## RESEARCH VESSEL OPERATORS COUNCIL

1970 ANNUAL MEETING

### TRANSACTIONS

CHAIRMAN -

Jonathan Leiby Woods Hole Oceanographic Institution

SECRETARY -

Frank T. Bean University of Washington

# RESEARCH VESSEL OPERATORS' COUNCIL

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# ANNUAL MEETING

# Held at University of Washington, Seattle, Wash. 30 April - 1 May 1970

5	Members Attending	
	BEAN, Frank T.	University of Washington
	BOWHAY, J. Brooks	Hopkins Marine Station, Stanford, University
	EDWARDS, R. S.	Woods Hole Oceanographic Institution
	FLAGER, George W.	Ed Ball Marine Station, Florida State University
	GIBBONS, James	University of Miami
	GRIFFIN, S. S.	Lamont-Doherty Geological Observatory, Columbia University
	IRVING, P. F.	Alan Hancock Foundation, University of Southern California
	KATZ, Jay	University of Michigan
	KNOWLES, L. I.	Hawaii Institute of Geophysics, University of Hawaii
	LEIBY, Jon	Woods Hole Oceanographic Institution
	MRAZ, Don	Center for Great Lakes Studies, University of Wisconsin
	NEWTON, John G.	Duke University
	NEWTON, L.	Texas A & M Research Foundation
	REDMOND, R. G.	Oregon State University
	ROZENBERG, Don	University of Alaska
	TETZLOFF, Cliff	Great Lakes Research Division, University of Michigan
	TRAPANI, P. G.	Scripps Institution of Oceanography

# Agency Representatives

SILVERMAN, Max	Naval Ship System Command
WARSING, R. H.	Office of the Oceanographer of the Navy

# Visitor

JEFFERS, K. W.

Pacific Marine Center, ESSA

RESEARCH VESSEL OPERATORS' COUNCIL

Annual Meeting 1970 30 April - 1 May 1970 University of Washington

#### First Day

The 1970 annual meeting of the Research Vessel Operators' Council was held on the 30th of April and 1st of May, 1970, at the University of Washington, Seattle. The meeting was called to order by 0900 by Chairman Jon Leiby.

#### Minutes of 1969 Meeting

Frank Bean, Secretary, read a summary of the minutes of the 1969 meeting, in the absence of smooth minutes. The meeting was held at the U.S. Naval Academy, Annapolis, Maryland, hosted by Chesapeake Bay Institute, on 20 and 21 March 1969. Discussed items are as follows:

The Alan Hancock Foundation, University of Southern California, was admitted to membership.

The Chairman discussed the U.S. Coast Guard Public Hearing to be held 24 March 1969. Certain changes in the proposed rules were agreed upon and the Chairman was authorized to prepare a written statement to be submitted at the Hearing, suggesting these changes.

Max Silverman explained the change in the contracting office for Navy-owned, institution-operated research vessels, from NavShips to the Oceanographer of the Navy.

Dick Edwards, By-laws Committee Chairman, read a proposed change in the by-laws, which was moved, seconded and carried.

Sid Griffin informed members that certain King's Point graduates were being double licensed and that service on research vessels by graduates was acceptable in fulfillment of the three year service obligation.

Membership at large discussed the desirability of seeking international recognition of the special status of research vessels.

Problems and difficulties incident to entry of research vessels to foreign ports were discussed.

Pay scale information was distributed and discussed. A brief discussion of job descriptions was held and it was decided that job descriptions would be exchanged on an "as requested" basis.

Bob Warsing, Office of the Oceanographer of the Navy, distributed a "Research Vessel Characteristics/Capabilities Questionnaire" and requested it be completed and returned.

Pete Trapani discussed portable vans briefly and stated that they plans are available for interested parties.

Jon Leiby was elected Chairman for the succeeding year.

Meeting adjourned at 1230, 21 March 1969.

It was moved and seconded that the oral summary of the minutes of this meeting be approved. Motion carried.

#### Review of Past Year's Developments

Chairman reviewed developments and occurences since the 1969 meeting. Of importance was the fact that RVOC became involved in an Oceanographic Ship Utilization Task Force that was called by the National Council on Marine Resources, Engineering and Education. Jon Leiby was asked to represent the private laboratories as Chairman of RVOC. The Task Force is seeking some reliable measure of ship utilization and efficiency as research platforms, both in the Federal and private sector. One problem that the Task Force was to look at

was the possible under-utilization of ships by one agency while other agencies were seeking more ships. An attempt was made to arrive at some index of efficiency of ship use, but this was unsuccessful, due primarily to the wide variance in ship capability and size, and the varying unique needs of agencies and institutions.

The principal event insofar as ships for private institutions are concerned was delivery of KNORR to WHOI and MELVILLE to SIO.

#### Ship Deliveries

Max Silverman reviewed delivery of oceanographic research ships during the past year. Two were delivered to private laboratories, KNORR and MEL-VILLE. Navy oceanographic shipbuilding program is about half complete. The last three ships of the AGOR 3 class were completed, DeSTEIGUER, BARTLETT and LEE. This is approximately half of the current building program. The other half of the program consists of the CHAUVENET and HARKNESS, 400' ships being built in Scotland, the WILKES and WYMAN, being built by Defoe, and finally the HAYES, a catamaran research ship being built by Todd in Seattle. The first four will go to Oceanographic Office and the HAYES to the Naval Research Laboratory.

HAYES is being delivered by the building yard without any scientific payload, but because of the tremendous interest in catamaran design, it is planned to instrument the HAYES to determine hull stresses, before it is put to work for the scientists. Navy is building two other catamarans, submarine rescue ships for the Fleet, which are being built in Seattle.

#### New Tonnage Rules

The discussion of proposed new tonnage rules was opened by Jim Gibbons and Jon Leiby. New rules will affect smaller research ships as many

will admeasure to greater tonnage and thus come under Coast Guard regulations not presently applicable. Max Silverman reviewed the new rules. There are really three types of new regulations, two of which are already in effect. First is justification of water ballast, which became effective 2 December 1969. Second concerned deep floors and went into effect 9 December 1969. It very carefully defines the way in which deep floors are designed and constructed. Generally the new rules preclude the design and construction of deep floors just to meet certain tonnage rules. The third is the International Tonnage Treaty, which totally changes the method of determining gross and net tonnage. It will not go into effect until either 25% of the maritime nations of the world sign the treaty or nations representing 65% of the total world tonnage ratify. The latter could be met by half a dozen nations ratifying. Under the proposed rules, determination of tonnage is made so simple that any shipknowledgeable person canwork it out. It is all reduced to some simple formulae and a series of tables. The rules will eliminate "rule beaters". In general ships with small tonnage now will have increased tonnage under the new rules and some of the larger ships will have their tonnage reduced, but the net effect on total tonnage of any given nation will be insignificant. Of concern to us, because many of us are operating ships a little under 300 GT or 200 GT, is that these tonnages will probably be increased, e.g., a ship of 300 GT now will probably admeasure 450 or 500 GT under the new rules, thus bringing such ships under a different set of Coast Guard regulations, etc.

The United States will undoubtedly ratify the treaty. The treaty will become effective 24 months after the requisite number of countries have ratified it. Phil Statt, chief admeasurer of the Coast Guard, feels that this will take place some time within the next 18 months. Two years thereafter, every new ship must meet the new rules. Every existing ship has to meet the new rules

12 years after ratification. During the intervening period between the two years and twelve years after the treaty comes into force, any owner has the option of putting his tonnage under either the old or new rules. The treaty also states that no nation is obligated to change any internal law or regulation which is based on tonnage.

None of the small vessel operators (tugs, fishing vessels, supply and exploration boats) were represented at the treaty convention in London last year, and they were totally forgotten. No one objected until the SNAME meeting held three weeks ago in Washington at which time a paper was read that summarized the new tonnage rules and their effect. Whether the Coast Guard will apply present laws and regulations to existing boats on the basis of the new tonnage rules, or change the applicability of existing law and regulation so that boats not now under inspection will not come under inspection under the new tonnages remains to be seen. It may require some strenuous objection on the part of operators of small vessels.

Another aspect of the new tonnage rules is the collection of dues, fees and tolls. Port Authorities were represented in the delegation. They may have to figure new schemes for collecting dues, fees and tolls to keep their income at present levels, because, in general, the fee and toll paying ships are going to decrease in tonnage.

The Coast Guard has the latitude to make exceptions in the case of research ships under P.L. 89-99; perhaps a resolution on the part of RVOC might help.

Pete Trapani and Dick Edwards spoke in favor of such a resolution. Dick Edwards felt that further investigation would be in order and moved that a committee be established to study the effects of the new tonnage rules and to consider the following points: (1) support clarification and simplification

of existing tonnage rules, (2) opposition to increase in tonnage of existing vessels, (3) measurement under the tonnage rules is not a suitable indication of the "size" and "carrying capacity" of research vessels and (4) discuss use of displacement tonnage and, if considered suitable, suggest application to research vessels.

This motion was seconded and carried.

#### U.S. Coast Guard Regulations - Personnel

The Chairman discussed the Public Hearing held last year. Coast Guard proposed certain changes in personnel and licensing requirements and regulations. RVOC submitted their comments at the Hearing. A representative of the maritime unions spoke at the Hearing and asked for further time to study the proposed changes. The proposed changes were consequently held in abeyance. We now have a letter from Captain Read stating that the Coast Guard is ready to promulgate the changes, but are awaiting our agreement. The proposed changes are basically what we had requested, we will be exempt from certain inapplicable requirements and others may be waived. Apparently, the signing of Articles is left to the operator, since our seamen are permanent employees and are protected by State Civil Service laws. If a Union agreement requires the signing of Articles, or if the operator prefers, Articles may be signed. However, for those of us who do not sign Articles, a reporting procedure is required, providing, generally, for the submission of CG 735(T), Master's Report of Seamen Shipped or Discharged, to be submitted annually or at the conclusion of extended cruises, and, of course the issuance of Certificates of Discharge to seamen. The Coast Guard feels that they must have a record of the service of seamen.

Question by the Chairman: Shall we inform them that we agree with the proposed changes as they stand, subject to clarification? Agreed.

## H.R. 209 - Proposed Modification to Certain Laws Relating to Seamen

There has been considerable correspondence regarding H.R. 209, several laboratory directors have written their respective senators and representatives expressing opposition to certain provisions of the bill, and pointing out their inapplicability to the employment of seamen on research vessels. Coast Guard claims that this bill is intended merely to clarify certain provisions of existing laws pertaining to seamen, but it appears to make many laws applicable to seamen on undocumented vessels that were heretofore inapplicable procedures applicable to our vessels.

Frank Bean commented that according to his interpretation of the bill, the University of Washington would be required to sign articles every time they wanted to send a 65-footer to Canada, if only for a one or two day trip. THOMPSON would be required to sign articles for nearly every separate voyage, even those just to Alaska or Hawaii, since such voyages would be to non-contiguous states.

In a letter to Congressman Keith, the Acting Commandant stated that HR 209 will make clear the fact that seamen serving on undocumented vessels over 100 GT would have to hold seamen's documents, but went on to say that it would not affect existing laws, such as P.L. 89-99, which permit the Coast Guard to exempt oceanographic ships from rules which are not necessary. Apparently they want to maintain some control over the seamen even if we are exempted from signing Articles. And this may be related to manning.

Max Silverman enumerated various laws that pertain to shipment, discharge and manning, including:

33	USC	1091	Rule	s of	the	Road.	Requires	proper	lookout.	Numer-
			ous	cour	t in	terprei	ations.			

46 USC 222 Requires a complement of licensed officers, crew and lifeboatmen.

46	USC 223	Stipulates the number of officers. Sets forth the
		tonnage cut-offs and contains the 24-hour law.
46	USC 672A	Vessels over 100 tons, 75% of the crew speak and
		understand English and 65% of the seamen must be
		able seamen.
46	USC 672E	Members of the engine department must possess
(*)		certificates of qualification.
46	USC 673	Vessels over 100 tons. Officers and crew in three
		watches. Eight-hour law.
46	USC 221	Officers must be U.S. citizens.
46	USC 672A	75% of the crew must be U.S. citizens.
46	USC 224	The enabling act - Coast Guard licenses the officers.
46	USC 224A	The officers' competency act which is the treaty, and
		contains the exemption under 200 tons.
46	USC 367	The 300-ton law on inspection of motor vessels. The
		basic inspection law.

The one thing about all these laws, and which RVOC has been talking about these many years, is that only one, 33 USC 1091, Rules of the Road, uses the term "all vessels". All the others use various terms such as "vessels of the United States", "merchant vessels", "vessels engaged in trade" and similar terms.

#### Foreign Port Entry

At this point there was a general discussion by various members regarding entry of research vessels to foreign ports. State Department pamphlet on foreign clearances requires submission of request to the State Department at least 60 days prior to commencement of a cruise or at least that long prior to port entry or start of res<sup>2</sup> arch in foreign waters. This period of time has prove

insufficient. OSU and UofW have experienced getting clearance as late as the day before the ship was due to start work. There may be an international committee to clear research requests and to evaluate research so that smaller nations without research capability are reassured that their waters and shelves will not be exploited. This will add to time required to obtain clearance. Working through the Consulate proved helpful to OSU and Stanford. Results of the research should be furnished to the country concerned. UofW provides preliminary report upon arrival at the first port, with the complete data submitted later on request through the State Department. Many cases require accommodations for foreign representatives, Ecaudor, for example. The UofW had no trouble on their Caribbean-Mediterranean cruise, everything went very well, but they had foreign participants for work in countries involved in nearly all cases and a good institutional contact in ports visited. The same applied to research in Japanese waters and visits to Japanese ports.

# Operation of Research Ships as "Public Vessels"

Dick Edwards spoke on his letter to all RVOC members pertaining to WHOI efforts to have KNORR operated as a public vessel. He reviewed the advantages and disadvantages of operating as a public vessel, similar to CHAIN, and under Coast Guard certificate as KNORR contract requires.

A general discussion followed, the ramifications of "public vessel" vs. "private vessel", i.e., under Coast Guard certification, viewed differently by different people, by different offices and by different agencies. The part stems from the implications of the GAO reports: people in Washington are becoming concerned and evidently want some agency to inspect vessels to insure that they meet safety requirements, that the taxpayers' money is being wisely spent and that vessels remain fully capable of meeting the varying requirements of the scientific community. The change of contracting office from NavShips to the Oceanographer bears on the problem: NavShips Field Offices, the Supervisors of Shipbuilding and Industrial Managers, formerly had the responsibility of con-

ducting inspection of our research vessels. Lately certain of these offices have become overburdened with work and have not the manpower nor funds to continue the task. Operation of Navy-owned - institution-operated ships as public vessels is not presently viewed kindly. Placing all government-owned or government-funded vessels, not just Navy-owned vessels, under inspection is also being considered. NSF vessels primarily are involved, since title to several are presently vested in the institutions.

Germane to this question, but not quantifiable, is the responsiveness of ships to the requirements of scientists. Comparison of average operating day costs is not really valid due to scheduling and operating differences.

Feeling in agencies is that all vessels, not just those under Coast Guard certification, should be inspected, and if some inspection plan could be arrived at, perhaps the "public vessel" concept would be viewed more receptively, or at least reconsidered. Inspection teams could consist of representatives from funding agencies, NavOcean and NavShips, augmented by personnel from the institutions' own operating staffs, namely, the Marine Superintendent, Port Captain and Port Engineer. This might have to be an "inspection system in being", concurrent with present Coast Guard and ABS inspection, which would add yet another level of inspection. However it would bring under inspection all vessels not now inspected, and this is evidently the present thinking at the funding agency level. They need some idea of the use to which operating funds are being put. The cost of operating research ships over a given period far outweighs the initial cost of building the ships. Agencies are becoming concerned over the uninspected vessels and inspection of this type will come. RVOC ought to lead the way. Inspection standards could be set by RVOC, they, being the closest to the problems, are knowledgeable and would bring a considerable background experience to bear on the task, are better qualified to offer advice

and assistance, offer improvements and have better ways of resolving problems than any outside group of inspectors.

Some members felt that Coast Guard licensing requirements had resulted in improvement in quality of operating personnel and performance of ships. Crew members responded to examination requirements and took a measure of pride in possessing required documents and licenses, which was reflected in their work. Some highly qualified personnel had trouble with examinations, but eventually pulled through. Admittedly, meeting Coast Guard requirements did add costs, some of them unforeseen, but on the whole, meeting Coast Guard inspection and licensing requirements had a positive, overall benefit. Meeting Coast Guard manning and licensing requirements also affects insurance costs, and the potential liability of the operator in case of casualty or accident.

Possessing a Coast Guard license or document does not, per se, guarantee that the possessor is the highly qualified, experienced and well-motivated person we need for our research ships. In the final analysis, those people not meeting our requirements must be weeded out, but this is our task, a management function. A Coast Guard license or document does, however, at least show us that the holder does possess certain minimum qualifications and a minimum background of experience. To a very great degree, the reliability, performance and operational cost of our ships rests with the operating crew, not the administrative staffs ashore. Qualification improvement of crew personnel should lower . operating costs.

The possibility of operating sister ships under different contractual provisions, one as a "public vessel" and the other under Coast Guard inspection and manning requirements is remote. A compelling case would have to be made. ARSs are a case in point: CHAIN and ARGO were operated as "public vessels", but GEAR was operated by Merrit, Chapman and Scott under contract with the

Supervisor of Salvage as a Coast Guard-inspected vessel.

Proposed new tonnage rules will have a bearing on this question, since many research vessels now under 300 tons will go over 300 tons under the new rules, and thus, by operation of treaty, come under Coast Guard inspection. Increased costs will be incurred in order to meet Coast Guard requirements.

At this point the meeting was recessed until 0900, 1 May 1970. RVOC Inspection of Vessels

Discussion of RVOC inspection of vessels operated by institutions continued at 0900 1 May 1970.

Concensus: That proposed inspection, by representatives of interested agencies and RVOC members, of all research vessels not now under Coast Guard and ABS inspection, and an augmenting inspection of research vessels presently under Coast Guard and ABS inspection, has merit and should be supported by RVOC, such inspection to consider present and future capabilities of ships to carry out their scientific mission. RVOC participation should be considered by COLD who should, if they agree, relay their position to ONR and NSF.

A motion was made that the Chairman write a letter to the Council of Laboratory Directors stating our position in support of surveys of institution-operated research vessels, that such surveys should be made a part of the agencies' facilities, and that if RVOC assistance is desired, such assistance will be given.

This motion was seconded and carried.

Dick Edwards spoke to the matter of RVOC support of WHOI proposal that KNORR be operated as a public vessel, and following a brief discussion by members, moved that RVOC support WHOI in their proposal that KNORR be operated as a public vessel notwithstanding that a sister ship be not so operated, and that valuable experience and cost data could be obtained from such operation vis a vis operation of a sister under Coast Guard certification.

Motion was seconded and carried.

#### Sea Grant Funding of Vessel Operations

Initial interpretation of the Sea Grant Act was that Sea Grant could not be used to support vessel operations, but later study showed that such funds could be used to defray cost of crew salaries, food and fuel, but not for vessel acquisition, repairs or alterations. Institutions are providing funding for Sea Grant vessel use under NSF block funding.

#### Marine Technicians

Letter regarding a suggested informal organization of marine technicians was discussed. It was agreed that this was a matter without the purview of RVOC and in view of that fact and further of the differing definitions, qualifications, employment methods and budget support of marine technicians among the member institutions, our action would be limited to providing a list of RVOC membership to the writer.

#### New Member

Don Mraz, Center for Great Lakes Studies, University of Wisconsin, announced that his institution would submit an application for membership. THOMPSON Visit

Frank Bean announced that R/V THOMAS G. THOMPSON would shortly berth at the Oceanography Pier, completing a six-month Caribbean-Mediterranean cruise, and invited the members to visit the ship as soon as she was cleared. Adjournment

Motion was made, seconded and carried that the 1970 RVOC annual meeting be adjourned, so done at 1125 1 May 1970.

