MINUTES

R/V ALPHA HELIX Review Committee Meeting

1-2 March 1974

Joseph Henry Building, Washington, D. C.

Present

| ALPHA HELIX Committee | UNOLS | NSF | SIO |
|---|---|---|---|
| R. Bandurski | R. Dinsmore | E. Clark | W. Garey |
| L. Prosser | | A. Greene | G. Shor |
| L. Provasoli | | G. Gross | |
| B. Steinbach | | M. Johrde | |
| | | E. Romanoff | |
| | | S. Toye | |

Friday, March 1

1. Review of meeting held in July 1973.
2. Prosser discussed areas of responsibility of the committee.
3. Dinsmore presented UNOLS report
   A. Costs of operating about 31 ships for '74 - 17.8M
   B. Available funds about 16.9M
   C. Cost of ship operations in '75 predicted to exceed prospective funding
   D. Generally a ship need be tied up for about 3 months before one month of ship operational costs are saved
   E. UNOLS and its advisory group want the ALPHA HELIX committee to have maximum autonomy and they stand ready to assist the committee in any way possible.
4. Shor stated that ALPHA HELIX must remain a national facility if it is to serve the national scientific community.
   A. Agreement of attendees that ALPHA HELIX research program as practiced and projected could not be carried out without the scientific supporting efforts provided through SIO.
   B. Cost of operations of ALPHA HELIX in line with those of other ships operated by SIO when ALPHA HELIX used in local operations; but greater than average, when operated in distant areas.
   C. Dinsmore - a national facility which accommodates people coming and going from various universities should be expected to cost more to operate.
      1) New Navy ships and other new research ships have approximately 12 scientists and 12 crew. Since these numbers are similar to those of ALPHA HELIX, better comparisons of operating costs will be available in the future.
5. Johrde - ship costs
   A. NSF scientific grants requiring ship time now exceed the available NSF supported time.
   B. Owing to the limitation of NSF ship support funding, scientists proposing work for the ALPHA HELIX should approach the respective funding agencies for ship operational monies.
6. Prosser - Canadian support via Randall and Hochachka for 2 months of ALPHA HELIX work in the Amazon appears promising.
7. Bandurski - Many facilities such as mass spectrometers are operated as regional facilities, funded by NIH and other agencies. If these agencies would charge

all NSF funded scientists for use of the facilities it would open a Pandora's box.

8. EPA, NIH and USPHS should be approached regarding possible ship support for ALPHA HELIX programs.
9. A vital role of ALPHA HELIX committee is in investigating and promoting other ship support for ALPHA HELIX. Johrde favors such efforts.
10. Clark - NIH groups, e.g. could be approached concerning partial and co-operative funding.
11. Johrde - a contracting ship operation budget results in NSF projects getting all of NSF supported ship time.
12. Prosser - ALPHA HELIX Committee should review scientific work proposed for ALPHA HELIX, but not duplicate functions of NSF panels. By reviewing letters of intent and screening proposals we can assemble meaningful research programs and years.
13. Steinbach - Similarity between ALPHA HELIX Committee and MBL Space Committee. ALPHA HELIX Committee should look hard at the scientific qualifications of the people, whether the work proposed is quality science and whether it needs to be done. Thus ALPHA HELIX Committee is in an extremely important position. It has responsibility for overseeing the most effective use of the facility.
14. Prosser - Maxwell says some functions of the Committee should be: "In terms of the ship, evaluating the science, scientific merit and feasibility; then assigning to the Program Manager the task of reordering priorities in order to make the ship competitive for federal funding."
15. Toye - NSF now asking each proposal requiring ship support be accompanied by form no. 831.
16. Prosser - Best that ALPHA HELIX Committee follow procedure of letters of intent adopted last summer.
17. Bandurski -
    A. Committee may respond to writers of letters of intent, e.g. "Yes, you have a good proposal, we suggest you develop it and submit it to a funding agency. We will write a recommending letter which could accompany your proposal."
    B. A committee responsibility should be in encouraging lab scientists to go to sea. Introduce new organisms (other than yeasts and ecoli) to biology.
    C. The ALPHA HELIX coefficient should reflect the desirability of introducing new investigators and techniques to the ocean.
    D. After ALPHA HELIX Committee conducts its review, comments and ratings should be sent to the appropriate program directors of NSF.
18. Prosser - "What about scientific projects that are not NSF funded?"
19. Johrde -
    A. Recommendation of UNOLS that ALPHA HELIX be treated as other vessels in the Academic Research Fleet
    B. Justification of our budget is that NSF projects will be provided for first.
    C. Research program people look at our budget in hopes of their getting a larger slice of the pie.
    D. We would be happy to have NIH use the ALPHA HELIX, but they will have to pay for it. Such support would be directed to SIO for the support operations.

E. NSF, IDOE and other groups get together to decide which ships are to be supported for how much. They are putting up the money to send these ships to sea. If the Office of Oceanographic Facilities and Support were to hold out money for the ALPHA HELIX, then these agencies will object.

20. Prosser - What can we do about keeping the use of the ALPHA HELIX open to all groups.
21. Toye - We are in a position where all money is taken up by NSF funding.
22. Clark - What if in the ranking of science the top ones are not NSF projects?
23. Johrde - If the top 10 are from NIH, then we must turn to them for support.
24. Bandurski - Michigan State University might well ask what are we doing supporting R. Bandurski in Washington on oceanographic business? The accomplishment of science is the important consideration!
25. Johrde - No one is saying that we aren't going to let others get aboard.
26. Steinbach - The need for a national ship program should be brought up at the next Congressional hearing.
27. Prosser - In our letter to UNOLS we should express our real concern that good science may be excluded from ALPHA HELIX because of funding considerations. "Biological investigations are significantly unique that their continuance should be preserved."
28. Johrde - ALPHA HELIX Committee should make a pitch to program people (e.g. Stephan) at NIH. NSF has provided the ALPHA HELIX to the scientific community and kept it going. Now other groups must help it to continue.
29. Dinsmore -
    A. Difficult for ALPHA HELIX to do any major oceanographic work such as coring.
    B. People coming to UNOLS are discouraged from considering the ALPHA HELIX for general oceanographic work.
    C. If the federal government wants to serve the entire group, then a National Facility should be supported by general federal monies for use of all.
30. Romanoff - A perversion to use the ALPHA HELIX for any science, but that (bio-medical) which it best supported.
31. Shor -
    A. If equipped with appropriate winches, ALPHA HELIX can do many things.
    B. It would possibly be a misuse of the ship to have it carry out geophysical work.
    C. Useful to add days to the in transit running times to accommodate work which can be carried out.
    D. General work can be done as the ship is coming and going from site to site.
32. Prosser -
    A. ALPHA HELIX should not be scheduled for a geophysical cruise in preference to a biological one.
    B. ALPHA HELIX is so uniquely suited to the support of experimental biology that it should not be deployed for any lengthy geo-physical work.
33. NSF should make quick decisions regarding upcoming proposals for ALPHA HELIX; form 831 will suffice for the Office of Oceanographic Facilities and Support.
34. ALPHA HELIX Committee shall judge the ALPHA HELIX coefficient as well as other qualities of proposed research and pass on their recommendations to NSF panels.

35. Steinbach -
    A. When Congress established the NSF it did so to advance the science of America.
    B. Steinbach to write a preface to ALPHA HELIX Committee response to UNOLS and NSF regarding policy and procedures.
36. Toye - our office does not want to receive the letters of intent routinely going to ALPHA HELIX Committee members and to Dinsmore and Shor.
37. A supplement to an existing scientific grant of a prospective participant on ALPHA HELIX, a good way to cover the scientific support of his participation.
38. Shor - some people who requested time on ALPHA HELIX in 1974 are being accommodated onother SIO ships.
39. Johrde - There have been internal discussions at NSF regarding the way in which ALPHA HELIX administrative support functions at SIO will be funded. Requested that Garey submit a proposal for this support directly to the Foundation. The current grant period ends 30 June 1974.
40. Agreed that ALPHA HELIX Committee members should serve 3-year terms with 2 persons being rotated each year. Barber, Gilmartin and Provasoli considered for terminating their tours of service this year.

## Saturday, March 2

1. Johrde - An inter-agency, NSF-NIH, group is being formed. Cooperative efforts and sharing of scientific and operational costs for ALPHA HELIX can be brought before this group. Suggested that ALPHA HELIX Committee also make its own approach to NIH people regarding these considerations.
2. Elements to be incorporated in a definition of the ALPHA HELIX coefficient:
    A. Definite need for the ship in going where the organisms are and working with fresh material, e.g. animals at the ice edge.
    B. ALPHA HELIX contributions to biology.
    C. Introducing new organisms and disciplines to oceanography.
    D. Scholander's original concept was to have a team of top investigators supported by modern scientific technology, studying problems where they occur in nature.
        1) often best research sites are in regions of environmental extremes, where organisms are pushed to their functional limits.
3. Bandurski -
    A. Difficult to judge a letter of intent on same basis as a full proposal.
    B. Suggested the ALPHA HELIX Committee give indication and advice to the prospective scientist but not make numerical rating of the letter of intent.
4. Dinsmore will talk with Menzell concerning any future CEPAX request for ALPHA HELIX.
5. GOLDEN BEAR, a ship of the California Maritime Academy often sails off western US, possibility of their accommodating scientists.
6. Military C5A's as possible transporters of containerized scientific support units.
7. Attendees pleased with the number and quality of letters of intent for ALPHA HELIX coming from scientific community.
8. Puffer-fish diseases letter of intent - DOLPHIN work and utliization of fishes from commercial and sport fishing boats suggested.
9. Rahn proposal at NSF, good science, which should be done. Good program for

ALPHA HELIX but would need other programs in Antarctica to send ship there. Johrde will check with others in Foundation regarding the support of this work.

10. Johrde will also check status of Carr-McNab ALPHA HELIX proposal at NSF.
11. Shor and Steinbach will communicate regarding the status of an oceanographic station at Ambonia.
12. Case-Horridge proposal is good science with good people, one on which a whole program in Indo-Australia area could be based.
13. Burris-Newcomb - also a program of this type.
14. KNORR to be going to area requested by Macurda; general favor of the work he is proposing.
15. Dunson - good science and people. A general program might be developed on
16. marine toxins involving: Russell, Abbott, McClure, Haxo and Rappaport.
17. Markert - Scandalios - a good program given time for organizing around the unifying theme, good scientific personnel.
18. Redmond - work with the nautilus that needs to be done, top people.
19. Prosser - recent word from Randall-Hochachka group is that they are encouraged that the Canadian Research Council will support their proposed ALPHA HELIX research work in Amazon in amount of 150K.

Programs receiving recommendation of ALPHA HELIX Committee

| Tropical America - Amazon | Eastern Pacific | Indo-Australia |
|---|---|---|
| Neel | Barber | Case-Horridge |
| Schultes-Holmstedt | Hammel-Bartholemew | Dunson |
| Nicol-Muntz | Ting-Black | Scandalois-Markert |
| Randall-Hochachka | Scandalois-Markert | Burris-Newcomb |
| Ting-Black | Rahn | Redmond |
| Daly | | Ting-Black |
| Bellamy (join Nicol-Muntz) | | Macurda |
| Riggs (join Randall-Hochachka) | | |

20. Steinbach - suggested review of Daly work by another pharmacologist.
21. Barber program (Joint II) time dependent for 1976. Possibility of programs from other regions being mounted either in 1975 or 1977.
22. Prosser will promptly call Canadian group regarding their possible committment before July 74.
23. Garey suggested possibility of South American groups providing fuel as their contribution to ALPHA HELIX operations. Garey will contact William Sullivan, Office of the Coordinator of Ocean Affairs, Department of State, Washington, D.C. regarding such arrangements.
24. An announcement will be drafted and sent as a flyer from UNOLS to the general scientific community setting for the tentative ALPHA HELIX operations for 1975,1976 and 1977.
25. Prosser will notify all of those persons proposing work for the ALPHA HELIX in Tropical America-Amazon, who received the favorable review of the Committee. Garey will notify those of similar status who proposed work for the other 2 regions. Prosser will write, as well, to all other persons who submitted letters of intent.