WOODS HOLE OCEANOGRAPHIC INSTITUTION

NEWSLETTER

Vol. 7 | 16 November 1966 | No. 17

MEETINGS

Journal Club - 8 p.m. - LMS

November 21 - "Salp Swarms"
Peter Foxton, National Institute of Oceanography, England, and WHOI

November 28 - "Cyclonic Eddies Detached from the Gulf Stream"
F. C. Fuglister, WHOI

Geophysics Luncheon - 1230 - LO Conference Room

November 22 - Commentary and Film on "Sound Rays through Internal Wave Fields"
Dr. Eli Katz, WHOI

November 29 - To be announced

Peanut Butter Club - Noon - MBL Club

November 18 - "The Viola", a film taken aboard the whaling schooner, Viola, in 1916. This is the film that many missed when Bill Schevill showed it several weeks ago.

OCEANOGRAPHIC EDUCATION CENTER

The Oceanographic Education Center is to be temporarily located in the science classrooms of the Intermediate School. These rooms will serve a dual purpose of classroom and center. In other words, teaching of the 7th and 8th grade science classes will take place here and they will be available for visits by other people.

Teaching materials are being prepared cooperatively by teachers and scientists. To supplement this material they need charts, instruments, and materials that are used or produced by the scientists in the various fields of oceanography. They plan a room for geology, meteorology, physical, chemical and biological oceanography. It is their intention to have as many displays and audio visual aids including films as possible for each area. Would you kindly search all your present and past materials to see what you can add to this educational venture? Dean Bumpus would like to know of the availability of such material.

TERMINATION

Norton, Elizabeth, Secretary; N. Fofonoff

SHIP NEWS

ATLANTIS II	-	Working in Gulf Stream; V. Worthington as Chief Scientist.
CHAIN	-	Passed through Suez on November 14. Dr. E. Degens as Chief Scientist.
CRAWFORD	-	Tracking Swallow Floats in the Gulf Stream. Dr. A. Voorhis as Chief Scientist.
GOSNOLD	-	In the Gulf of Mexico proceeding toward Tampa, Fla. Dr. E. Uchupi as Chief Scientist.
C54Q	-	Departed November 15 for Bermuda for airborn infra red survey of Gulf Stream. C. Parker as Chief Scientist

COMINGS AND GOINGS

Dr. Iselin returned Friday from a week's visit to Paris where he attended a NATO conference on the oceans.

Dr. Earl Hays returned from Port Sudan where he departed the Chain as Chief Scientist.

Dr. Stanley Watson arrived in Woods Hole after a short stay in Switzerland followed by a cruise on the Chain from Beirut to Port Sudan. His assistant John Waterbury remained on board the Chain.

Bill Rainnie, Jim Mavor, and William Marquet attended the annual meeting of the Society of Naval Architects and Marine Engineers in New York last week. They presented a paper "Alvin, Submergence Research Vehicle" at the meeting.

Jim Mavor gave a talk on Tuesday night to students, faculty and visitors at SMIT about the lost continent Atlantis.

DMV-WORKSHOP

A conference sponsored by WHOI on "Research Use of Deep Manned Vehicles" will be held at the Institution on Monday, November 21 and Tuesday, November 22 to review accomplishments and discuss problems in the use of submersibles. Participation by invitation only.

EXCESS PROPERTY FOR SALE

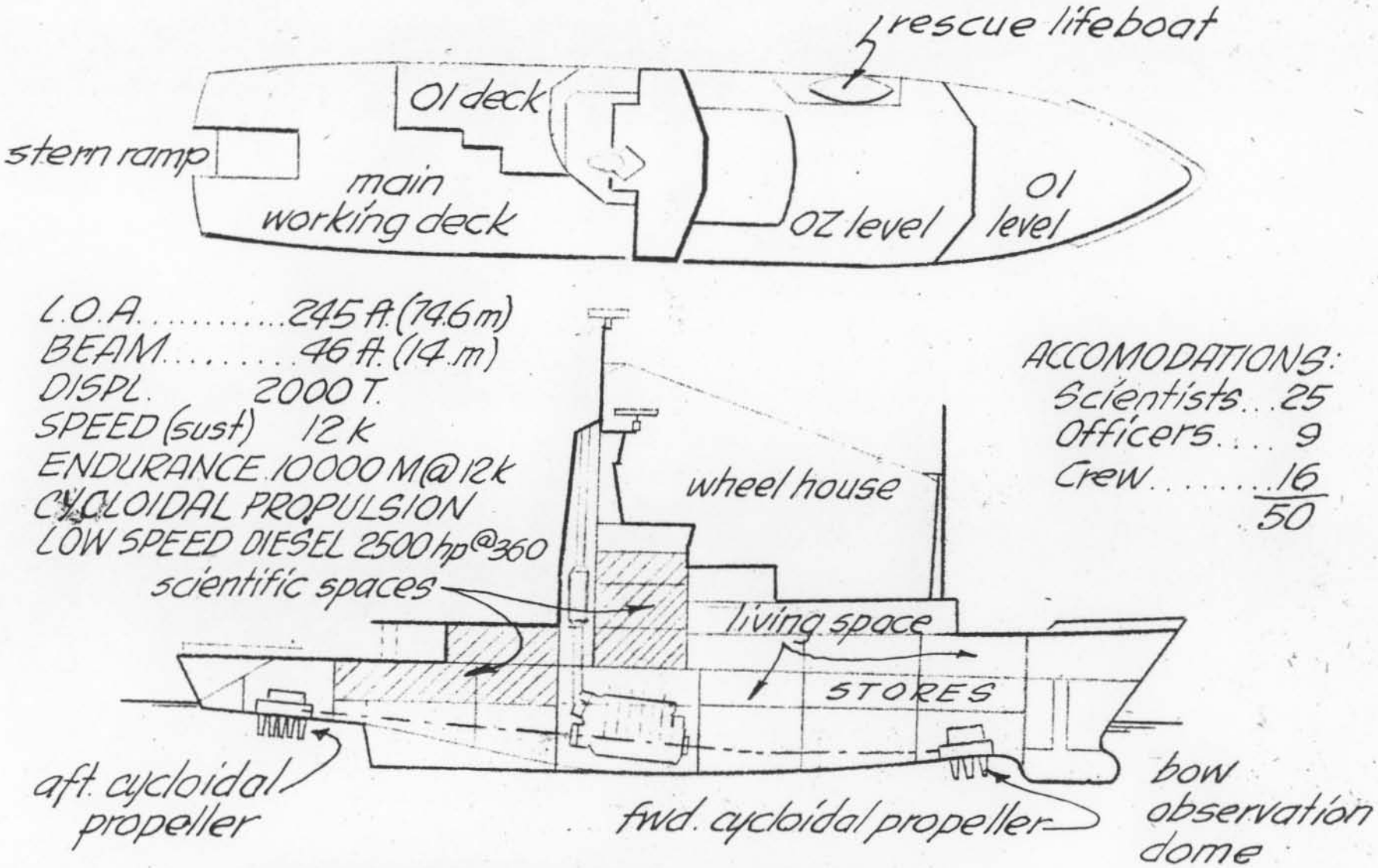
Generator, Onan with a Ford Engine. Needs repair. $150.00
Contact Property Office, Ext. 379/380.

LOST

One U.S. Divers Scuba Tank Pressure Gage with initials E.D. on back of the case. Please call Ed Denton LMS 2-56, Ext. 320.

NEW EMPLOYEES

Drever, Robert G., Research Associate; D. Webb
Hobson, Louis A., Postdoctoral Fellow; D. Menzel
Ramsey, William S. Jr., Inventory-Property Clerk; A. Wessling
Reynolds, Michael, Lab Assistant; Alvin Group
Scaglione, Ferdinand C., Jr., Lab Assistant; Alvin Group



OCEANOGRAPHIC RESEARCH
VESSEL
AGOR-14-CLASS
(SCB Project 710.66)

mersibles, deep drilling pilot projects, towing heavy loads. It is arranged to be versatile so that it can change from task to task with a minimum turnaround time, and it is intended to be simple, rugged and as maintenance-free as possible in arrangement and basic equipment.

If used with some imagination, the designed capabilities of this ship will allow a new approach to many of the standard research tasks, and hopefully they will also open new opportunities in research by allowing the development of some entirely new procedures.

Some of the major advances in the design are:

- The extraordinary maneuvering capability, provided by instantaneous control (thru quick-response joy sticks) of the amount and direction of approximately 1000 hp of thrust located at each end of the ship.
- A better combining of functions exemplified by locating the wheelhouse in a position to oversee all scientific operations aft as well as normal ship routine forward.
- Heavy duty capability, thru inherent strength and planned loading characteristics, and thru handling equipment such as special winches and cranes capable of controlled handling of heavy objects.
- Simplification of the basic ship arrangement, equipment and maintenance.

As an example, the power plant will be a single, low-speed, heavy-duty Diesel engine, with direct connected shafting fore and aft to the two propellers in lieu of complicated electric drive or other systems which take more personnel and care. The ship won't be acoustically quiet (we have one already) but should turn out to be simple, rugged and dependable with crew requirements below those for our existing large ships.

There are some disadvantages in the design; it must be borne in mind that this is intended to be a class ship and that Woods Hole is only one of about twelve laboratories which are intended to receive the same design in the next few years. Since we are one of the first recipients our input was extensive but there are inherent limitations in a class design which must be borne gracefully if one accepts the class ship at all. We did attempt to mitigate its limitations by developing a design concept whereby a basic ship and power plant would be produced for all users but where the scientific spaces and equipment, such as winches, handling equipment, and so forth, would be tailored for each operating laboratory. As a result, in the first two ships, the one for Scripps (AGOR-14) will be equipped with their latest ideas, and ours will be equipped more realistically for our needs. Scripps will have a towing winch to handle the FLIP and ours will have a special controlled handling system for ALVIN. Scripps will have a drill rig for pilot drilling thru the centerwell, but the ships will be basically similar enough that we can borrow their drilling equipment if anyone is interested.

The plans and specifications for the ship are available in the Marine Department for those who care to study them in detail.

EL AUSTRAL

R/V EL AUSTRAL departed Friday morning shortly after 9:00 a.m. The delay in departure was due to trouble in the generator which supplies power for the radio. A replacement was found in New York and was flown to Boston, picked up and installed by WHOI personnel Thursday night.

UNITED FUND

Dean Bumpus reports that almost $4000 has been received to date. Another 75 people who have given in the past have not yet done so and will receive a not from him. He would like to close out by Thanksgiving, so "come on and join the band-wagon"!

NEW RESEARCH PROGRAM

Dr. Paul M. Fye announced that the Institution has plans for a new research program in the study of the life cycle of Atlantic salmon.

The Institution has purchased a tract of land of about 150 acres at the mouth of the Matamek River on which will be sited a small field station. The tract includes a residence quarters, a barn which will provide laboratory space, several outbuildings, and a small airstrip. It is intended that these facilities will allow both American and Canadian graduate students to participate in the research studies.

NEW AGOR

The new AGOR - a 245 foot Oceanographic Research ship to be added to our fleet in 1969 thru ONR sponsorship. With the award of the contract for construction, the new design AGOR's have come closer to being a fact which must soon be included in the future planning of our seagoing program.

This is a completely new design and except for the designation "AGOR" the new ship will in no way resemble the AGOR's 9 & 10, the Thompson and Washington, which visited here in the summer of 1965.

The Navy's Bureau of Ships has put their best efforts into the new design -- an effort that was at times awesome in its extent and the number and talent of people involved. Our strongest input derived from experience with the ATLANTIS II and CHAIN, and much in the new design reflects improvements over those ships.

The basic idea behind the design is a heavy-duty but simplified work ship - one which is capable of undertaking the larger heavy-duty tasks which are beginning to plague existing fleets: laying and tending large buoy systems, handling small sub-