

## *Draft Minutes*

### UNOLS Ship Scheduling Meeting NSF - Arlington, VA July 20 & 21, 2005

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Meeting called to order at 0835 by Elizabeth Brenner, Co-Chair (SIO). The planned agenda is in [appendix I](#).

Introductions were made around the room and a list of participants is included as [appendix II](#). Several new members of the scheduling committee were welcomed, even though all thought this would be a particularly difficult year to make your debut as a UNOLS Ship schedulers.

An opportunity for brief reports by agency representatives was provided.

Larry Clark, acting director for Ocean Sciences provided an overview of the Geo-Sciences and Ocean Sciences budgets and in particular the factors that have lead to the reduced budget in 2006 for ship operations. He indicated that the target for Linda Goad's ship operations budget was \$37M and that would include lay-up costs. He stated that some in NSF management still felt that there were more ships in the UNOLS fleet than were supportable with the budgets projected for the foreseeable future and that in addition to the real possibility of lay-ups for the near term, the prospect of retirements was still on the table. He thanked UNOLS for the response to his request for advise on dealing with the budget short fall. The UNOLS recommendations were sent to Larry on Monday and the original delivered to him at the meeting by Peter Wiebe, UNOLS Chair. Larry's presentation is available as [appendix III](#).

ONR - John Freitag stated that his budget for operations was more or less unchanged at around \$10M from which he has to cover FLIP, CIRPAS and lay-ups in addition to operations. Some Navy projects are paid from program, funds and he receives funds for NRL and NPS cruises. There is a plus up of around \$5M in the congressional budgets for ONR use of the UNOLS fleet, but they cannot promote or comment on that until appropriated at which time they would spend the money according to the intent of Congress.

NOAA - Beth White indicated that the NOAA charter budget for UNOLS would be somewhere between \$6.5M and \$7.1M depending on whether they use the House or Senate mark. There would also be program dollars for ship time from the Ocean Exploration, DART and others for a total somewhere around \$10M

Work funded by other agencies has totaled around \$4M, but this usually grows during the year. This puts the ship operations budget for next year at around \$59M, which is less than previous years,

An attempt was made to go through all schedules quickly to identify problems, issues, double bookings, unscheduled work and etc. The agenda called for this to be complete by 10:15 and as it turned out, we

were still left with a few ships to cover when we broke for lunch at 12:15. Future scheduling meetings will have to find a different way to approach this. Probably a list of problems compiled before the meeting, which would be reviewed by the chair or executive secretary. Members could add to the list at the meeting, then scheduling recommendations and changes could be addressed in logical blocks, so that we would not review schedules two or three times.

[appendix IV](#) - Spreadsheet of schedules posted prior to the meeting

ALPHA HELIX – 53 days

Woodgate needs a home with Stabeno on HEALY

Bandopadhyay will have to find another ship

Will lay-up unless something changes

BARNES – 88 days

Possible Battelle Labs work

All NSF work is funded

Boyd is NRL funded

BLUE HERON – 68 days

NSF – Steve Coleman – Note that this 10 days finishes program

NOAA – Sea Grant – PENDING

Decision to be made

HENLOPEN/HUGH R. SHARP – 151 funded

NOAA – 33 days pending

Boyd NRL funded

Cormier – Keep to 8 days total

Stine – Status and program unknown

Not scheduled – 7 ONR days – Benoit-Byrd, OSU

Already passed 15 days to HATTERAS. May transfer some more work

Realistic number of days - 180. 185 is optimal

CAPE HATTERAS – 101 days

75 funded

NOAA – Fletcher – CaroCoops Cruise, Carolina Ocean Observatory. Number of days to be determined.

Need total confirmed days.

Corliss – Pending NSF Education w/program funds. Possible NMFS work of up to 8 days.

Available for Lynch. If Lynch doesn't happen on HATTERAS there will be a big hole.

Possible EPA cruise – Gibson – 10 days;. Can't go on SHARP.

SAVANNNAH

CaroCoops Cruise – Number of days TBD.

NOAA – Pending

LI, Sea Grant – Pending

Nelson, Jim – Navy Pending – from program funds.

URRACA

15 days NSF to schedule for Peter Glynn from program funds for next 5 years.

SPROUL – 101 days

D'Spain – Pending and is likely

Hildebrand - 30 days – Change to pending until source of funds is determined. Not in John Freitag's budget. Program over according to Program officer.

LONGHORN – 27 state/private

PELICAN - 199 days

Lopez – Need to add two port days – total 31 days

Boyd – NRL funded

Bibee and Gettrust – NRL pending. PI's need to talk to Joan Gardner/NRL

NSF – Frank and Fredericq – Combine and condense transits

Nancy Brindley – Pending Sea Grant 5 days add on to Lopez - need to schedule

Hanifen – Pending

Could go as high as 220-225 days

WALTON SMITH – 143 total – 120 days without Lopez

Lopez in double book – Remove 23 days

Total funded days for Ortner and Beringer are more than budgeted by NOAA

\$506,800K total budget

Schedule will be less, based on number of days NOAA can afford, high day rate makes worse.

POINT SUR – 155 days

Collins, CalCOFI line– 6 day cruises, NOAA- COP -Funded. Add 12 days

Bruland – Pending status

Bess Ward – Check status of STR and Award - not scheduled

LTER pulled September cruise. Leaves Dickey September cruise 1 day with 2 days transit. Need alternate home for this (SPROUL)

Chavez NOAA days, removed from schedule and will add if they really need them.

Girton/Kunze – Not scheduled - ONR – 7 days funded

Coordinate with other ships in AESOP project.

WECOMA – 77 days

2 pending NOAA buoy work – Can be scheduled as one day add on to other cruises, but must be a month before Embley's NEMO cruise. Would be a three day stand alone cruise on WECOMA and this would cost more than \$31K budgeted.

Hickey – Coordinate with POINT SUR

Lee, C. – AESOP cruise – WECOMA OR MELVILLE

NEW HORIZON – 109 Funded (Lower)

Stein - Funded out of program funds. Need a pathway

Hildebrand – Status pending 32 days - check on status if funds are not available, winter and spring

CalCOFI cruises will have to be carried out on the JORDON.

Ohman CalCOFI add on days – To be scheduled

NOAA CalCOFI pending

Need Dry Docking in May at different time than other SIO ships

Seibel – Funded if clearance and arrangements made, need to add transit

Lonsdale – Not in budget. If funded, replaces something else, was to be deferred.

ENDEAVOR 1 – Mediterranean

230 days total

Book – Not scheduled using Italian ship

BATS Cruise – Remove

Zehr – Double booked, remove  
Sigurdsson – 5 days only (no transit)  
Debbie Smith – Needs to pick up equipment, but not funded for shiptime. Would have to work out with Ballard and URI.  
Bernhard – Double booked - decide on ship, request is for OCEANUS.  
Shipyard needed.

ENDEAVOR 2 – Option without Ballard  
Double booked with OCEANUS

OCEANUS – 149 days total  
Bernhard – Double booked  
Pilskaln – Days are NOAA/NOS change  
Toole – 16 days until approval by program manager for more, change to 16

SEWARD JOHNSON – 196 days  
NOAA OE – Pending, days within budget.

WEATHERBIRD II - SEWARD JOHNSON II 149 days  
Plans to be online by January  
All local work.

KNORR  
237 days without Ohman  
275 days with Ohman  
218 NSF  
Add Miller to transit to Chile for Talley  
Call Talley – See if earlier time is okay (done, ok)  
Option for Ohman provided, but shown as non-op now.  
Dart Mooring available spot during transit thru the Caribbean.  
Consider: Toole later cruises , Hey, Lyle

KNORR 2  
East coast and Toole double-booked with Atlantis

ATLANTIS  
NOAA OE – Within budget. Budgeted for 42 days  
Hilton – 1 or 2 days  
Tolstoy – 2 days. Could go on KNORR  
Shorter trip to West Coast  
Cowles – Double-booked (or Gregg – Double-booked)  
Levin – 55 days between cruises, which is ok.  
EPR order may change to keep times right  
Need to look at all cruises during the end of the year.

ATLANTIS 2  
Has Miller and shorter transit after OE

REVELLE 2 – 285 days  
Start with Laske deployment  
Change note to re-deployment  
Cowles – Double-booked

ODP cruises – Lonsdale and D’Hondt – too early for one or the other

## REVELLE

Cowles not scheduled

Splits Lonsdale/Lyle and D’Hondt

Adds transits

More ODP in 2006

Could leave earlier in 2005 for ODP

John Collins could have 3 months (wants 3 months) between Laske recovery and deployment.

## MELVILLE 2

Watts may be too late

Childress – keep in mind possible conflict with Lutz. Not a problem as currently scheduled

Long schedule, over 300 days when trying to keep shorter. Due to several cruises in the Western Pacific.

## KILO MOANA

HOTS series – 50 days

Laske – Double-booked

Class cruise – Preferred time

Huntley – Funds from program

30 days needed for installing new CTD System needed - earlier in the year is better.

Alford – Double-booked

Weller – Double-booked

Murray – Double-booked

Moyer – Double-booked

Need to schedule JASON Test cruise

## LANGSETH 1

Start in June

McNutt permits and clearances needed.

Alaskan work - specific time of year due to permits needed.

NEPR Mutter/Floyd – Conflict with ALVIN

## LANGSETH 2

Later start (September) with McNutt

McGuire as an option instead of Mutter. OBS’s should be available.

THOMPSON – Double-booked with KNORR

Several Options

Start in Galapagos

Student cruise

ROV location

## THOMPSON 2

No Talley, goes West and North. Needs to be refined to include full Feely cruise and Stabeno.

## RESOLVING ISSUES

LOCAL vessels

WALTON SMITH

NSF and ONR concerned about weakness of schedule, below what is on the schedule and the already

high daily rate. The number of days scheduled for NOAA projects is already above the budget with a lower day rate and will have to be reduced to meet the budget.

Lopez needs to be removed. If day rate stays high or goes higher then the NSF work will need to come off and this makes the vessel a candidate for a lay-up. Dave Powell pointed out the much of the work was very local to RSMAS and in shallow water and questioned whether any other vessels could do some of this work.

Schedulers for the WALTON SMITH and other east coast regional and intermediate vessels met separately to determine if other ships could handle any of these cruise. It was felt that they most could be schedule, with added transit and port days in some cases.

WALTON SMITH Day Rate needs to come down. Look at other scheduled NOAA Budget – 57 days @ \$8500K day

RSMAS will evaluate the daily rate and schedule and make a new proposal for WALTON SMITH. Pending the outcome of that process, other ships could look at scheduling this work.

Also during this meeting it was determined that the SEWARD JOHNSON could possibly handle the DART moorings for Caribbean. They will follow up with Shannon McArthur/NWS

HUGH S. SHARP and CAPE HATTERAS schedulers will look at coordinating these two schedules to make sure everything is covered adequately. Coordination with some SAVANNAH cruises will be necessary.

#### INTERMEDIATES Vessels

##### East Coast

ENDEAVOR – Revised

December 15- April 1 Non Op

October 5 – December 31 Non Op

##### OCEANUS

Starts April 7

Med cruises not included in schedules

Pitton ONR – Not scheduled because of timing, but could use ENDEAVOR otherwise.

Cindy Lee – May be added if French ship can't be arranged.

Both ships requested for ONR funded cruises in late summer/early fall. Combining schedules removes one vessel from these projects and moves several PI's out of there required time periods.

Decided to see what the costs of running both ships with partial lay-up periods at the beginning and end of the year would do to the budget and operations.

##### West Coast

Embley cruse on WECOMA – need a month before NEMO. Not add on to NEMO.

Schedule as 3 day stand alone on WECOMA or one day add on to large ship cruise.

The west coast schedules also have some multi-ship operations and PI ship specific requirements, but it was decided to try to prepare consolidate schedules for Intermediate on West Coast. OSU and SIO would produce a draft schedule and cost estimate by tomorrow.

It was proposed that Laske's recovery cruise be carried out on WECOMA, OSU scheduler was asked for an estimate in number of days. –see KILO MOANA below.

## LANGSETH

Use #2 schedule for budget - start in September. Consider McGuire as an option.

## ROV schedules

Check MELVILLE 2 schedule with Andy Bowen and ask about the need for Maintenance Period (when/where/how long). Use Alvin for ROV requests where acceptable and have EMBLEY (NEMO) look at using ROPOS.

KILO MOANA - looked at the double bookings and PI's objections to use of KILO MOANA to determine which of these cruises could be scheduled with program manager (and PI) approval. Alford – requested Revelle for both cruises and STR says second cruise is acceptable on KILO MOANA. More recent correspondence states that shear data is required for both legs and therefore the REVELLE is required. It was acknowledged by all that the Pinkel Sonar on REVELLE was the only option for this type of data. UH argued that all other criteria for the second Alford cruise could be handled including the need to deploy SEA-SOAR. The differential in cost for conducting this cruise on REVELLE is at least \$100K assuming identical day rates based on the need to charge four in port days as operating days. The program manager felt that shear data was central to the project. If this was verified as a central requirement of the project as proposed and funded then both cruises would be scheduled on REVELLE and removed from KILO MOANA. At the moment they are still double booked.

Laske's OBS cruises are double booked. OBS recovery is a concern due to the higher freeboard and the structure of the hull. It is clear that a standard monohull approach to doing recoveries would not work on KILO MOANA. Backing down to the OBS or using small boats would be alternate approaches the UH think would work. The other concern was space for vans on the main deck and getting access to the OBS for recovery and deployment legs. It was stated that putting two vans on the main deck would not be a problem and that working with the required three vans could be accomplished. A compromise position was reached; recovery was a bigger risk and should not be scheduled on the KILO MOANA for a major project already in progress. A test cruise for refining and demonstrating recovery techniques is scheduled for later this year and could prove it possible to schedule OBS recovery cruises in the future. Deployments are less risky from KILO MOANA and the flexibility to schedule a local ship was a plus in addition to saving the cost of in port days. John Collins, who will conduct the OBS recovery and deployment cruises agreed to try a deployment from KILO MOANA because it would be easier to give him three months between the recover and deployment, which he would need to keep within budget for overhaul and testing of the OBS.

Later discussion led to considering the WECOMA for the recovery cruise. WECOMA has been used for this purpose in the past and even with an intermediate port call, it could be less expensive than a Global class vessel.

## MELVILLE\_2

This is still best option for doing all Western Pacific work, but well over 300 days. Asked to create an option without Laske and instead a deadhead transit to western pacific to do Bach. Return home after Moyer for shorter schedule. WECOMA covers Laske under this option. Also look at getting Watts a little earlier, although he is in requested window and only two weeks later than this year. Most weather problems for Watts happened in first year on an earlier cruise.

KNORR - Will do the Talley cruise with Web and Cormier. Will decide on Ohman based on whether or not other options are available. Will add two days to transit south for Talley to cover S. Miller.

## SEWARD JOHNSON – Try to add DART moorings in Caribbean

LANGSETH- Decide between doing McGuire or Mutter to avoid possible conflict between Mutter and the EPR work from ALVIN. McGuire in late 2006 on LANGSETH is not a problem for OBS or other considerations.

Schedulers were asked to make revisions to their schedules and revise cost estimates as needed.

### Day 2 - Thursday, July 21

Went through each schedule and tallied up total days and NSF days and assigned a daily rate from estimates provided or from a revised rate. Sometimes these rates were arbitrarily reduced to something closer to a norm, assuming that partial lay-up support would help lower the rate. Intermediate rates ranged from \$13,000 to \$14,200 and will probably need refining, but these numbers were mostly kept a little high to make a conservative estimate of total costs. There were still some cases where the cost of the scheduled work was greater than the NOAA budget for the cruise. In particular the revised ATLANTIS schedule increased the transit days after the Gulf of Mexico cruise for NOAA, such that it was about 7 days over their budget. We proceeded with this as something to be resolved later. Revised schedules posted after the meeting are contained in a spreadsheet See [appendix V](#)

A spreadsheet was created by Linda Goad to add up her costs, see appendix VI. The result, even with some double bookings such as Ohman and Alford and with an estimated \$3.5M in lay-up costs was just under \$37M, which is the target budget for the NSF Ship Operations program from OCE. This was after removing the costs for ODP, OPP and BE. ODP costs were substantial as all the funded work was worked into the 2006 REVELLE schedule.

These costs were based on running partial lay-ups on ENDEAVOR, OCEANUS, CAPE HATTERAS, NEW HORIZON, WECOMA and a full lay-up on ALPHA HELIX. The Global and Ocean class vessels would run with rotating maintenance periods in their homeports and not be laid up. This method was used in order to meet specific scientific requirements and to make sure ships were available for the several multi-ship operations. This method runs contrary to the recommendations developed by UNOLS and may result in slightly higher lay-up costs, but does increased flexibility in scheduling vessels as requested by PIs. Several ship operators expressed concern with trying to meet the requirements of the lay-ups, with reduced crew without running the risk of losing experienced personnel when needed for the operating periods. Mike Prince expressed related concerns because the partial lay-ups would all occur during the beginning and end of the year, making it very difficult to employ laid-off crew on other vessels.

Sandy Shor NSF expressed a concern with the quality of operations as we cut budgets and lose the opportunity to focus on improving operations during these tough budget years. His budget was impacted by several incidents of lost equipment and he is concerned that a trend in this direction would not be supportable.

Linda finished by saying that unless her budget was increased, she would not be able to support large increases in day rates or lay-up costs if actual costs came in substantially higher than this rough estimate, then we would have to look again at cutting programs from next years schedule and revisit the issue of partial versus full lay-ups. See [appendix VI](#).

The meeting concluded with a review and input on the new SQL server data base driven ship time request, scheduling and reporting system. Valuable input and suggestions was received from NSF, NOAA and ONR program managers and from ship schedulers.

The meeting adjourned at 12:30 pm.