

# Marcus Langseth *Science Oversight Committee (MLSOC)*

New UNOLS Committee to oversee Science  
and Ship Operations for a National  
Oceanographic Seismic Facility

Report by UNOLS Steering committee:

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# Background

- LDEO acquired a modern commercial 3D seismic vessel to replace *Ewing*, now renamed the *R/V Marcus Langseth*
- A *Ewing* Replacement Oversight Conversion Committee (EROCC) chaired by Tom Shipley is providing science and operator input to the conversion process.
- The *Langseth* will be operated as a UNOLS Vessel AND as a National Oceanographic Facility
- The science community and NSF desire a “DESSC like” oversight committee that would provide advice to LDEO and the funding agencies regarding the operation of this facility.

# Your Approval Required...

- UNOLS standing committees must be approved by a vote of the membership.
- This committee (*MLSOC*) will be formed under Annex II of the UNOLS Charter, which outlines the requirements for National Facilities.
- Ballot Measure asks you to approve the formation of this oversight committee contingent on completing the conversion process and designation as a UNOLS Vessel and National Facility
- The UNOLS Council will approve the UNOLS designation of the vessel and National Facility when appropriate.
- The UNOLS Chair will appoint the initial members of the *MLSOC* in consultation with the UNOLS Council based on our committee's recommendations.

# Ballot Measure

## Establishment of a new UNOLS Standing Committee

- The UNOLS member institutions hereby authorize the establishment of a *Marcus Langseth* Science Oversight Committee (MLSOC) to be operated according to the attached Terms of Reference (*dated September 8, 2005*). This authorization is contingent on the successful conversion of the vessel to an academic research vessel and designation of the *Marcus Langseth* by the UNOLS Council as a UNOLS vessel and National Oceanographic Facility in accordance with the UNOLS Charter. If approved, the Terms of Reference will be incorporated in the UNOLS Charter as Annex IX. Initial members of the committee will be appointed by the UNOLS Chair in consultation with the UNOLS Council in accordance with the attached Terms of Reference and the UNOLS Charter.
- Approve \_\_\_\_\_ Disapprove \_\_\_\_\_

# Terms of Reference

- Introduction and Purpose of MLSOC
  - *Langseth unique capabilities for 3D and 2D seismic reflection as well as support for other MG&G and Oceanographic field work.*
  - *Charge to MLSOC*
    - Overseeing the scientific operation of the *Marcus Langseth* as a National Oceanographic Facility.
      - fulfill an ombudsman role for all scientific groups in need of high-quality geophysical images, with the goals of providing
        - » state-of-the-art seismic acquisition capabilities,
        - » lowering the threshold of expertise needed to use the facility,
        - » and increasing the quality and accessibility of archived data.
    - Maintaining and enhancing the *Langseth's* capabilities for general geophysical and oceanographic research

# Introduction (cont.)

- MLSOC will be available to provide advice and input on the annual and long term scheduling of the *Langseth*, but will not do the actual scheduling. They will promote coordination with OBS and PASSCAL facility scheduling.
- Identify and recommend hardware and procedure upgrades to keep the facility at the cutting edge of exploration capability.
- Encourage geophysical research worldwide and encourage the advancement of cooperative international programs.

# Authority

- Establish Committee under Annex II of the UNOLS Charter
- MLSOC has the authority to establish subcommittees when needed.

# Membership

- 9 voting members
  - 3D and 2D seismic, including industry operations and data acquisition expertise
  - OBS and PASSCAL experience
  - General Oceanography including:
    - Coring, ROV ops, Moorings, Phys/Bio/Chem Oceanography, General Over-the-side ops
    - Mapping, Observatories
- Ex-Officio RVTEC and RVOC reps, probably from LDEO
- Other Ex-Officio representatives from LDEO
- Participation by Federal Agency representatives



# Nominations

- Solicited from the community, advertise the need.
- Review CV and letter of interest.
- Voted on by current membership.
- Appointed by UNOLS Chair with Council concurrence.
- Three-year terms, staggered with no more than two consecutive terms.
- Ex-Officio members appointed by LDEO and UNOLS standing committees.

# Meetings

- Meet twice a year
  - One meeting should allow for an open forum with the user community to get broad input for long-range planning, user concerns, etc.
  - The second meeting will be generally devoted to scheduling issues, permitting, advising on specific programs, and other near-term issues, and should occur in the late spring or early summer.
  - Might need to meet more often at the beginning or under unusual circumstances.

# Charge to Committee

- **Provide advice on scientific programs.**
- **Forecast future operations locations.**
- **Provide advice on scheduling issues.**
- **Address user concerns.**
- **Review technical capabilities.**
- **Monitor issues related to permitting.**
- **Encourage technology expansion and upgrades.**
- **Reporting on activities and recommendations**

# Potential Members

## - profile of the committee membership

- Those with excellent MCS experience. These folks will provide the leadership for the committee. I suggest that we pick 4 from this category.(We have plenty of these to choose from.)
- Those who are users of MCS information, but not specialists. These people will work with the Category 1 folks to bring down the level of expertise necessary to use the facility successfully. I suggest that we have 2 on the committee from this group.(We have plenty of these to choose from.)
- General ship users, marine mammal specialists, and industry people. We need one person from each group, and I think that we need more names in most of these categories. It is going to be hard for these folks to see that serving on this committee is worth his/her time.

# Potential Members

- MG&G user community

## Seismic Specialists - Committee leadership

Need ~ 4 including Committee Chair

Top choices

- Mike Enachescu – Memorial University, Newfoundland - 3D, former industry
- Tom Shipley – UTIG – ERROC, 2D, 3D (Chair)
- Graham Kent – SIO - 3D
- Nancy Grindlay (UNC)

Alternate choices

- Steve Holbrook – Wyoming – 2D (alt chair)
- Alan Levander - Rice – EAR, IRIS, CD
- Dan Lizarralde –WHOI
- Nathan Bangs (alt for Shipley) - UTIG - 3D
- Casey Moore (UCSC)
- Kirk McIntosh - UTIG - 2D, 3D
- Greg Moore - SOEST - 3D
- Alistair Harding (alt for Kent) –SIO-3D
- Jim Fowler – NM Tech, IRIS - PASSCAL
- Mark Wiederspahn (UTIG) – seismic data acquisition

# Potential Members

- MG&G user community
- ## Non - Seismic Specialists

No particular order, but need institutional balance with previous list (need ~2)

- Mitch Lyle (Boise State)
- Will Sager (TAMU)
- Neil Driscoll – SIO
- Dale Sawyer – Rice
- Gail Christeson - UTIG - OBS
- Colin Zelt – Rice - EAR
- John Collins – WHOI - OBS
- Jeff Babcock – SIO – OBS
- Ralph Stephen – WHOI - downhole imaging

# Potential Members

- User community – General Oceanography  
No particular order, but need institutional balance with previous list (need ~1)
  - Ian Macdonald – TAMU – mapping/ROV experience
  - Peter Franks – SIO – Physical and Biological ocean, over-the-side experience.
  - Mark Zumberge – SIO-IGPP
  - Jim Broda – WHOI - Coring
  - Alan Chave – WHOI- observatories/emerging technologies
  - Bob Embley – NOAA/PMEL - observatories, ROV ops
  - Jim Barry – MBARI – ecologist with ROV experience
- User community - Marine Mammal and Permitting (need at least 1)
  - Michael Moore – WHOI- might have recommendations for others
  - Peter Tyack – WHOI – cetacean response to human-generated noise
- Industry (need at least 1)
  - Craig Shipp - Shell - (ODP experience, Site Survey and Safety panels, plans 3D experiments)
  - Phil Fontana – Veritas - (survey design and acquisition parameters)
  - Peter Littlewood – Shell – 3D & current member of ERROC

# What's Next...

- If *MLSOC* is approved by your vote, recruit initial members and seek their appointment by the UNOLS Chair.
- Provide opportunity for the committee to formulate their agenda and provide input to LDEO and NSF as soon as possible using correspondence or face-to-face meetings if funding available.
- LDEO request designation as UNOLS vessel and National Facility for action by Council
- LDEO complete conversion and complete inspection.
- Conduct shakedown cruise and begin operations in late 2006.
- Committee conduct regular and special meetings as needed to ensure smooth start up of operations.