ASC Marine Operations Support to the United States Antarctic Program

Marine Operations
Bruce Felix
What We Do
Operating in the Southern Ocean

- We operate year round in the Southern Ocean, which presents a number of unique operational challenges.
Operational Challenges

Remote “home port” in Punta Arenas, Chile

Extreme weather and sea state

Original, aging and undersized pier at Palmer Station
NBP Cruise Tracks 1992-2012

Ports of call:
Punta Arenas, CH
Cape Town, SA
Auckland, NZ
Hobart, AU
Littleton, NZ
Seattle, US
Talcahuano, CH
Valparaiso, CH
Honolulu, US
Dutch Harbor, US
San Diego, US
Papeete - TA
LMG Area of Operations
Water Column and Biological Sampling
Coring and Mooring Systems
Vessel Based Laboratories, Aquariums and Helicopter Support
Field Camps, Shore Support and Small Boat Operations

Operate fleet of:
Ten Zodiac® inflatable hull boats
One aluminum hull landing craft

Currently working on proposal for two novel Rigid Hull Inflatable Hull Boats (RHIB)
Palmer Station Supply and Support
Still Awake?
Technology Highlight

Video guided coring
Evolution of a Technology
Problems

- Learning to splice and work with fiber optic cable
- Resolving issues with oil filled junction boxes
- Resolving deployment issues, lights, camera….hmmm
- Data management
- Largest issue has been getting ‘wire time’ to test and fine tune the system.
Where are we now
Still photos taken in conjunction with video
Down the road

- Resolve video archiving quality issues
- Eliminate lead weight
- Obtain an HD camera
- Expand uses of system to nets and grabs
- Addition of instruments to the package
Questions?