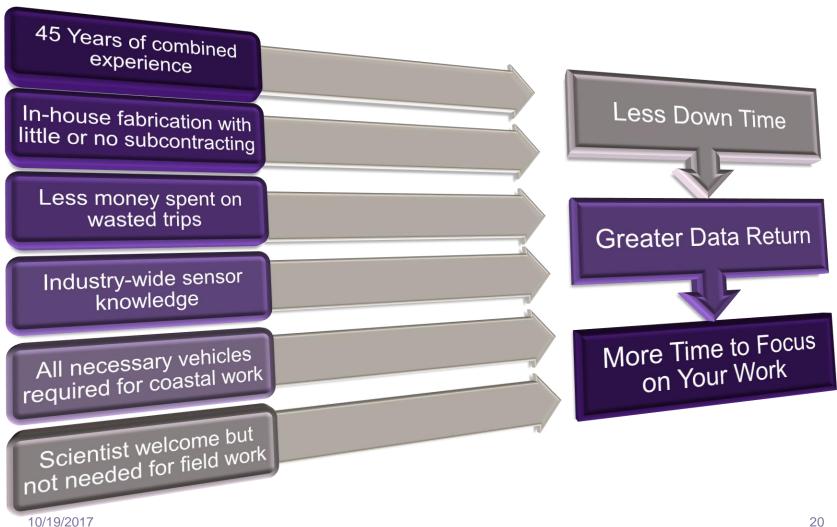
#### All Field Support Group members are:

- Certified in different levels of dive proficiency, from open water diver to commercial diver.
- Adult CPR certified
- Safe-Gulf certified
- Fall-Protection certified
- TWIC card carriers

#### Some Field Support Group members are:

Boat Captain qualified

### How can our model benefit you?



#### Questions?

#### Field Support Group

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