UNOLS Pooled Technical Resources and
Planning Required for Their Use

Chief Scientist Training Cruise

October 6 2014

Moss Landing Marine Laboratories

UNOLS
Online Equipment Inventory

Links to the Online Equipment Inventory as well as all of the the Pooled Equipment Facilities are available from the UNOLS homepage:

UNOLS
Online Equipment Inventory

- Lists equipment available on the UNOLS vessels as well as pooled equipment.

- Able to be filtered by Institution, Vessel, Group, Device, and Manufacturer

- Depending on schedule, portable equipment may be able to be moved to another vessel.

- Requests of equipment from another operating institution are usually made by the operating institution's Tech Support group but it never hurts to ask.

UNOLS
Online Equipment Inventory

http://strs.unols.org/Public/Search/diu_equipment.aspx

UNOLS Equipment Inventory Search

Institution:	Choose Institution ▾
Vessel/Facility:	Choose Vessel/Facility ▾
Group:	Choose Group ▾
Device Type:	mocness ▾
Manufacturer:	

Filter   **Clear Filter**

Export Current Page | Export All | Page Size: 20 ▾

	Institution	Vessel/Facility	Group	Device type	Manufacturer	Model	Description	Number	Component of
View/Edit	URI_GSO	Portable	nets & trawls	mocness	BESS	MOC-1		1	
View/Edit	RSMAS	Portable	nets & trawls	mocness	BESS	MOC-1		1	
View/Edit	RSMAS	Portable	nets & trawls	mocness	BESS	MOC-1 double		1	
View/Edit	RSMAS	Portable	nets & trawls	mocness	BESS	MOC-10		1	
View/Edit	OSU_COAS	Portable	nets & trawls	mocness	BESS	MOC-1	1m2	1	
View/Edit	OSU_COAS	Portable	nets & trawls	mocness	BESS	MOC-0.25	0.25m2	1	
View/Edit	SIO	Portable	nets & trawls	mocness	BESS	MOC-1		1	
View/Edit	SIO	Portable	nets & trawls	mocness	BESS	MOC-1 double		1	
View/Edit	SIO	Portable	nets & trawls	mocness	BESS	MOC-10		1	
View/Edit	UH_SOEST	Kilo Moana	nets & trawls	MOCNESS	BESS	MOC-1		1	
View/Edit	UAF	SIKULIAQ	nets & trawls	mocness	BESS	MOC-1			mocness

UNOLS
Pooled Equipment/Services

Portable Lab (Van) Pools

- Operated by: UDelaware (East Coast) and OSU (West Coast)
- Portable labs including dry lab, isotope lab, cold lab, clean labs
- Requested early in the planning phase
- More info:
  - http://marops.cms.udel.edu/uecvp/
  - http://www.shipops.oregonstate.edu/ops/vans/
- NOTE: Some institutions have their own lab vans so consult with the host institution prior to requesting a van

Winch Pool

Photo from whoi.edu

- Operated by: WHOI
- Heavy, Medium, Light and Ultra-light duty winches available
- Requested early in the planning phase
- More info:
  - http://winchpool.whoi.edu/
- NOTE: Institutions have their own installed and portable winches so consult with the host institution prior to requesting a winch

Long Core

- Operated by: WHOI
- Capable of recovering up to a 50m core
- Currently only available on KNORR but design study underway to move to LANGSETH
- More info: http://www.whoi.edu/page.do?pid=19095

NORCOR

- Operated by: OSU
- Jumbo Piston Core (JPC)
- Multi core, box core, gravity core, Kasten core
- Maintains the core repository at OSU
- Contact:
    Nick Pisias:
    npisias@coas.oregonstate.edu
    541-737-5213

MISO & PFPE

- Operated by: WHOI
- PFPE: Magnetometers and gravimeters
- Towcam, MC-800 w/ RT camera, Deep-Sea cameras, strobes, High-Temperature Loggers, Acoustic Transponders and more!
- More info:

    http://www.whoi.edu/website/miso/miso-instrumentation

Operation SWAB

- Operated by the UMiami Tritium Lab (UMTL)
- 3rd party testing for low levels of ^3H and ^{14}C contamination of ships and associated laboratory vans
- Visit ships at least 1x per year, sometimes more often
- Can be requested (through the ship operator) prior to natural abundance cruises
- SWAB results are posted online through UNOLS website's Document Search.

Ship/Shore Communications

- Generally 2 systems available, HiSeasNet & FBB
- HiSeasNet
  - Primary System.
  - Always on.
  - Fixed rate paid through day-rate ($150/$250).
- FBB
  - Back-up to HiSeasNet
  - Pay as you go system
  - Paid through CGI with WHOI
- Anything beyond basic communications (e.g. video outreach) must be discussed approved by the funding agencies. Discuss with the host institution EARLY.
- If you are not sure whether your needs are "normal", ask.

Multibeam Advisory Committee

- Operated by L-DEO and UNH
- Support for the multibeam systems to help ensure consistent high-quality multibeam data
- More Info: http://mac.unols.org/

Currents ADCP Group

- Operated by UH/Julia Hummons
- Developed a suite of collection & processing software for ADCP data
- Provides near real-time data monitoring to participating institution

Chemistry Services

ODF

- Operated by SIO
- Reference Quality Hydrographic Support
- CTD data acquisition and processing to WOCE standards
- More Info: http://odf.ucsd.edu/

Other

- Data Collection and/or sample analysis services may be available from a lab at the host institution
- Ask your cruise Technical Support POC to find out what might be available
- If the host institution cannot help, ask around for other possibilities

Tech Pool and Tech Sharing

- Each ship supplies a baseline level of technical support
- Baseline level of support varies a bit from ship to ship so be sure to discuss your tech support needs early
- If necessary, additional tech support may be available through the Tech Pool or through Tech Exchanges
- Additional funding is needed for additional support so contact your Science Program Manager and have the ship's Technical POC contact his/her Program Manager

Planning

- Equipment/Services should be requested EARLY in the planning process. Discuss with the cruise Technical POC.
- Requests can come from either the Chief Scientists or the Ship operator.
- Do your research and understand what equipment you need. Don't be afraid to ask questions.
- Last minute requests can be frustrating for all parties. Sometimes they are unavoidable but try to make them the exception and not the norm

Use

- Pooled Resources are for the *entire* community
- They should be treated as if it is your own so they will be available for others in the future:
  - Understand the equipment and its limitations prior to the cruise. Ask questions.
  - Read any literature that arrives with the pooled equipment. It is there for a reason!
  - Return it in as good or better shape than when it arrived.
  - Abuse will not be tolerated.

UNOLS
Radioisotope Resources

- UNOLS are multi-use vessels that support both natural abundance and enhanced isotope research
- Miniscule amounts of enhanced isotope will ruin natural abundance work
- Increasing concerns of contamination from enhanced isotope users

UNOLS
Rad Awareness Program

http://www.unols.org//unols-radioisotope-awareness-program

Outlines the problem and provides tools (bottom of page) that include:

- Presentations to make folks aware of the issues and how to avoid them.
- Links to Radioisotope Use Logs for each ship.
  - ▫ Who has used radioisotopes.
  - ▫ SWAB test results.
- Checklists to help everyone understand the roles and responsibilities onboard.

This is a great way to help new users understand rad use on ships in general and especially on multi-purpose ships.