LIMITED OFFICIAL USE

July 10, 1968

OFFICIAL - INFORMAL

William H. Mills, Esq.
Scientific Attache
American Embassy
Mexico City, Mexico

Dear Bill:

My apologies for this rather belated sequel to our telephone conversation of last month concerning the research essel Anton Bruun. Anyway, perhaps the delay has allowed you time to make some informal inquiries into the Mexican oceanographic community.

NSF plans to initiate proceedings to turn the Bruun over to GSA for surplus disposal o/a August 1, 1968, providing there is no expressed desire on the part of any foreign government by that time to take her. As you may know, there is a "last ditch" effort being made by a small group of private individuals, Americans and Indians, to persuade the Indian Government to reverse its recent decision and take the Bruun. The USG would be willing to consider an Indian reversal up to the turn over date since there had already been a fair amount of "groundwork" done before the turn down. Similarly, NSF and the Department would be receptive during the same period to any "requests" for the Bruun from other countries. Also, I understand that, because GSA disposal sometimes goes slowly, it might be possible to "reclaim" the ship intact for same indeterminate period after turnover.

The ground rules

LIMITED OFFICIAL USE

The ground rules are roughly these:

- The USG will grant title to the ship only to the Government of the donee country.
- 2) The USG will not grant ship under any conditions which would require, or make it seem likely, that NSF continue to provide funds for her operation. NSF's grants for research programs aboard her would not, however, be prohibited.
- 3) The donee country would be asked to inspect the ship before title transfer, preferably before or during overhaul and repair.
- 4) NSF would provide, by separate agreement, for crew training, sea trial, USCG safety inspection and Lloyd's of London insurability certification.
- 5) Available spare parts and scientific equipment would go with the ship.

Attached is some data on the Bruun and a draft of proposed transfer agreement with India (which would apply in most particulars to other countries as well). I should also point out that the Bruun needs rather extensive repair and overhaul and since costs have risen since the insurance settlement for the casualty, there may not be sufficient funds available to do a "complete" job. We wouldn't know until bids were asked for. Of course, the amount and type of overhaul depends on the type of utilization intended and "trade-offs" are possible. In any event, this is the story in brief. If there is any Mexican interest, or questions, let me know. Formal initiatives, if any, should come, spontaneously, from the Mexicans. We really don't want to be accused of palming off the old Anton Bruun.

With best regards,

CC -

NSF - Mr. Hunt

MSC - Mr. Schweitzer

NSC - Mr. Johnson

ARA/MEX - Mr. Boles

SCI - Dr. Joyce

Dr. Rouleau

Mr. Dooling

SCI: AERichmond: dg 7/10/68

Sincerely,

Addison E. Richmond Science Officer International Scientific and Technological Affairs P.S. -

In view of the recent history of the ship, including the casualty and Indian turndown, and also because everybody here is naturally anxious to bring this saga to a close, I feel that acquisition of the ship for Mexico should be seriously pursued only if there is a genuine interest on both the governmental and private levels. I don't think we should appear to push the cause.

491 Charles Dithon

July 16, 1968

#### DIARY NOTE

Subject: Meeting with Dr. Panikkar, Head of India's National Oceanographic Institute

The following participated in discussions with Dr. Panikkar Head of India's National Oceanographic Institute (NOI) on Monday, July 15, 1968:

Miss Dolores Gregory ISA
Miss Mary Johrde DES
Mr. Addison Richmond, Jr. State Department
Mr. Daniel Hunt, Jr. O/D

The following subjects were discussed in general terms and were concerned principally with background information:

- 1. Dr. Panikkar's visit to U.S. oceanographic activities, particularly Scripps Institute of Oceanography
- 2. Status of ANTON BRUUN; reasons for India's refusal of ship; pros and cons of recent proposal from Florida State University in conjunction with University of Madras for India's educational/training/scientific oceanographic program involving consortium of universities and hopefully funded through P.L. 480.
- 3. Possibility of any ship, oceanographic or suitable for conversion, being available in U.S. for loan or gift to India so India could inaugurate a bona fide oceanographic program at sea.

The following information and conclusions resulted from the above subjects:

1. Scripps mentioned to Dr. Panikkar that their R/V HORIZON might soon be available for sale and that HORIZON was an active and equipped R/V ready to go on the line. Scripps owns this ship and desires to receive cash. We understand that Italy has been interested in this R/V and has inspected her. We also understand Scripps wants about \$500,000 for the ship.

- 2. Dr. Panikkar stated that it was unlikely that the Government of India would reverse their previous refusal of ANTON BRUUN. Dr. Panikkar stated that he would like to inspect ANTON BRUUN while he was in New York. Arrangements were made to have him escorted through the ship on Tuesday, July 16, by a representative of Alpine Geophysical Associates.
- 3. Dr. Panikkar distributed a set of general oceanographic research ship characteristics designed to represent the typical general purpose R/V desired by India. Mr. Addison Richmond of the State Department stated that he knew of no suitable ship being available but that he would advise India through the embassy if any ship became available and under what conditions.

Dr. Panikkar stated that India had long range plans to procure a suitable R/V through foreign construction, but that there was an urgent need for an interim ship during the next four or five years.

Daniel Hunt, Jr.

cc: Dr. Haworth

Dr. Wilson

Dr. Roe

Miss Gregory

Miss Johrde

Dr. Carlson

Mr. Richmond (State)

Mr. Charles Johnson (White House Staff)

July 11, 1968

NOTE FOR MR. HAMILTON

Ed --

Attached is a summary report of the current status of the Anton Bruun. It now looks as though the transfer to India is a dead issue, but the subject might come up in your talks with the Indians.

5

Charles E. Johnson

OPTIONAL FORM ND. 10 MAY 1962 EDITION GBA FPMR (41 CFR) 101-11.0

UNITED STATES GOVERNMENT

### Memorandum

ro : Director

DATE: July 9, 1968

FROM :

Special Assistant to the Director

SUBJECT:

ANTON BRUUN; review of status

#### Background

The Government of India refused the gift of ANTON BRUUN from the United States by a letter from Dr. A. Lahiri, the Acting Director General of the Council of Scientific and Industrial Research (CSIR), addressed to Dr. Fuller, the U.S. Scientific Attache in India. This letter was quoted in Amembassy New Delhi airgram A-1073, dated May 9, 1968.

Your memo to W. W. Rostow, White House Staff, dated June 11, 1968, stated that plans were being made to transfer ANTON BRUUN to GSA for disposal. Prior to taking this action, the State Department and the Marine Science Council Staff were formally asked if they were aware of any further appropriate foreign utilization for ANTON BRUUN. The Marine Science Council Staff has reported no known use for ANTON BRUUN and the State Department is reviewing the situation and will shortly concur with the action to transfer the ship to GSA for disposal.

After the Government of India's refusal of ANTON BRUUN, Dr. Menzies and Dr. George of the Oceanographic Department of Florida State University, former shipmates with ANTON'BRUUN during scientific cruises, visited India in the capacity of private citizens in an attempt to change CSIR's decision to that of acceptance of the R/V ANTON BRUUN to be the oceanographic research vessel of the recently established Indian National Institute for Oceanography (NIO). Florida State University is planning to establish a joint effort with India involving cooperative scientific oceanographic research in the Indian Ocean and ANTON BRUUN would be a key facility. While in India, Drs. Menzies and George conferred with the following representatives of the Indian Government: Dr. Sen, Minister of Education; Dr. Atma Ram, Head of CSIR; Dr. Panikkar, Director of NIO; Professor Kothari, Head of the University Grants Commission (UGC);



a: me Hamilton

and officials of the University of Madras. Organizationally, the CSIR and the UGC are parallel departments directly under the Minister of Education. NIO is supported by the CSIR and the universities are supported by the UGC.

It was reported that interest was expressed by the UGC and the University of Madras in obtaining ANTON BRUUN for a development program in oceanographic training and research. This program would be a national program and participated in by other universities of India. The understanding of this program, which is to include ANTON BRUUN, is outlined in the attached copy of a letter from H. Odell Waldby, Vice President of FSU, to Dr. A. L. Mudaliar, Vice Chancellor of the University of Madras, dated June 25, 1968. In accordance with this document, the suggested joint program provides for FSU obtaining title to ANTON BRUUN.

#### Summary.

To discuss the proposed plan, as presented in the attached document, and to determine the status of ANTON BRUUN in reference to the impending transfer of the ship to GSA for disposal, representatives of Florida State University requested a meeting with representatives of the State Department and the Foundation. On Monday, July 1 (exactly one year after ANTON BRUUN's ill-fated casualty) the following met in the Foundation:

- Dr. Carl H. Oppenheimer, Chairman, Department of Oceanography, FSU
- Dr. Robert A. Menzies, Director, FSU-India Oceanography Center
- Dr. Robert Y. George, Adjunct Professor of Oceanography, FSU
- Mr. Addison E. Richmond, Jr., State Department
- Mr. Joseph Schurman, OGC, NSF
- Mr. Daniel Hunt, Jr., Special Assistant to the Director, NSF

The representatives from Florida State University explained in detail the proposed plan which had been worked out with

representatives of the University of Madras and UGC in India. The essence of the plan was that

- (1) FSU would take title from NSF to the rehabilitated ANTON BRUUN and keep title
  for the first five years of the proposed
  joint program after which time FSU would
  transfer title of the ship to Madras
  University. During this period, ANTON
  BRUUN would be operated and maintained
  by Indian nationals and the program supported by counterpart funds under Public
  Law 480.
- (2) A formal proposal of the program would be made to Madras University by FSU and Madras University would forward this program to UGC for approval. UGC would seek AID financing from the United States and use rupees to conduct the program as an education-institutional development project.

The representatives of Florida State University were advised that the Foundation intends to transfer ANTON BRUUN to GSA for disposal in her "as is" condition in the near future. It was stated that the United States Government would still consider transfer of the ship to India if the following minimum and essential conditions are met before the ship is transferred to GSA (estimated to be August 1, 1968):

- (1) A formal request is received from the Government of India to the Government of the United States for reconsideration of the gift of ANTON BRUUN to India for the newly proposed educational institutional development marine science program.
- (2) The Government of India takes title to ANTON BRUUN as originally envisioned.
- (3) The Government of India agrees to the terms of the original agreement the Foundation and the State Department had drafted in 1967 prior to the casualty to ANTON BRUUN.

(4) There is no further obligation on the part of the Foundation to support in any way the operation or maintenance of ANTON BRUUN after formal transfer.

Representatives of the Florida State University were also told that even should the U.S. Government reconsider transferring ANTON BRUUN tothe Government of India after an official request countermanding the previous refusal, further analysis would have to be made to ascertain the total cost required to recondition ANTON BRUUN and also to satisfy U.S. Coast Guard and Lloyds of London requirements for reliability and safety. In addition, it was also stated that prior to any action on the U.S. Government's part, notification would have to be received that AID had approved and committed sufficient rupees for the proposed program for at least a five-year period.

In view of the foregoing, the representatives from Florida State stated that they understood the U.S. Government's position and the requirements for a government to government transfer. Florida State was still interested in pursuing the joint oceanographic effort with India in order to develop a viable marine science program in the Indian Ocean and at the same time provide training and growth to the Indian university system. Florida State stated that Dr. George would immediately write to Professor Kothari explaining in detail the results of this meeting and the requirements presented, and Dr. Oppenheimer would write to the Vice Chancellor of the University of Madras as a follow up to Florida State's Vice President Waldby's letter of June 25, 1968 (attached). Also, Mr. Richmond would communicate informally with Dr. Fuller, State Department's Science Attache in India.

#### Addendum

Attached for information are the recently received copies of the above-mentioned letters written by representatives of Florida State to representatives in India. Dr. George's letter to Professor Kothari is somewhat optimistic since he indicates that transfer is expected to be requested prior to approval of a program or commitment of AID funds for the proposed operation. Also, for reference, we have on file a classified document written by Mr. Richmond which is a detailed summary of our discussions held at the Foundation on July 1 and detailed background on the case history of representatives of Florida State visiting India.

#### Action by the Foundation

We believe that the transfer of ANTON BRUUN to India will soon become a dead issue. The effort and perseverance of the representatives of Florida State have been commendable in their pursuit of a vehicle to promote international marine science in the Indian Ocean with the full participation of India. Plans are now being made to circulate the list of capital scientific equipment associated with ANTON BRUUN to the oceanographic institutions which we support. We intend to award useful equipment on a justified basis to those with specific needs. At the same time, Mr. Howard Tihila is investigating the mechanics of transferring ANTON BRUUN to GSA for disposal.

Daniel Hunt, Jr.

#### Attachments

cc: Dr. Wilson w/o attachment
Mr. Sheppard " "
Mr. Tihila " "

Dr. Roe

Miss Gregory w/attachment

Mr. Hoff w/o attachment

Mr. Schurman w/attachment Mr. Phillips w/o attachment

Dr. Carlson w/attachment

Mr. Bolton w/attachment

Mr. Richmond, State Department, w/o attachment

Mr. Charles Johnson, White House Staff, w/o attachment

NATIONAL SCIENCE FOUNDATION
OFFICE OF THE DIRECTOR

Chuch behave
Please bandle
Together with EW

June 11, 1968

Pla

MEMORANDUM for W. W. Rostow.

Since the Government of India has finally decided not to accept ANTON BRUUN, I am making plans to transfer the ship to the General Services Administration for disposal.

Prior to taking this action I am asking Dean Rusk and Ed Wenk if they are aware of any appropriate foreign utilization for this oceanographic research ship.

You may wish to advise the President of this action.

SIGNED

Leland J. Haworth Director

O/D:D Hunt:bss June 10, 1968 June 11, 1968

XLRO

111 9

Dr. Edward Wenk, Jr.
Executive Secretary
National Council on Marine Resources
and Engineering Development
Executive Office of the President
Washington, D.C. 20500

[XI:BO]

Dear Ed:

Since the Government of India has finally decided not to accept ANTON EMUUN, I am making plans to transfer the ship to the General Services Administration for disposal. By memorandum I have advised Walt Rostow of this intended action and have stated that I would ask you and Dean Rusk, prior to taking this action, if you were awars of any appropriate foreign utilization for this oceanographic research ship.

We have had several informal inquiries with regard to the acquisition of ARTON ERUUN but we have received no formal proposals. No proposal that would involve in any way expenditure of Foundation funds for operation and maintenance of this ship would be acceptable. Indeed, we feel that the expenditure of funds of any federal agency would be inadvisable.

I am hoping for an early response so that the saga, of ANTON BRUUN can be brought to a conclusion.

Sincerely yours,

Leland FD Faworth Director

cc: Mr. Hoff Mr. Ohlke Mr. Bolton

O/D:D Hunt:bss June 11, 1968

June 11, 1968

Honorable Dean Rusk Secretary of State Washington, D.C.

Dear Dean:

Since the Government of India has finally decided not to accept ANTON BRUUN, I am making plans to transfer the ship to the General Services Administration for disposal. By memorandum I have advised Walt Rostow of this intended action and have stated that prior to taking this action, I would ask you and Ed Work if you knew of any appropriate foreign utilization for this occanographic research ship.

We have had several informal inquiries, as I am sure your staff has had, regarding the acquisition of the ship, but we have received no firm proposals. No proposal that would involve future support for the maintenance and operation of the ship with Foundation funds would be acceptable.

During the course of this saga concerning ANTON ERUUN, the cooperation and assistance rendered by your staff have been splendid. I would particularly like to commend Mr. Addison Richmond, Jr. of your staff for his fine service.

Sincerely yours,

S!GNED Loland J. Enworth Director

cc: Mr. Hoff Mr. Ohlke Mr. Bolton

O/D: D Hunt:bss June 11, 1968

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	Drs. George and Menzies and Dr. Carl Oppenheimer, Chairman,
MSP HEWMSE MSC	Department of Oceanography, Florida State University (FSU),
7 4 7 6 1	met with NSF and Department representatives July 1, 1968 to
SUGGESTED DISTRIBUTION	discuss AB and proposed FSU/Madras U (MU) cooperative
BOWDLER	oceanographic program. FYI: A memorandum of the meeting
BUDGET	is attached. END FYI.
I _FRIED	
_GIMSBURGH	FSU representatives were advised: (1) NSF intends to turn
_HAMILTON	AB over to GSA for surplus disposal o/a August 1, 1968.
- June of	USG will, however, entertain any reconsideration by GOI of
HORDEN	the rejection of AB, if made prior to turn over date, and
POST ROUTING	(2) FSU/MU proposal unacceptable to NSF in present form
TO: Action Attfo. Initials	because of provision that FSU take title AB from NSF.
AMB/ ROCHE	NSF is unable to give ship directly to FSU and is willing to
DCM TAYIOR	NSF is unable to give ship directly to FSU and is willing to
POL	give her to India on original basis only, i.e. as a gift to
ECON	GOI itself. Dr. George is writing Dr. Kothari stating USG
	position enclosing a copy of the draft transfer agreement
- CONS	prepared by NSF before casualty, and asking if UGC would be
ADM	willing take title to AB and utilize her according FSU/MU
AID	proposal.
USIS	
	Also attached FYI is a copy of the draft agreement given to
	Dr. George. Any GOI officials who might have an interest in
	reopening AB transfer should be advised that first step must
	be formal notification of USG by GOI that transfer of AB has
FILE	been reconsidered. USG will also require committment on part of
Action Taken;	GOI to take title to AB if she is overhauled and repaired. EMB
	may, at its discretion, make draft agreement available to appropriate
-	GOI officials to show proposed conditions of transfer.
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#### DEPARTMENT OF STATE

Washington, D.C. 20520

MSC -Ym. Johnson 7

#### CONFIDENTIAL

July 3, 1968

MEMORANDUM TO:

The Files

FROM:

SCI - Addison E. Richmond

SUBJECT:

ANTON BRUUN - Menzies/George Proposal

FSU/NSF/Department Meeting

A meeting on the Menzies/George proposal to utilize the R/V ANTON BRUUN (AB) in a joint Florida State University (FSU) Madras University (MU) Oceanographic program was held at NSF July 1, 1968.

#### Participating were:

Dr. Robert Y. George, FSU, Department of Oceanography

Dr. Robert J. Menzies, FSU, Department of Oceanography

Dr. Carl H. Oppenheimer, Chairman, Department of Oceanography, FSU

Mr. Daniel Hunt, Special Assistant to the Director,

Mr. Joseph Schurmann, Office of the General Counsel,

Addison E. Richmond, SCI, State

#### BACKGROUND

Drs. Menzies and George reported on their recent trip to India to attempt to get the GOI to reconsider the decision not to accept AB. Dr. George had conversations with Dr. Atma Ram, Director, CSIR, Dr. D. S. Kothari, Chairman, UGC, Dr. A. L. Mudaliar, Vice Chancellor, Madras University, Dr. S. Chandrasekhar, Minister of State, Ministry of Health, Family Planning and Urban

DECLASSIFIED
E.O. 12958, Sec. 3.5

NSC Memo, 1/30/95, State Dept. Guidelines
By 301/2, NARA, Date 8:11:00

CONFIDENTIAL

Development, Dr. N. K. Panikkar, Director, National Institute of Oceanography, and C. N. Annadurai, Chief Minister, Madras State. Dr. George, an Indian national, is personally acquainted with several of the above.

It was initially the hope of Drs. George and Menzies that Atma Ram could be persuaded to reconsider his decision and accept AB. Atma Ram remained firm, but said he would have no objections if any other Indian Agency wished to take the ship. Dr. George then discussed the matter with Dr. Kothari. According to Dr. George, Dr. Kothari at first showed little interest in "resurfacing," the BRUUN proposal under the aegis of the UGC. However, when the full FSU proposal was explained (particularly when it was indicated that Dr. George would head the FSU program in India) an interest apparently developed. The original FSU proposal, in brief, was that the GOI accept AB and allow Madras University to operate her as a training and research vessel around which an oceanographic "establishment" could be built at Madras University. Madras University would man and operate the ship out of Indian or USAID resources. FSU would establish an "India Oceanography Center" at FSU and at Madras, and contribute technology and trained personnel to assist in the development of the Indian program. An exchange of students and professors between FSU and MU is also contemplated. Madras University would attempt to interest other Indian universities in forming a consortium to develop an educational and research program in oceanography. (Dr. George says that a meeting between representatives of Madras University and "four or five" other institutions on this subject has occurred.) Dr. George would be appointed Adjunct Professor of Oceanography at FSU and would go to India to direct the program. In the future, professors from Madras University and the consortium would also be given "adjunct appointments" at FSU and come to the United States to teach and do research.

The UGC (Dr. Kothari), according to Dr. George, approved the plan in substance but suggested that:

 FSU take title to AB from NSF and keep it for the first five years of program operation after which time FSU would transfer ship to Madras University; and that a formal proposal of the program be made to Madras University by FSU and that Madras University then forward the program to UGC for approval. UGC would seek AID financing from the United States and use rupees to run the program (including BRUUN) as an educational/institutional development project.

In response to Dr. Kothari's suggestions, and after informal talks between George, Mudaliar, and the Chief Minister, Madras State, a formal proposal has been made by FSU to Madras University (see attached Waldby/Mudaliar letter). Dr. Kothari is also said to have secured Atma Ram's concurrance in the use of the BRUUN in the program. Dr. N. K. Panikkar, Director, Indian National Office of Oceanography, is said by Dr. George to have approved the plan.

#### USG POSITION

Drs. George, Menzies and Oppenheimer were advised that NSF intends to turn AB over to GSA for surplus disposal in unrepaired, as is, condition in the near future. NSF might still consider transfer of the ship to India if the following minimum essential conditions are met before the ship is turned over to GSA (estimate 1 August 68):

- formal notification to USG of reconsideration by GOI of BRUUN rejection;
- some Agency of GOI itself must receive title to ship;
- 3) no further obligation on part of NSF to support, in any way, operation of AB as a ship after transfer, including grants to programs where part of the grant would be used to maintain and operate the ship itself, NSF research grants to support scientific projects carried out on board AB would not be prohibited; and
- 4) firm committment on part of GOI to complete transfer if ship is overhauled.

FSU representatives were told that NSF does not have authority to give ship outright to domestic institutions; and that even if it could, short time available would not allow getting new Executive, Congressional and Agency clearances. Also, NSF will not consider retaining title and loaning or leasing AB to FSU for their India Program. Dr. George was given a copy of the proposed agreement

between USG and GOI on the transfer, drafted before the casualty, and authorized to pass it on to Dr. Kothari along with the USG position. If Madras University and UGC remain interested in AB under these conditions, NSF will be willing to reopen the matter through 1 August. FSU representatives were also told NSF would equally consider proposal from any other interested countries through 1 August 68.

#### FSU DECISION

Dr. George will write Dr. Kothari advising him of USG position and request that UGC take title to AB, which would still be manned, used and financed according to proposal. Vice President Waldby, FSU, will write Vice Chancellor Mudaliar, Madras University, advising him of above and reiterating hope for a joint program, even if AB transfer does not take place.

#### COMMENT

Department and NSF not particularly sanguine about prospects for transfer under FSU proposal. Aside from question of GOI accepting title to BRUUN, AID approval of Kothari request is essential since neither UGC, FSU nor Madras University has funds to develop program. Also, because of increases in labor and material costs since last year, NSF cannot be certain prior to receiving bids that \$500,000 settlement plus funds budgeted for overhaul are now sufficient to put ship in shape. In addition, if internal Indian politics and/or personality clashes played a part in the original BRUUN refusal, these factors are probably still operable. It should be noted that Minister of Education Triguna Sen, if he approves Kothari and UGC taking AB, might be in awkward position since he concurred in CSIR decision not to take Dr. George hopes to leave way out by pointing out ship. Note: that FSU/Madras program would eliminate need for Navy involvement thus getting around maintenance, overhaul and operational problems presented to Naval Hydrographic Service which presumably concerned Commodore Kapoor. FSU/Madras program would contract with commercial crews and shipyards for operation and maintenance of BRUUN and would not involve initial committment of Indian funds. Another factor may be the involvement of Dr. N. Panikkar, Director, Indian National Institute of Oceanography (NIO). There is some indication that CSIR did not permit Dr. Panikkar a reputed BRUUN partisan, to come to the United States for a long scheduled visit under the NSF US-India Scientist Exchange Agreement until after CSIR had made a final decision on AB. Dr. Panikkar is now in California but has expressed

a desire to talk to NSF about the BRUUN when he comes to Washington July 11, 1968. Dr. George says that the FSU proposal, although in some ways duplicating functions of the NIO, has Panikkar's approval because it would "get the BRUUN for Indian Oceanography".

CC -

SCI - Dr. Joyce
Dr. Kovach

L/MER - Mr. Maurer

NEA/INC - Mr. Coon

AID/NESA - Mr. Muscat

NSF - Mr. Hunt

NSC - Mr. Charles Johnson

MSC - Mr. Schweitzer

AmEmb New Delhi - Dr. Fuller

SCI: AERichmond: dg 7/3/68

## THE FLORIDA STATE UNIVERSITY TALLAHASSEE 32306

OFFICE OF THE VICE PRESIDENT FOR ADMINISTRATION

June 25, 1968

Dr. A. L. Mudaliar Vice Chancellor University of Madras Madras 5, India

Dear Vice Chancellor Mudaliar:

Extended to Professor Robert Menzies and Dr. Robert Y. George and of your endorsement of the concept of cooperation between Florida State University and the University of Madras in the field of oceanography. I can assure you that Florida State University fully endorses the program in oceanography and interim title to the vessel as outlined by Dr. George and is willing to aid your University by permitting Professor Menzies to oversee the reconditioning of the Anton Bruun through the direction of the National Science Foundation in keeping with the policies of that agency. It is understood that such reconditioning does not obligate Florida State University in any way financially, either through direct or indirect costs.

The concept of a joint proposal with Professor Menzies representing Florida State University and Dr. George representing the University of Madras is also endorsed by Florida State University. We view this as an important means to effect the collaboration through persons who have worked well together in the past and to assist your University and the Indian Government through the Indian University Grant's Commission in its desire to operate that vessel in India for the benefit of your programs and mankind.

It is my understanding of the plan that your University agrees to the operation of the research vessel through PL 480 as a cooperative program in India with Florida State University participating as a cooperating U.S.A. institution in the scientific and training projects which are to be jointly developed by Dr. Robert George and Dr. Robert Menzies.

It is also my understanding that Dr. Robert Y. George, Adjunct Professor, Florida State University, will direct your program in India at the University of Madras and that he will be represented here at Florida State University by Professor Menzies as Director of the Florida State University - India Center in Oceanography. We have appointed Dr. Robert Y. George as Adjunct Professor of Oceanography. His adjunct appointment implies full membership in

Dr. A. L. Mudaliar June 25, 1968 Page 2

the Florida State University - India Center, and we expect that he will lead and develop a complementary University of Madras - U.S.A. Center in Oceanography on his return to India.

A program of the nature outlined by Drs. George and Menzies will require time to develop. There remains, however, the urgency that the U. S. Government be informed promptly of the agreements reached between Florida State University and the University of Madras through the University Grant's Commission relative to the transfer ultimately of the Anton Bruun to India (estimated as a period of five years).

Sincerely,

Olell Waldby

HOW/ss

Attachments: (1) Outline of Joint Plan

(2) Tentative Time Table and Target Date

cc: Kothari, Chairman, University Grant's Commission Fuller, U. S. Scientific Attachee Chief Minister of Madras Director, National Science Foundation Addison Richmond, State Department, U.S.A. Allan Tucker, Board of Regents, State of Florida

June 12, 1968

MEMORANDUM FOR MR. ROSTOW

SUBJECT: Anton Bruun

Walt --

Lee Haworth is consulting with State and the Marine Sciences Council to see if there is any further use for the Anton Bruun since the Government of India has finally decided not to accept this ship. He suggests that you might wish to advise the President of this action.

I recommend that we wait to see what replies he gets from State and the Marine Sciences Council before saying anything more to the President in this matter.

I attach Haworth's memorandum to you plus copies of his letters to State and the Marine Sciences Council.

51

Charles E. Johnson

cc: Ed Hamilton

899

NATIONAL SCIENCE FOUNDATION
OFFICE OF THE DIRECTOR

6/11/68

Chuch,

Mens for hu. Rostow and copies of letters as discurred today.

Dan

#### NATIONAL SCIENCE FOUNDATION

OFFICE OF THE DIRECTOR

WASHINGTON, D.C. 20550

June 11, 1968

#### MEMORANDUM for W. W. Rostow:

Since the Government of India has finally decided not to accept ANTON BRUUN, I am making plans to transfer the ship to the General Services Administration for disposal.

Prior to taking this action I am asking Dean Rusk and Ed Wenk if they are aware of any appropriate foreign utilization for this oceanographic research ship.

You may wish to advise the President of this action.

SIGNED

Leland J. Haworth Director NATIONAL SCIENCE FOUNDATION
OFFICE OF THE DIRECTOR
WASHINGTON, D.C. 20550

June 11, 1968

Dr. Edward Wenk, Jr.
Executive Secretary
National Council on Marine Resources
and Engineering Development
Executive Office of the President
Washington, D.C. 20500

Dear Ed:

Since the Government of India has finally decided not to accept ANTON BRUUN, I am making plans to transfer the ship to the General Services Administration for disposal. By memorandum I have advised Walt Rostow of this intended action and have stated that I would ask you and Dean Rusk, prior to taking this action, if you were aware of any appropriate foreign utilization for this oceanographic research ship.

We have had several informal inquiries with regard to the acquisition of ANTON BRUUN but we have received no formal proposals. No proposal that would involve in any way expenditure of Foundation funds for operation and maintenance of this ship would be acceptable. Indeed, we feel that the expenditure of funds of any federal agency would be inadvisable.

I am hoping for an early response so that the saga of ANTON BRUUN can be brought to a conclusion.

Sincerely yours,

Leland J. Haworth Director NATIONAL SCIENCE FOUNDATION
OFFICE OF THE DIRECTOR
WASHINGTON, D.C. 20550

June 11, 1968

Honorable Dean Rusk Secretary of State Washington, D.C.

Dear Dean:

Since the Government of India has finally decided not to accept ANTON BRUUN, I am making plans to transfer the ship to the General Services Administration for disposal. By memorandum I have advised Walt Rostow of this intended action and have stated that prior to taking this action, I would ask you and Ed Wenk if you knew of any appropriate foreign utilization for this oceanographic research ship.

We have had several informal inquiries, as I am sure your staff has had, regarding the acquisition of the ship, but we have received no firm proposals. No proposal that would involve future support for the maintenance and operation of the ship with Foundation funds would be acceptable.

During the course of this saga concerning ANTON BRUUN, the cooperation and assistance rendered by your staff have been splendid. I would particularly like to commend Mr. Addison Richmond, Jr. of your staff for his fine service.

Sincerely yours,

Leland J. Haworth Director



### Department of State

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LIMITED OFFICIAL USE

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PAGE 01 NEW DE 15112 051519Z

43 ACTION SCI 05

1 0 NEA 13, NSF 4, NSC 10, MSC 01, SFW 02, E 15, 10 13, CIAE 00, DODE 00,

INR 07, NSAE 00, P 04, RSC 01, USIA 12, L 03, AID 28, RSR 01, INT 06,

DOT 10,/135 W

R 05'112Z JUN 68 FM AMEMBASSY NEW DELHI TO SECSTATE WASHDC 5739

LIMITED OFFICIAL USE NEW DELHI 15112

PASS SCI FOR NS

SUBJECT: R/Z "ANTON BRUUN"

REF STATE 174365

DRS. GEORGE AND MENZIES REPORTED TO SCIATT STATUS THEIR PROPOSED INDO-AMERICAN COOPERATION IN OCEANOGRAPHY UTILI-ZING "AB" AS FOLLOWS:

- 1) THEY CLAIM UNIVERSITY GRANTS COMMISSION (UGC) WILL REQUEST USAID FINANCE A 5-YEAR RUPEE PROGRAM AT MADRAS. UNIVERSITY WITH DR. GEORGE, MADRAS UNIV., AND DR. MEN. ZIES, FLORIDA STATE UNIV. (FSU) AS COLLABORATORS.
- 2) TO GET USAID SUPPORT UGC WILL STRESS EDUCATIONAL AND SCIENTIFIC VALUE OF PROGRAM ALSO EXPECTED FUTURE ECONOMIC GAINS IN SEAFOOD PRODUCTION FOR DOMESTIC AND EXPORT MARKETS.
- 31 FSU WILL REQUEST NSF TRANSFER THE "AB" AFTER OVERHAUL TO FSU.
- 4) FSU WILL MAINTAIN "AB" TO BE OPERATED BY INDIAN CREW .
- 5) CF THE 5-YEAR PROGRAM IS SUCCESSFUL, UGC WILL TAKE OVER

LIMITED OFFICIAL USE



### Department of State

TELEGRAM

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"AB" .

6) DR. MENZIES RETURNING TO US JUNE6 HOPING TO GET FSU AND NSF APPROVAL OF PROPOSAL. WEATHERSBY. Cy for Ed Hamultone
Sinks a mate to

Market Slots

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Church, 10a

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FYI.

Copy sent to Cellisia Richmel.

Dan

### Memorandum

TO : Director

DATE: May 28, 1968

FROM :

Special Assistant to the Director

SUBJECT:

ANTON BRUUN; Information concerning

I was visited today by Dr. John Calhoun, Vice President for Programs at Texas A&M, inquiring as to the status of ANTON BRUUN for possible use of the ship by the Gulf Universities Research Corporation (GURC). Dr. Calhoun had evidently been informed of ANTON BRUUN's status by Dr. Joe Reynolds.

Dr. Calhoun's idea for utilizing ANTON BRUUN is strictly in the preliminary thinking stage but we discussed the following points:

- (1) He must obtain suitable backing for the operation of the ship from the Gulf universities and private sources.
- (2) Preliminary thinking is that the ship could be set in concrete or permanently imbedded near Pelican Island, the new oceanographic center being established by GURC near Galveston, and used as a facility for laboratory space and/or a dormitory for the oceanographic academic community; or, as an alternative, there is a possibility the ship could be completely activated and operated by the Texas Maritime Academy for the purpose of training cadets, graduate students in oceanography, and faculty. There would necessarily be a permanent crew, the minimum required being the subject of investigation,
- (3) He was to pursue these ideas further, first of all with Dr. Chinn of Texas A&M, who had extensive experience on ANTON BRUUN as Chief Scientist during several of her cruises.



President of FSU.

Wenk and/or Dr. Reynolds.

cc: Dr. Wilson Mr. Hoff Dr. Todd

He was aware of the status of ANTON BRUUN insofar as India refusing acceptance and as to the two representatives of Florida State University who recently went to

India on behalf of Florida State's cooperative oceanographic program with the University

Daniel Hunt, Jr.

of Madras and the attempt to get India to review their decision on ANTON BRUUN. Dr. Calhoun received this information from the

I advised Dr. Calhoun that we would furnish any assistance that we could and he stated that if this program appeared feasible, he possibly would be in contact with you, Dr.



### Department of State

## TELEGRAM

42

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PAGE DI STATE 174365

92 ORIGIN SCI Ø5

INFO NEA 13, NSF 04, NSC 10, MSC 01, SFW 02, E 15, IO 13, CIAE 00, INR 07,

NSAE 00, KSC 01, L 03, /074 R

DRAFTED BY: SCI: AERICHMOND APPROVED BY: SCI: WHTAFT III NSF: HUNT SUB NEA/INC: SCHAFFER SUB NSC: CJOHNSON INFO

P 312210Z MAY 68
FM SECSTATE WASHOC
TO AMEMBASSY NEW DELHI PRIORITY

LIMITED OFFICIAL USE STATE 174365

SUBJ: ANTON BRUUN(AB)

REF: NEW DELHI 14792

I. NSF HAS NOT, REPEAT NOT, RECEIVED ANY PROPOSAL FROM MENZIES, GEORGE OR FSU RE JOINT FSU/MADRAS U. PROGRAM AND WOULD NOT, RPT NOT, SUPPORT ANY PROGRAM CONTRIBUTING TO MAINTENANCE OR OPERATION OF AB AS A SHIP. NSF DID RECEIVE PROPOSAL FROM MENZIES SEVERAL MONTHS AGO FOR USE OF AB FOR TRAINING INDIAN TECHNICAL PERSONNEL WHILE EN ROUTE INDIA. THIS PROPOSAL INFORMALLY CONSIDERED ACCEPTABLE BUT REJECTED WHEN INDIA REFUSED SHIP. PROPOSED FSU PROGRAM IS ENTIRELY PRIVATE VENTURE.

2. NSF AND DEPARTMENT NOW CONSIDERING QUESTION OF DISPOSAL OF AB: NO DECISION YET REACHED. IF GOI SHOULD DEFINITIVELY RECONSIDER BEFORE OTHER ARRANGEMENTS ARE MADE, WE WOULD CONSIDER PROCEEDING WITH TRANSFER AS OXIGINALLY PROPOSED. RUSK



### Department of State

# TELEGRAM

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PAGE 01 STATE 167179

92 ORIGIN SCI 05

INFO NEA 13, NSF 04, NSC 10, MSC 01, SFW 02, E 15, 10 13, CIAN 00, INR 07,

NSAE 00, RSC 01, L 03, P 04, USIA 12, /090 R

DRAFTED BY: SCI: AERICHMOND
APPROVED BY: SCI: WILLIAM H TAFT III
NEA/INC: COON
SCI: SOULEN INFO
NSC: JOHNSON INFO
NSC: HUNT

R 202137Z MAY 68 FM SECSTATE WASHDC TO AMEMBASSY NEW DELHI

LIMITED OFFICIAL USE STATE 167179

SUB: ANTON BRUUN (AB)

INDIA O/A MAY 21 TO QTE ATTEMPT TO PERSUADE GOI TO CHANGE MIND RE AB UNQTE. DR. GEORGE IS INDIAN CITIZEN. HE WILL BE JOINED IN ABOUT ONE WEEK BY DR. ROBERT MENZIES, US CITIZEN, DEPT. OF OCEANOGRAPHY, FLORIDA STATE U. GEORGE AND MENZIES TRAVELLING AS PRIVATE INDIVIDUALS, FUNDED BY FLORIDA STATE. DR. GEORGE HOPES TO SEE OFFICIALS IN GOI CONCERNED WITH AB, QTE INCLUDING PM UNGTE. DRS. GEORGE AND MENZIES ADVISED TO CONSULT WITH EMB, SCIATT, BEFORE MAKING INDIAN APPOINTMENTS.

2. DR. MENZIES HAS WRITTEN TO DR. PANIKKAR AND GEORGE TO DR. KRISHNA SWAMI, MADRAS UNIV. AND TO 3TE GOI MINISTERIOF HEALTH UNGTE; BUT INDIAN OFFICIALS PROBABLY UNAWARE OF VISIT. FLORIDA STATE WISHES DEVELOP JOINT PROGRAM IN OCEANOGRAPHY WITH U. OF MADRAS AND MENZIES AND GEORGE HAVE SUBMITTED A RESEARCH PROPOSAL TO NSF; HOWEVER, TRIP TO INDIA IS NOT UNDER ANY AUSPIČES USG, BUT PRIVATE INDIVIDUALS ONLY.



# TELEGRAM

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PAGE 02 STATE 167179

3. AIRGRAM FOLLOWS.

4. BOTH GEORGE AND MENZIES CAUTIONED AGAINST GIVING ANY APPEARANCE THEY REPRESENT USG.

5. DEPT AND NSF HAVE ADVISED GEORGE AND MENZIES THAT; EVEN IF GOI RECONSIDERS, OTHER ARRANGEMENTS FOR DISPOSITION OF BRUUN MAY HAVE BEEN MADE. RUSK

ORIGIN/ACTION		ION	DEPARTMENT OF STATE		13
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AGR	10	FRB	FROM : Amembassy NEW DELHI	DATE:	May 9, 1968
INT	LAB	TAR	SUBJECT: R/V "ANTON BRUUN."		
TR	XMB	AIR	REF : New Delhi's 13842		*
ARMY 34 NSC	STA DELA	NAVY S NSF	During the temporary absence of Dr of Scientific and Industrial Researc received from Dr. A. Lahiri, the Ad	h (CSIR), a letter	quoted below was
BOWDLER BUOGET DAVIS FRIED GINSBURGH HAMMETON DESCRIP		H	Please recall our discussions regarding the proposal of the U.S.Govt. to make a gift of the Research Vessel, "Anton Bruun" to the Council of Scientific & Industrial Research for carrying out oceanographic studies under the auspices of National Institute of Oceanography. We are extremely grateful to the U.S.Govt. and the U.S.National Science Foundation for this very generous offer.  Unfortunately, however, our Naval authorities who have examined this Vessel find that it will be difficult to operate it in India, especially under our control, due to various reasons. We have examined the question in great detail and have reluctantly come to the conclusion that we cannot make much use of this Vessel, if transferred to us.		
Drafte			However, we hope that the ing out research investigation of and that they will be able to find help us, perhaps with a smaller manage within our means, or per a period of time.  CONFIDENTIAL CONFIDENT	of the Indian Ocean d some other alter vessel which we haps even loan ar	m will be continued mative means to can maintain and nother vessel for  FOR DEPT. USE ONLY Sin Out
Cless	E:SC	I: DLF	DECLASSIFIED P	E:SCI:DIF	*
			E.O. 12958, Sec. 3.5 State Dept. Guidelines By 50w, NARA, Date 8-11-40	10.00	

"May I once again thank you and the U.S.Govt. for this magnificent offer which we unfortunately cannot utilise in its present shape and request you to see if some alternative arrangement can be made?

"With kind regards.

Yours sincerely,

S/ A. Lahiri."

Dr. Panikkar, Director of the National Oceanographic Institute of the CSIR is preparing specifications of a vessel that would cover the near needs for oceanographic research in India. When received, this will be forwarded in hopes that some other vessel could be made available by loan, gift or through an Indo-American cooperation oceanographic program.

WEATHERSBY

CONFIDENTIAL



# **TELEGRAM**

\_BUDGET DAVIS

GINSBURGH

HAMILTON

7

-CONFIDENTIAL 267

PAGE 01 NEW DE 13842 080711Z

ACTION SCI 05

INFO NEA 13,NSF 04,MSC 01,COM 08,E 15,TRSY 08,DOT 10,RSR 01,L 03,

CIAE 00,DODE 00,INR 07,NSAE 00,P 04,RSC 01,USIA 12,NSC 10,SFW 02,

1104 W

R 080446Z MAY 68 FM AMEMBASSY NEW DELHI TO SECSTATE WASHDC 5112

CONFIDENTIAL NEW DELHI 13842

REF DELHI'S 12956

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH REGRETFULLY DECLINES OFFER OF "ANTON BRUDN." AIRGRAM ON DETAILS FOLLOWS.

WEATHERSBY

Hoth for angum

DECLASSIFIED

E.O. 12958, Sec. 3.5

State Dept. Guidelines

By Dec., NARA, Data 8-11-10

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- CONFIDENTIAL

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ACTION SCI 05

INFO NEA 13.NSF 04.MSC 010NSC 10.CIAE 00.DODE 00.INR 07.NSAE 00.P. 04.

RSC 01, USIA 12, DOT. 10, COM 08, E 15, TRSY 08, RSR: 01, L1 03, /102 W

R 181310Z APR 68 FM AMEMBASSY NEW DELHI TO SECSTATE WASHDC 4691

CONFIDENTIAL NEW DELHI 12956

SUBJECT: R/V "ANTON BRUUN"

REF: DELHI 11317, MARCH 13, 1968

BOWDLER BUDGET

DAVIS

\_FRIED \_GINSBURGH

- HITCH

\_JESSUP

JOHNSON

JORDEN

KEENY

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ROCHE

SAUNDERS

SCI ATT VISITOR DR. ATMA RAM, DIRECTOR-GENERAL COUNCILIANDA SCIENTIFIC AND INDUSTRIAL RESEARCH, APR 18, 1568 AND LEARNED THAT CAPT. KAPOOR HAS SENT HIM CONFIDENTIAL REPORT ON "R.V. "ANTON BRUUN". HE SAID REPORT NOT ENCOURAGING REGARDING INDIAN ACCEPTANCE OF VESSEL'S REPORT PASSED ON ONLY TO DRO TRIGUNA SEN, MINISTER OF EDUCATION. NO DECISION MADE YET BUT ATMA RAM EXPECTS DR. SEN MAY WISH TO MEET WITH AMB. BOWLES. REGARDING POSSIBLE AVAILABILITY OF ANOTHER VESSEL. SCI ATT PRESSED FOR FINAL DECISION ASAP. BOWLES.

DECLASSIFIED

E.O. 12958, Sec. 3.5 State Dept. Guidelines By JON , NARA, Date 8-11-00





CONFIDENTIAL 990

PAGE 01 STATE 149431

82 ORIGIN SCI Ø5

INFO NEA 13, NSF Ø4, NSC 10, SFW Ø2, E 15, COM Ø8, OST Ø1, MSC Ø1, CIAE Ø0,

INR 07. NSAE 00, RSC 01, /067 R

DRAFTED BY: SCI: AERICHMOND APPROVED BY: SCI: EGKOVACH NEA/INC: COON SUB SCI: DOOLING SUB NSF: HUNG INFO NSC: CHARLES JOHNSON INFO

R 190015Z APR 68 FM SECSTATE WASHDC TO AMEMBASSY NEW DELHI

CONFIDENTIAL STATE 149431

SUBJ: R/V ANTON BRUUN

REF NEW DELHI 12956

1. NO FULLY SERVICEABLE OCEANOGRAPHIC VESSELS AVAILABLE AT THIS TIME AS GIFT TO GOI. FEW SHIPS WHICH MIGHT BE USEFUL! REQUIRE SOME DEGREE OVERHAUL AND/OR REPAIR AND DO NOT NOW HAVE SCIENTIFIC EQUIPMENT ON BOARD. LOAN OF A SHIP MAY HOWEVER, BE POSSIBLE. IF GOI INTERESTED IN ACQUISITION OF VESSEL OTHER THAN BRUUN, ON EITHER PERMANENT OR LOAN BASIS, CAPABILITIES DESIRED SHOULD BE SPECIFIED BY TECHNICAL DESCRIPTION, INCLUDING SCIENTIFIC EQUIPMENT SO THAT DEPT. CAN INVESTIGATE FURTHER. ANY SHIP AVAILABLE WOULD PROBABLY BE ON QUOTE AS IS, WHERE IS UNQUOTE

PAGE 2 RUEHC 149431 CONFIDENTIAL
BASIS. COST OF ANY OVERHAUL, REPAIRS, OR EQUIPMENT INSTALLATION,
WOULD LIKELY HAVE TO BE BORNE BY GOI, ALSO, FUTURE US SUPPORT
IN SPARE PARTS OR MAINTENANCE SERVICES ON OTHER THAN CASH BASIS
MOST UNLIKELY.

DECLASSIFIED

E.O. 12958, Sec. 3.5

State Dept. Guidelines

By Jov , NARA, Date 8-11-00



# **TELEGRAM**

#### CONFIDENTIAL

PAGE 02 STATE 149431

2. HIGHLY DESIRABLE TO HAVE FINAL DECISION ON BRUUN BY 1 MAY.

RUSK

LIMITED OFFICIAL USE March 26, 1968 . MEMORANDUM TO: The Files SCI - Addison E. Richmond FROM: Inspection of R/V ANTON BRUUN SUBJECT: Commodore D. C. Kapoor, Chief, Indian Naval Hydrographic Service and Hydrographer to the GOI, inspected the ANTON BRUUN at Eushey shipyard, Brooklyn, New York on March 19 and 20. Mr. Daniel Hunt (NSF) and I accompanied him to New York. Joining in the inspection of the ship were Messrs Julie Hirschman, Facilities Manager, Alpine Geophysics and Peter Larsen, Marine Engineer, Alpine Geophysics. Commodore Kapoor was also scheduled to visit Alpine's warehouse in New Jersey to inspect nonfixture equipment, spare parts and ships stores in storage. He was to return to India March 25 and submit his report to the GOI (CSIR, National Institute of Oceanography, and Ministry of Education). The Ministry of Education will probably have the final say. The Commodore hoped for a final decision on GOI interest within a month. Commodore Kapoor is to report to the GOI on (1) the physical condition of the ship, (2) the prospects for repair and reconditioning, (3) the projected utility to India and (4) the manning and maintenance requirements. After the inspection of the ship, in response to a request for his opinion, he said that he was impressed by the condition of the ship considering her age and the casualty and that he thought she could be put in a condition to be useful to India. He aslo said that manning her would be no problem. The Commodore was, however, concerned about the availability of spare parts particularly for navigational and scientific equipment (radar, fishfinder, radios) and for pumps and auxilliary motors. For the ship to be useful to India, she should be able to

be able to spend six to eight months/year at sea over at least a five year period. She would be of little value, if she had to be laid up for extended periods, because of a breakdown of some auxilliary element. This sort of "minor breakdown" would be no problem in the US, but would in India, because of the need to buy parts in the US for dollars. It might be possible to replace pumps and motors an necessary with functional equivalents which may be available in India (mostly of British or German manufacture) if adequate US spares cannot go with the ship. Alpine promised to make available a list of auxilliaries with ratings and capquities so that Indian inventories could be checked. The Commodore said that Indian shipyards had the skills to manufacture some elements for onbozrd equipment (e.g., impellors for pump), but since some equipment on the BRUUN is so old that construction materials used (e.g., "Ebonite") may no longer be available. Adequate replacement and spare parts for the main engines (Winton diesels, no longer in manufacture) were on board ship, and Indian yards could fabricate propellor shafts and plates if needed. If adequate spares can be found, the Indian yards can maintain the BRUUN and naval personnel can sail her. Commodore Kapoor suggested that since Indian yards could do much of the interior refurbishing and deck work (caulking, painting) much cheaper than the US, if the GOI decision is to go ahead, NSF should consider doing only work (1) essential to making the BRUUN safe and seaworthy and capable of accomodating a crew to sail her to India, and (2) that could not be done easily in India (e.g., air conditioning, overhaul) and use whatever savings are effected to obtain spare parts. Alpine and NSF felt that this could be done. Another factor the GOI must consider is the economics of operating the ship (this will play a large part in the Ministry of Education position). Both US and Indian estimates are that the BRUUN will cost about \$300,000/year in rupees to operate in India; however, if most of this must go to maintain the ship, there would be little left for scientific work; hence, spares are crucial. He said all costs would be charged to the Institute of Oceanography.

Commodore Kapoor said that he would report to the GOI the BRUUN "had possibilities" and could be useful provided spares and budget priorities permitted her operation for at least five years at six to eight months steaming/year(it was estimated that her age would require her to be overhauled approximately every two years). He will urge that

the GOI

the GOI expedite a decision since he understood NSF's position and realized that delay alone could well loose the ship for India, and would certainly increase the cost for repair and overhaul. The Commodore's report would also point out that the initial Indian interest (never repudiated) had probably been a factor in the decision of the underwriters to settle and make the funds avialable for repairs.

The ANTON BRUUN has now been moved to a public pier of the New York Port Authority and Alpine is completing specifications for repair and overhaul, so bids can be requested should the GOI reply be favorable.

. cc -

NSF - Mr. Daniel Hunt
NSC - Mr. Charles Johnson
SCI - Dr. Joyce
Dr. Kovach
NEA/INE - Mr. Schaffer
L/MER - Mr. Ely Maurer

SCI: AERichmond: dg

3/26/68

### LIMITED OFFICIAL USE

March 18, 1968

MEMORANDUM TO:

The Files

ARR

FROM:

SCI - Addison E. Richmond

SUBJECT:

Meeting with GOI representatives on

R/V ANTON BRUUN

On March 15, 1968 a meeting was held between representatives of the GOI, NSF and Department of State (SCI) to consider the ANTON BRUUN.

### Participants were:

Commodore D. C. Kapoor, Chief, Indian Naval Hydrographic Service

Brigadier F.S.B. Mehta, Military Attache, Embassy of India

Mr. Hardas Shahani, First Secretary (Education), Embassy of India

Mr. Paramjit Sahai, Second Secretary (Political), Embassy of India

Mr. Daniel Hunt, Special Assistant to the Director, National Science Foundation

Mr. Joseph Schurman, Office of General Counsel, National Science Foundation

Mr. W. W. Bolton, Contracts Office, National Science Foundation

Dr. J. Wallace Joyce, Deputy Director, SCI

Mr. A. E. Richmond, SCI

Mr. Hunt opened the meeting with a resume of the recent history of the BRUUN, i.e., from April 1967 to date; generally describing the BRUUN and the damages she suffered in the sinking. He stated that NSF is faced essentially with these problems:

- 1) Can the BRUUN be reconditioned?
- 2) Can the work be done with funds available?
- 3) Is the GOI still interested?

Mr. Hunt feels that there are no technical reasons which would prevent the reconditioning of the DRUUN, and the work can probably be done with available funds (approximately \$660,000). However, there is no positive way of determining the cost of repair and overhaul until bids are solicited (prices may have risen since the original contract was let in June 1967). Hence, the attitude of the GOI is the key question in determining whether or not to go shead with bids.

Commodore Kapoor stated that his mission was essentially fact finding. He is to gather as much information about the BRUUN as possible, from plans, specifications and personal inspection of the ship, and report his opinion to the GOI which will then make a decision. There is very little information on the BRUUN (e.g., her present layout, technical specifications and condition) availabel in India, hence the GOI hasn't sufficient information to determine whether they can maintain the ship properly. The manning and maintenance of the BRUUN would be Commodore Kapoor's responsibility, although she would be assigned to the National Oceanographic Institute headed by Dr. Panikkar.

It was agreed that Commodore Kapoor would spend March 16 - 18 familiarizing himself with the ERUUN's plans and specifications and go to New York on March 19 and 20 to inspect the ship and stored equipment. If necessary, he may spend March 21 and 22 in New York. After the inspection, a wrap-up meeting in Washington or New York can be held if it seems useful.

Commodore Kapoor appears to be conscientious and informed; he did not seem to have any biases "for or against" the BRUUN. There was no indication which Agency of the GOI will make the final decision but the Commodore's advice will probably be the decisive factor. In luncheon conversation, the Commodore indicated that, assuming he recommends that the BRUUN is worthwhile, Dr. Panikkar's Institute of Oceanography, having suffered less in budget cutbacks than others, could probably bear the operating costs. The BRUUN would be the first ship

assigned to the Institute, which now has few facilities. At present, it is intended to base the BRUUN in GOA, however, ground is just being broken for the Institute and facilities are not expected to begin to be useful for another 18 months. He also confirmed that the CSIR is now more oriented towards "applied research" than was formerly the case.

The Indian Naval Hydrographic Office is responsible to the Defense Department for military hydrography and to the Department of Transportation for commercial and scientific research activities. At present, Commodore Kapoor has four ships; three converted British frigates and a new Indian built frigate, which he says is comparable to the LEANDER class of British vessels. The BRUUN is to be used in the Indian Occean, and would sail "quite far south".

In response to a question by Mr. Hunt, the Commodore said that the Indian Navy has now got two submarines, and that the reason that the underseararm is just now receiving some attention was because Prime Minister Nehru had always been unalterably opposed to offensive weapons and had considered submarines to be purely offensive. He also estimated the size of the Indian Navy at about 20,000 men.

cc -

SCI - Dr. Joyce

Dr. Kovach

NEA - Mr. Schaffer

NSC - Mr. Johnson

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SHIGHWACTION *		*	DEPARTMENT OF STATE	anton Bruun 5CI 31 INdia			
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AGR	COM	FRB	FROM : Amembassy NEW DELHI	DATE: March 7, 1968			
10	LAB	TAR					
7	200		SUBJECT: Indian Oceanographic Research and Dev	velopment			
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3	20	5	Introduction		٦		
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057		NSC	At the invitation of Dr. N.K. Panikkar, Director	The state of the s			
1	1	6	of Oceanography (NIO), the Science Attache vis centers in Kerala and GOA February 5-9, 1968.				
			of the Council of Scientific and Industrial Research (CSIR) created as a				
			follow-up from the International Indian Ocean Expedition (IIOE) 1962-1965 with laboratories in Ernakulam, Kerala and in temporary quarters near Gaspar				
	WDLER						
BUDGET			Dias, Goa and offices in Bombay and New Delhi. Eventually the Headquarter				
FRIED		4	of the NIO will be in Goa, beautifully located on a 30-acre shore site on a flat knoll 75 feet above the sea about a mile northwest of Dona Paula. On				
GINSBURGH HAMILTON			Edition 1, Army Map Service, India and Pakistan, Sheet ND 43-2, Series				
1	OHNSON		U-502 1:250,000 this is approximately at 2,2		00		
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Md -	TAYCOR		Most oceanographic work is now centralized in	Ernakulam. The main basic	3		
0	67:		research including the UNESCO Indian Ocean Biological Center is carried				
1968 MAR 10 COPYFLO			on by the NIO. Appreciable applied work on gear, standards, processing,				
MA	99		byproducts, inspection, etc., is handled by the Indian Council of Agri-				
98			cultural Research (ICAR) and an excellent training and demonstration scheme for fishing, fish handling, gear, etc. is operated by the Norwegians.				
9			Kerala University has a branch at Ernakulam for				
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Discussions were held with scientists in six centers as follows:

- 1) Dr. S.Z. Qasim who heads the NIO Biological Oceanographic Program.
- 2) Dr. V.V.R. Varadachari, who heads the NIO Physical Oceanographic Program.
- 3) Dr. D. Tranter, leader of the UNESCO Sorting Center i.e., the Indian Ocean Biological Center (IOBC).
- 4) Dr. R. Prasad, in charge of the Central Marine Fisheries Research Institute (ICAR).
- 5) Dr. A.N. Bose, Head, Central Institute of Fisheries Technology (ICAR).
- 6) Dr. C.V. Kurain, Head, Kerala University Oceanographic Laboratory.

## 1. NIO of the CSIR and the UNESCO Group

The NIO including the UNESCO group has some 60 scientists in all and is located in four temporary quarters; after the development of the main laboratories in Goa, it is expected that a small group will be maintained in Ernakulam in a new laboratory to be built on recently acquired land.

The crude sorting of plankton collected during the International Indian Ocean Expedition appears to be well along, but a great deal has yet to be done studying and classifying the groupings that have resulted. Dr. Tranter from Australia seems to be a very valuable addition to this program and new manager of IOBC.

Dr. Varadachari and his group are doing interesting work such as on seashore interaction which could be expanded fruitfully with PL-48O (Special Foreign Currency Research Program) funds. Easy access to a computer would greatly accelerate these and other studies of this group on physical oceanography.

Dr. Qasim and his group cover many projects dealing with chemistry, bacteriology, biochemistry, microbiology, biology, etc. but are without a suitable oceanographic vessel. Studies are limited to the estuaries and near shore waters. It appears that this group is developing considerable valuable background information for the expansion of the fishing industry of India. A very sizable expansion of all these research groups is anticipated when they move to the center at Goa.

#### 2. ICAR

The Central Marine Fisheries Research Institute and the Fisheries Technology Laboratory under Drs. R. Prasad and A.N. Bose are located in several areas

in Cochin and Ernakulam. The main current efforts fall under the following headings:

#### a) Craft and Gear Wing

Development of fishing vessels
Protection of wooden vessels against deterioration
Prevention of metallic corrosion in wooden fishing boats
Development of mechanical accessories for fishing boats
Development of mechanical methods of deweeding lakes
Trawl fishing
Improvement of set nets and bag nets in inland waters
Improvement in the design of gill nets
Line fishing
Set net for mackerel
Electric fishing

#### b) Processing Wing

Including departments of chemistry, bacteriology, microbiology, engineering, fishcuring, byproducts, quality control and inspection

An important activity deals with preshipment inspection.

Research projects in this wing include:

Biochemical studies on fish and shellfish
Bacteriological studies of fish and shell fish
Preservation and transport of fishery products
Freezing characteristics of tropical fish
Technical aspects of canning fish products
Technological aspects of preparation of products including
creamed fish pastes, fishflakes, protein supplements
Methods and machinery for fish dehydration
Utilization of factory wastes
Factory sanitation and control, etc.

## c) Extension, Information and Statistical Wing

In passing through the laboratories one feels that they are reasonably well equipped and that the staff members are capable and are busy on important projects.

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In discussions with various scientists and engineers it appears that a good deal of good work has been done that has been utilized in the industry. Since 1959 about 150 papers from these laboratories have been published in various scientific journals on a great many subjects.

### 3. University of Kerala - Oceanographic Laboratory

At Ernakulam there are some twelve staff members in this center covering biology, chemistry, ichthyology, planktonology, invertebrata, physical oceanography and marine geology. Besides the laboratories the center has a 50-foot oceanographic research vessel (R.V.Conch).

Each year about 20 seats are open to students to major in marine biology or oceanography for M.Sc.degrees. Good job opportunities for graduates are said to be scarce at the present time.

#### Goa

The new laboratory will be about four miles from the center of Panaji, the capital of Goa, (there has been some delay in the adoption of Panaji as the new name for New Goa also called Pangim, or Panjim, because some claim the name should be Panji).

The land for the NIO Center has been surveyed, some roads have been built and an architect will be selected in the next few weeks to lay out the laboratories which it was stated would eventually house about 1,000 total personnel.

Since the site faces the sea the vessels to be utilized by the institute will be stationed about two miles southwest of the laboratories behind the pier in the excellent and busy Vasco de Gama harbor. A ferry boat operates between Vasco de Gama and Dona Paula.

At the present time the five young, bright, well-trained scientists stationed in new but temporary laboratory quarters here are concerned with preliminary exploratory geological and marine biological studies. Since they do not yet have a vessel of any kind they are studying shore and estuary problems in the neighborhood. Because of the effect of the tides, monsoons, pollution, river traffic and sea-air-shore interaction there is much to do in this area which includes three large estuaries.

Morale at the new center is not high because of GOI delays in engaging an architect for designing and building the center and because they feel no real productive oceanographic work can be started until a ship such as the R/V Anton Bruun is acquired.

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A small fisheries industry is already in operation in Goa and a very large expansion is anticipated for both foreign and domestic markets. It is evident that much effort must be expended to develop the foreign outlets for products other than prawns. Incidentally, it was pointed out that some countries have import duties for shrimp but not for prawns although in most localities they are considered to be the same product except for size.

Goa appears to be an excellent center for the development of the NIO. Four colleges affiliated with Bombay University are located in the area and in June, 1967, the Vice Chancellor of Bombay University announced that he would develop a center for advanced study for oceanography in Goa as the NIO evolves.

The common language of Goa is Konkani which is said to be without a script. It was noted in a local college publication that the section devoted to Konkani was written in scripts such as Hindi, Marathi, and Roman (as we do in English). Other sections are in English, Hindi and Marathi but there was nothing in Portuguese. Since scientists for the center will come from many Indian states it was stated that English would obviously be the language of the NIO.

#### COMMENTS:

- 1) Oceanographic research in India is well underway now on a very modest scale and the staff is made up mostly with young, well-trained, active scientists. The economic gains expected from oceanographic research are constantly in mind in the laboratories and the scientists know what they are doing and why the work is important. The laboratories are not overloaded with peons and gardeners and other non-productive classes of personnel that are found in many Indian institutions.
- Laboratory facilities are modest for the work now in progress but it is expected they will be greatly augmented when the new center is developed at Goa.
- 3) USG agencies that are interested in cooperating with the NIO through excess rupees or other programs will probably get a very good return for money spent with well-chosen projects. The NIO will also greatly benefit from their cooperation.
- 4) There is a good deal of interest in oceanographic research in many Indian institutions besides the NIO. Some, such as the Tata Institute for Fundamental Research, are impatiently waiting for the NIO to get the R/V Anton Bruun or some other adequate vessel so that real new oceanographic work can be undertaken.

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- 5) The site chosen in Goa for the central laboratories of the NIO looks very good from many points of view. The scientists now there like the location which is developing also as a cultural and tourist center and is only 70 minutes from Bombay by air. All those contacted in Cochin, Ernakulam and New Delhi are anxious to move there.
- 6) A good deal of attention is paid in India to the development of the NIO research and development program. Project proposals come from all scientific levels in the NIO and other interested scientific organizations in India. They are discussed and approved by the National NIO Executive Council which is made up of 16 members including heads of leading scientists from several organizations such as the Tata Institute for Fundamental Research.

Members now include the Director of Scientific Research (Navy); Chief Hydrographer (Navy); Director, National Geophysical Research Institute; Director, Institute of Tropical Meteorology; President, Seafood Canners Association; Director-General CSIR; Director, NIO; etc. International groups also provide suggestions and help evaluate the NIO program. Even with all this superstructure for project clearance it appears that the new research scientists coming in have a suitable amount of freedom in working in their special fields of interest.

- 7) There is universal disappointment in the NOI and in other science centers that the GOI has not yet decided to accept the R/V Anton Bruun. In a few days it is expected that Captain D.C. Kapoor. Chief Hydrographer of the GOI Naval Hydrographic Office of Dehra Dun will inspect the Anton Bruun and pass judgment on whether it will be suitable for NIO purposes or not.
- 8) Because of economy drives in GOI science departments and the changes in overall management in the CSIR, in 1966, the NIO does not seem to enjoy the status it had previously in the CSIR. Dr. N.K. Panikkar was named Director of the NIO from the start but he is only now being transferred officially from the Ministry of Food and Agriculture to the CSIR. Previously, among other things, Dr. Panikkar developed the central (National) and state fisheries research and development centers (now not part of the NIO).

Some senior scientists including some in the CSIR feel that Panikkar is rather slow in developing his program and that he gives too much attention to details of the scientific program of the NIO rather than to its organization, planning, management and development.

This is, of course, a common complaint in developing science centers the world over particularly in situations like this where the top management is new, where committees have great power and where economies are being effected in the middle of a previously approved institute development program. Because of the widely publicized political and other problembs within the CSIR it is impossible to pass judgment now on the performance of Dr. Panikkar. At least in the scientific community where he is known he has a top reputation and his associates in the NIO all speak very well of him and several stated they joined the NIO only because Panikkar is the director.

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REF: STATE'S 126384

SUBJECT: "ANTON BRUUN"

GOI EXPECTS CAPT. D.C. KAPOOR, CHIEF HYDROGRAPY4 INDIAN NAWY, VISITING USA TO INSPECT "ANTON BRUUN" SHORTLY. WILL SEND DATE WHEN AVAILABLE. BOWLES

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# NATIONAL SCIENCE FOUNDATION OFFICE OF THE DIRECTOR WASHINGTON, D.C. 20550

March 8, 1968

MEMORANDUM FOR THE RECORD

Subject: Summary of ANTON BRUUN Status

This memorandum is a continuation of the saga of ANTON BRUUN. Continuity and pertinent background are provided in memoranda of December 8, 1967, December 21, 1967, and January 26, 1968 on the same subject.

Subsequent to the meeting at the offices of Bigham, Englar, Jones & Houston on January 25, 1968, at which time agreement was reached between all parties as to the cash settlement from Hartford, a suitable agreement concurred in by all parties was drafted by the legal representatives of Hartford, Alpine and the Foundation. A copy of this agreement is attached.

At a meeting in New York City, at the offices of Bigham, Englar, Jones & Houston, on March 5, 1968, five originals of the attached agreement were signed and duly certified by authorized representatives of Hartford, Alpine and the Foundation. Attending this meeting were:

- Mr. H.E. Martini, Hartford Fire and Insurance Company
- Mr. Daniel A. Sullivan, Attorney for Hartford
- Mr. Joseph E. Biancheri, Assistant Attorney for Hartford
- Mr. Archie Roberts, Vice President of Alpine
- Mr. J. Hirshman, Director, Facilities Management Division, Alpine
- Mr. Robert Giuffra, Attorney for Alpine
- Mr. W. W. Bolton, Jr., Contracting Officer for the Foundation
- Mr. Daniel Hunt, Jr., Project Manager for ANTON BRUUN

At the time of the signing of this agreement, Mr. Martini of Hartford turned over a check for \$500,000, made out to Alpine Geophysical Associates and their attorneys. A copy of the check is attached. The significant part of the attached agreement, other than the payment of \$500,000, is that Hartford will holdthe Government and Alpine harmless from any action or costs incurred by Bushey regarding ANTON BRUUN until midnight of March 22, 1968.

Alpine has been instructed to commence the preparation of detailed specifications for the complete restoration of ANTON BRUUN. These specifications will combine the original overhaul specifications (estimated to be approximately \$160,000) with newly prepared specifications derived from the detailed survey of casualty damage to the ship (estimated to be approximately \$350,000 to \$400,000). Alpine has also been instructed to make preparations and to take action to move ANTON BRUUN from Bushey's shipyard. This will involve obtaining suitable pier space in the New York area and arranging for adequate hotel services. This will also require Bushey to replace the parts removed from equipment aboard ship and to load aboard ship or in vans the spare parts and loose equipment that have been stored in Bushey's warehouses.

After preparation of the specifications by Alpine and after their review by Foundation cognizant offices, Alpine may negotiate directly with Bushey or send these specifications to designated qualified shipyards in the New York area for quotations. The foregoing is dependent upon an affirmation from the State Department that India is anxious to proceed with the proposed transfer of ANTON BRUUN and willing to accept the conditions which will formulate the basis of an agreement as outlined in earlier correspondence. Messrs. Pollack and Richmond of the Scientific Section of the State Department have been contacted with regard to ANTON BRUUN status and have been asked to obtain, as soon as possible, India's position on the proposed transfer. Not only have more than eight months elapsed since the casualty, but, by recent transmittal from our Ambassador in India, there is a question as to whether India still desires ANTON BRUUN or can afford to support its operation and maintenance. Now that settlement has been reached, we estimate that a safe, reliable and useful ship can be delivered. We need to know India's position prior to further expenditure of effort or contractual commitment on the ship. We should expect India's wholehearted, enthusiastic acceptance of the original proposed terms of the transfer as a minimum requirement, or else cancel the program.

The State Department is sending a strong transmittal to our Ambassador in India explaining that a settlement has been reached and requesting a statement from the Government of India by March 15. We are hopeful of receipt of an answer sometime during the week of March 18th, at which time the ANTON BRUUN should be located away from Bushey's shippard and berthed at our expense and under our control. There have also been statements from India for the past several months that a senior naval officer will inspect ANTON BRUUN. It is assumed that he will be the representative from India who will provide the final decision for the Indian Government. The last transmittal indicated that such an officer would be here in early 1968 but, as yet, there has been no indication nor schedule of his visit. We have also asked the State Department to expedite this item.

Should the transfer of ANTON BRUUN to India proceed as originally scheduled, the following is a rough time schedule:

March 1968 -- complete work specifications

April 1968 -- negotiate with selected shipyard for performance of work

May thru Sept. 1968 -- overhaul of ship

Oct. 1968 -- transfer of ANTON BRUUN to India.

Should the transfer not proceed due to a reconsideration of ANTON BRUUN's acceptance by India, or an excessive cost for overhaul work, recommendations will be made to the White House to cancel the proposed transfer of ANTON BRUUN to India.

Daniel Hunt, Jr.

#### Attachments

cc: Dr. Haworth Mr. Brown Mr. Pollack (State)
Dr. Wilson Mr. Schurman Mr. Richmond (State)
Dr. Robertson Mr. Sheppard Mr. Charles Johnson (White Dr. Carlson Mr. Bolton House Staff)
Dr. Spencer Mr. Phillips

Asonteng 22

January 30, 1968

NOTE FOR MR. HAMILTON

Ed --

FYI. As soon as the Memo of Understanding has been accepted and the \$500,000 is in hand, we should talk about the next steps. Meanwhile, it might be useful to get State at work on the political problem of whether or not we want to follow through on the transfer to India. I will tell Richmond we will be asking State for an evaluation and recommendation shortly. ..

Charles E. Johnson

Attachment

(Handwritten) \* I have done so. Richmond will check L and the India desk and get together with NSF. He'll keep me informed. There may be a budget problem in the GOI.

Mr. Charles Johnson The White House

# NATIONAL SCIENCE FOUNDATION OFFICE OF THE DIRECTOR WASHINGTON, D.C. 20550

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February 1, 1968

#### MEMORANDUM FOR THE RECORD

Subject: ANTON BRUUN Status

To clarify the Memorandum for the Record on the summary of ANTON BRUUN status, dated January 26, 1968, at the top of page 3, an additional condition should be added:

(4) Should any factor cause the proposal to transfer ANTON BRUUN to India, or feasibility of repairing and rehabilitating ANTON BRUUN to change, be postponed or cancelled, the disposition of the funds would be specified by the U.S. Government.

SIGNED

Daniel Hunt, Jr.

cc: Dr. Haworth

Mr. Charles Johnson (White House Staff)

Dr. Wilson

Mr. Addison Richmond (Department of State)

Mr. Brown, OGC Mr. Bolton, AM NATIONAL SCIENCE FOUNDATION OFFICE OF THE DIRECTOR WASHINGTON, D.C. 20550

File Pending

January 26, 1968

MEMORANDUM FOR THE RECORD:

Subject: Summary of ANTON BRUUN Status

The recent events concerning ANTON BRUUN are summarized in my memoranda of December 8 and 21, 1967. Attached are three reports which are pertinent to a meeting held on January 25th in New York City between principal parties concerned with ANTON BRUUN settlement:

- "Status of the M/V ANTON BRUUN," dated January 26, prepared by Robert J. Giuffra, Legal Counsel for Alpine
- (2) Diary Note, dated January 19, 1968, prepared by Charles F. Brown
- Memorandum of Understanding, prepared at New York conference of principals on January 25, 1968.

The meeting in New York City on January 25, 1968 at the offices of Bigham, Englar, Jones & Houston was held principally due to the efforts of Mr. Giuffra in trying to get an audience of a key individual of Bushey's underwriters, Hartford Fire Insurance Company. The meeting was attended by:

Mr. Wilbur W. Bolton, Jr.

Mr. Charles F. Brown Mr. Daniel Hunt, Jr.

National Science Foundation

Mr. Julius Hirshman

Alpine Geophysical Associates, Inc.

Mr. Robert J. Giuffra,

Attorney for Alpine

Mr. Joseph E. Biancheri Mr. H. E. Martini

Hartford Fire Insurance Company

Mr. Christopher E. Heckman

of the office of Foley & Martin

Attorneys for Ira S. Bushey & Sons, Inc.

Daniel A. Sullivan

Attorney for Hartford Fire

2 -

Mr. Sullivan initiated the discussion in the morning and reiterated Hartford's previous offer of \$450,000. He then reviewed the breakdown of the costs required to restore ANTON BRUUN to her pre-casualty condition:

\$722,500	Estimate for detailed survey of damage	
-75,000	Less reduction due to modified electrical system work	
\$647,500	Net Survey Damage	
-83,964	Less portion of \$160,000 overhaul work estimated to be duplicated	
\$553,806	Net	
20,000	Estimate of damaged spare parts	
\$583,806		
-56,000 Less cost of cleaning and preservat: included in survey cost		
\$527,806	Net	

After a general discussion among all representatives on the above components of costs, liability for the casualty, value of ANTON BRUUN, possible future litigation, and general philosophy, the representatives of Hartford adjourned from the conference room to conduct private discussions. Upon their return, Mr. Martini, the corporate official from Hartford, stated that Hartford was prepared to make an offer of \$500,000 with no strings attached, such funds to be used for the repair and rehabilitation of ANTON BRUUN or however else the Government desired to use them. All parties then adjourned with final discussions to take place after lunch.

Foundation representatives checked with the Director in regard to accepting Hartford's settlement offer of \$500,000 under the following conditions:

(1) The amount to be paid into an escrow account under the control of Alpine and sole use to repair and rehabilitate ANTON BRUUN

- (2) Mutual releases to be executed by all parties which would also include absolvement of all from previous claims
- (3) The Foundation and Alpine to have sole control of the funds being provided by Hartford and would specify the work to be done on ANTON BRUUN and would determine whether it would be done by Bushey or at some other shipyard.

The Director agreed that we could accept the offer.

The discussions resumed after lunch and the Foundation agreed to the settlement offer of \$500,000. Prior to this settlement becoming binding, releases must be secured by the parties concerned, particularly that of Bushey. In this connection, a Memorandum of Understanding was drafted and distributed to those concerned. A copy of this is attached. Mr. Biancheri estimated that the negotiations and releases with Bushey should be concluded within five days. If such is concluded to satisfaction, in accordance with the Memorandum of Agreement, the Foundation and Alpine would have up to 30 days in which to prepare specifications for repair of ANTON BRUUN and determination as to whether the work be accomplished at Bushey or some other shipyard.

Assuming that the necessary releases will be executed, and the \$500,000 will be offered and accepted, the following considerations and plans are enumerated:

- (1) Bushey is the logical shipyard to continue the work on ANTON BRUUN due to the shipyard's familiarity with the ship, the shipyard's storage of spare parts and other material, plus miscellaneous machinery items being stored in Bushey's shops as a result of cleaning and preservation after the casualty. We would expect to negotiate with Bushey for work under a revised set of specifications conforming to previous estimates or prevailing competitive prices.
- (2) We estimate that the \$500,000, plus the original \$160,000 for overhaul, will be sufficient to adequately repair casualty damage and place ANTON BRUUN in a reliable, seaworthy, and useful condition. About four weeks will be required to completely revise the specifications.

- (3) An estimate will be prepared as to the total estimated cost to the Government for transfer of ANTON BRUUN to India indicating what additional costs have been required due to the casualty. (For instance, the prime contractor's cost for managing the ship since July 1, and the future management required for the estimated length of repairs and transfer.)
- (4) An over-all plan will be prepared for transfer of ANTON BRUUN to India in consultation with the White House Staff and the Department of State.

Daniel Hunt, Jr.

#### Attachments

cc: Dr. Haworth

Dr. Wilson

Mr. Brown Mr. Bolton Mr. Charles Johnson (White House Staff)
Mr. Addison Richmond (Department of State)

## STATUS OF THE M/V ANTON BRUUN

January 22, 1968

The undersigned recently attended a conference with the attorneys for the underwriters in an effort to establish certain guidelines for the scheduled conference of January 25, 1968 with the representative of Hartford Insurance Company.

During the course of the discussions, the attorneys maintained that there was no negligence on the part of the Yard. They maintained that some unknown third person came on board the drydock between 8 to 12 P.M. and opened the six inch line in compartment #2 East to the drydock after which they broke the reached which operated the valve. They maintained that they personally interviewed and discussed the matter in great detail with the Yard's personnel, who confirmed that the valve was properly closed at the time the drydock was raised. The underwriter's position is further substantiated by a metallurgist report to the effect that the reached was recently broken from a force outside of the drydock.

The attorneys also raised the question concerning the valuation of the vessel in relation to the damages.

The report of Pete Larsen pointed out the fact that the open six inch valve and broken reachrod, in itself, would not have caused the sinking of the drydock if the two inch drain line located in the #2 East Compartment had not been left open. The shut-off valve on this line was inoperable, due to the fact that one of the prongs activating the hand wheel was totally rusted away. Other factors contributed to the sinking of the drydock, including the feature of leaky bulkheads between compartments which permitted large amounts of water to collect in the pontoon. Larsen also pointed out that there were numerous openings to the outside between the wings and pontoon which coupled with a leaky deck would admit a large volume of water into the pontoon when this point reached the water level.

In addition, during the course of the survey, it was found that in the flood gate for compartment #4 East, a 5/8th of an inch rope was caught in the gate, which permitted a considerable amount of water into the pontoon.

crandall's report confirmed that it would take approximately 3 1/2 to 4 hours of leakage for the dock to sink down on one side before the wing was completely submerged. He also pointed out that no large leakage was required to capsize the drydock. Crandall states that the rotation of the list from 2 to 24 feet would only take 10 to 20 minutes.

Assuming the correctness of these reports, I do not believe that if we were to proceed to litigation,

that a Court would find any basis for Bushey's contention that a mysterious third person opened the six inch valve and subsequently broke the reachrod. I do not believe that this testimony would be credible. Moreover, this position fails to take into consideration the contractual obligation of the Yard to maintain an adequate and proper watch over the vessel. The survey damage I believe we can agree amounts to \$592,000.00, however, no provision was made for any latent or undiscovered damages which may corop up during the course of the survey work. In addition, the report does not contain any reference to the spare parts in the approximate value of \$20,000 which was lost with this casualty. The minimum figure exclusive of consequential and other damages which were incurred because of this loss, would amount to \$612,000.00. The attorneys for the underwriters in their recent conference, stated that they were prepared to recommend the sum of \$450,000. During this recent discussion with them, I pointed out that this figure was completely unacceptable to Alpine and the Foundation. I also pointed out that settlement on this basis would permit Bushey to recover in full all of its additional expenses and at the same time put the Foundation in the position of absorbing all of its consequential damages.

I get the impression that the attorneys would recommend somewhere in the neighborhood of 80-85% of the survey damages in order to dispose of this matter at the present time. However, it must be pointed out that the Foundation would have to absorb all of the additional expenses incurred, together with the latent items.

January 19, 1968

#### DIARY NOTE

Subject: The R/V ANTON BRUUN

Mr. Giuffra called at 4:30 on January 19, 1968 to say that he had just concluded a meeting with counsel for the underwriter for Bushey. A meeting has been set up for Thursday, January 25, 1968 at 10:30 in New York at the office of the counsel for Hartford Insurance at which, it is claimed, a person with authority to settle the case on behalf of the underwriter will be present.

In today's sparring, Giuffra said that the underwirters advanced the theory that their policy covering this damage would be avoided if the drydock were unseaworthy. They also made a claim that an outside party entered the yard and opened the valve which caused the drydock to capsize. They claim to have a metallurgist's report stating that the valve control, found by Pete Larsen in an open position, was broken by an external force. This theory would also, they claim, somehow relieve them of all liability.

Mr. Giuffra suggested that we send a delegation (Hirshman may or may not be there but some Alpine representative will be there) prepared to accept a settlement if agreement can be reached as to an amount.

Mr. Giuffra said that he had used in today's conference most of the arguments that we have used repeatedly in the past and clung to the minimum figure of \$612,000.

Charles F. Brown

cc: Mr. Hunt Mr. Bolton

## January 25, 1968

MEMORANDUM FOR MR. DANIEL HUNT, MR. WILBUR W. BOLTON, JR., MR. CHARLES F. BROWN, National Science Foundation MR. JULIUS HIRSHMAN, Alpine Geophysical Associates, Inc. MR. ROBERT J. GIUFFRA, Attorney for Alpine MR. JOSEPH E. BIANCHERI, MR. H. E. MARTINI, Hartford Fire Insurance Company MR. CHRISTOPHER E. HECKMAN, of the office of Foley & Martin Attorneys for Ira S. Bushey & Sons, Inc. DANIEL A. SULLIVAN, Attorney for Hartford Fire

a meeting at the offices of BIGHAM, ENGLAR, JONES & HOUSTON on January 25, 1968 concerning the capsizing and damage to the R/V ANTON BRUUN on July 1, 1967 while in drydock No. 4 at the Ira S. Bushey & Sons, Inc. shipyard at the foot of Court Street, Brooklyn, N. Y. it is agreed as follows:

In consideration of the undertaking by Hartford Fire Insurance Company to bear the cost of repair of said vessel in the amount of \$500,000 which amount will be paid by Hartford Fire Insurance Company into an account under the control of Alpine upon execution of the mutual releases hereinafter provided for,

IT IS FURTHER AGREED that releases will be exchanged whereby Alpine Geophysical Associates, Inc. and National Science Foundation

will release Ira S. Bushey & Sons, Inc. and Hartford Fire Insurance Company and its subsidiary companies for all claims arising out of the capsizing and damage to the aforesaid vessel on July 1, 1967,

IT IS FURTHER AGREED that Ira S. Bushey & Sons, Inc. and Hartford Fire Insurance Company and its subsidiaries will release Alpine Geophysical Associates, Inc. and National Science Foundation from all claims which they may have arising out of the above mentioned occurrence to capsizing and damage from the date of March 1, 1968.

Ar Armston

December 21, 1967

Return to cefol

### MEMORANDUM FOR THE RECORD

Subject: Summary of ANTON BRUUN Status

The following is a summary of events to date following the summary given in my memorandum dated December 8, 1967. The latter memo explained that the underwriters had tentatively offered \$564,000 as a settlement for ANTON BRUUN. We instructed Alpine and their lawyers to relay to the underwriters that we could not settle for less than approximately \$634,000.

On December 19th, in phone conversations with Mr. Robert Giuffra, Legal Counsel for Alpine, Mr. Giuffra stated that he had been in contact with Mr. Heckman, legal representative of the underwriters and Bushey, and had relayed to him that the settlement required by the Government was in the neighborhood of \$634,000 to \$643,000. The variation of \$10,000 is due to the continuing costs required to be paid by the Government to Alpine as long as the ANTON BRUUN situation is not settled. Mr. Giuffra relayed Mr. Heckman's statement that the settlement was under active consideration and that there was a possibility he would have an answer by Friday, December 22nd. Immediately following Mr. Giuffra's call, I was called by Mr. Francis Bushey, President of the Bushey Shipyard. Mr. Bushey stated that things were moving slowly and that if he could be of any assistance in helping to reach a settlement or solution to the ANTON BRUUN case, he would be happy to do so. He stated that the offer of \$564,000 by Mr. Heckman included \$56,000 due to Bushey for cleaning and preservation of ANTON BRUUN. He further put forth the possible proposal for our consideration of the underwriters offering a cash settlement of \$450,000 with no further strings attached. He said that he was under the impression that the underwriters wanted to settle this case prior to the end of the calendar year, and if he could be of any assistance in this regard, he would be happy to arrange for a meeting in New York or in Washington between all parties concerned. In several subsequent conversations, I advised him of our position and what had taken place to date and that we would be happy to meet with him and his representatives, preferably in Washington if he thought progress could be made toward reaching settlement. We arranged a meeting at the

Foundation for Wednesday, December 20, at 10 o'clock between the principal parties involved. Mr. Bushey stated that he at least hoped that he could shed light on the various components of cost involved, such components being confusing and misunderstood by all.

At 10 o'clock on Wednesday, December 20, the following met at the Foundation to discuss ANTON BRUUN's settlement:

Mr. Francis Bushey, President of Bushey Shipyard Mr. Nicholas Crisser, Whitehall Brokerage Representative for Bushey

Mr. Robert Giuffra, Admiralty Legal Counsel to Alpine

Mr. W. W. Bolton, Jr., Contracting Officer Mr. Charles Brown, Deputy General Counsel

Mr. Daniel Hunt, Jr., Special Assistant to the Director

Mr. Bolton placed on the blackboard our estimate of the elements comprising a satisfactory settlement as follows:

\$722,500	Estimate for detailed survey of damage
-56,000	Less Bushey's costs for cleaning
666,500	and preservation which were included in detailed survey
<b>-74,</b> 500	Less reduction due to proposed modified electrical system
592,000	Net ship repair cost
+20,000 +50,000	Estimate for damaged spare parts Estimate of consequential costs paid to Alpine
662,000	Settlement required
+77,000	Overhaul work not included in damage survey to be funded by NSF
\$739,000	Total value of amended contract for repair and overhaul of ANTON BRUUN

The above settlement figure of \$662,000 is interpreted by the Government to be a figure clear of all encumbrances and to place ANTON BRUUN in its pre-casualty condition. The Foundation would utilize the additional \$80,000 under the original \$160,000 overhaul subcontract to take care of consequential costs (due to the fact that the ANTON BRUUN situation was no fault of the Government) and to fund future uncovered defects due to the casualty.

After several hours of adding, subtracting, and substituting all component costs which have been delineated over the past six months due to the ANTON BRUUN casualty, it became evident that no matter which way the costs were determined, the minimum settlement that could possibly be accepted or negotiated as a free and clear settlement from the insurance company, would be between \$600,000 and \$650,000. The figure of \$612,000 was the predominant result of all reasonable mathematical combinations and permutations. The estimated amount of \$77,000 which depicts the costs of overhaul work not covered by the damage to ANTON BRUUN, would be added by the Foundation to the \$612,000 insurance settlement to make a total of \$689,000 available for ANTON BRUUN work and allowance for damaged spare parts. The Foundation stated that if this settlement figure were agreed to, this total amount of money would be used under our control under the provisions of the subcontract for restoration of ANTON BRUUN to an acceptable condition and that if it turned out that less money were needed, such would be a reimbursement to the underwriters. This was the final position of the Foundation and Messrs. Bushey and Crisser were to be in contact with Mr. Heckman as soon as possible, and presumably, the results of any possible settlement would be related to Mr. Giuffra.

The Foundation emphasized to Mr. Bushey that this case has been unduly delayed toward reaching a settlement. It was also emphasized that the plan to transfer ANTON BRUUN to India, as approved by the President, was a bona fide program still endorsed strongly by the U.S. Government and desired by the Government of India. Mr. Bushey was advised that Dr. Panikkar from India would be in this country commencing early 1968 and would be given an opportunity to inspect ANTON BRUUN. Also, that India was prepared to send their acceptance team to this country upon receipt of planning information.

If a satisfactory settlement is not reached soon, the Foundation plans to turn the entire matter over to the Department of Justice.

## Daniel Hunt, Jr.

cc: Mr. Sheppard Mr. Bolton

Mr. Hoff Mr. Brown Mr. Schurman
Dr. Haworth
Dr. Wilson
Mr. Phillips

Mr. Addison Richmond Mr. Charles Johnson Dr. Wallace Joyce December 8, 1967

### MEMORANDUM FOR THE RECORD

Subject: Summary of ANTON BRUUN Status

On Friday, December 1, 1967, a meeting took place in the Foundation with representatives of Alpine, our prime contractor for managing ANTON BRUUN under Contract C443. Present at this meeting were:

Mr. Julius Hirshman, Alpine

Mr. Peter Larsen, Alpine Consultant Marine Engineer

Mr. Robert Giuffra, Consultant Admiralty Lawyer

Mr. W. W. Bolton, Jr., Contracting Officer Mr. Charles Brown, Deputy General Counsel

Mr. Joseph Schurman, Office of the General Counsel

Mr. M. T. Phillips, Contracts Office

Mr. S. Franko, Contracts Office

Mr. D. Hunt, Special Assistant to the Director

The purpose and the background of this meeting is summarized in my memorandum to the Director of November 29, 1967, which was instigated by an indication from the underwriters that they were willing to reach a settlement on ANTON BRUUN. At this discussion, the background and points outlined in my memorandum of November 29 were discussed. During the course of the discussion, Mr. Giuffra made a phone call to Mr. Heckman, the legal representative for the underwriters (Hartford Insurance Company) and Bushey Shipyard, in order to ascertain the settlement figure which the underwriters were thinking of. From Mr. Giuffra's conversation with Mr. Heckman, a figure of approximately \$564,000 was mentioned as the amount which the underwriters are willing to settle for.

We ascertained that this figure was arrived at in the following manner:

Estimate for detailed survey of damage	\$722,500
Less reduction due to modified electrical system work	-75,000
Net survey estimate	647,500
Less portion of \$160,000 overhaul work estimated to be duplicated	-83,500
Total	\$564,000

The result of the above discussion was that Mr. Giuffra was to contact Mr. Heckman on Tuesday, December 6, and discuss in general terms the following additional considerations:

- (1) Reimbursement for damaged spare parts, estimated to be \$20,000
- (2) Consequential costs to the Foundation of Alpine's continuing management responsibilities due to the casualty amounting to approximately \$50,000 (June through November)
- (3) Incorporation of agreed-upon survey into existing overhaul specifications
- (4) Responsibility of underwriters and Bushey for undiscovered defects not included in the survey and which undoubtedly would be found during the course of repair and overhaul
- (5) Administrative procedures for repair of the ship, principally those concerned with specifications and "boiler plate" to the specifications, referring mainly to control of work by Alpine and Foundation in regard to deleting and substituting items within the specifications and itemized cost breakdown.
- (6) Necessity of a performance bond.

I called Mr. Hirshman on Wednesday, December 6, in order to ascertain the results of the foregoing meeting between Messrs. Giuffra and Heckman. Unable to reach Mr. Heckman, I contacted Mr. Giuffra. Mr. Giuffra gave the following report of his meeting with Mr. Heckman.

- (1) Mr. Heckman stated that he would recommend to the underwriters that the existing settlement offer not be changed.
- (2) Mr. Heckman indicated a possibility of a cash settlement and the Foundation take custody of

ANTON BRUUN. He made the statement that Bushey and underwriters were of the opinion that the ship would never be repaired if a cash settlement were made.

- (3) Mr. Heckman indicated he felt that there would be no problem in incorporating the survey into the overhaul specifications and that there would be no problem in Alpine controlling the work as presently specified in the overhaul specifications. Mr. Heckman indicated he thought there would be no problem in solving the spare parts situation.
- (4) Mr. Giuffra proposed to Mr. Heckman that insofar as undiscovered defects were concerned, that a proportional agreement be worked out.

The result of this meeting was that Messrs. Giuffra and Heckman would think about the adjustments to be made and be in contact with each other very soon. Mr. Giuffra indicated that he may talk to Mr. Heckman on Thursday, December 7, 1967.

Mr. Giuffra asked if we had any other ideas toward reaching settlement. I stated that he should pursue the course of action we had previously agreed upon with further talks with Mr. Heckman and that he could reaffirm the Government position of definitely going ahead with the too long delayed proposal to turn over ANTON BRUUN to India, as approved by the President, as soon as a satisfactory course of action was agreed upon.

As to a final agreement, if the underwriters are to be relieved of any further responsibility, which is apparently their desire, I recommend that as a minimum we should eventually arrive at the following as a satisfactory arrangement:

(1) Accept the \$564,000 settlement for placing ANTON BRUUN in its precasualty condition in accordance with the previously agreed-upon and priced-out survey.

- 4 -

- (2) Reimbursement of \$20,000, or agreed-upon price, after mutual survey, for damaged spare parts.
- (3) Reimbursement for approximately \$50,000 of consequential costs for Alpine's administration from July 1st to December 1st.
- (4) Incorporation of survey into existing overhaul specifications with additional "boiler plate" added as necessary. (This means that Alpine and the Foundation will be able to delete any items of repair they deem necessary and apply the savings to other areas. )
- (5) An adequate time of performance must be agreed upon.
- The need for a performance bond should be (6) investigated.
- (7) In lieu of (2) and (3) above, an alternative proposal is for the underwriters to settle for the \$564,000, plus the \$83,500 estimated duplicative work and the Government would absorb the above \$70,000.

The above agreement means that the Foundation will be willing to take responsibility for undiscovered defects. In discussions with Alpine and Mr. Peter Larsen, the consulting marine engineer, and in view of the agreed-upon survey, it is deemed that the Foundation can agree to this without undue risk ...

In discussions with Mr. Charles Johnson of the White House Staff and Mr. Addison Richmond of the State Department, both reaffirmed that the proposal approved by the President to transfer ANTON BRUUN to India should proceed as planned and all efforts to arrive at a satisfactory agreement to achieve that objective should be made. Mr. Addison Richmond stated that in light of new developments, he would wire the Embassy in India for a reaffirmation of India's interest.

Daniel Hunt, Jr.

cc: Mr. Bolton

Dr. Haworth

Mr. Charles Johnson

Mr. Hoff

Dr. Wilson Mr. Phillips Dr. Wallace Joyce

Mr. Brown Mr. Schurman

Mr. Addison Richmond

# NATIONAL SCIENCE FOUNDATION OFFICE OF THE DIRECTOR

October 23

For your information.

Daniel Hunt, Jr.

Anton Bruun General Counsel

October 18, 1967

Special Assistant to the Director

ANTON BRUUN

Attached, for your information, is a Dougherty, Ryan, Mahoney, & Pellegrino letter, dated October 13, 1967, signed by Mr. Robert J. Giuffra, and sent to Mr. Julius Hirshman of Alpine Geophysical Associates, summarizing Mr. Giuffra's discussion with the attorney representing both Ira S. Bushey & Sons and their Hartford Underwriters. This discussion concerned our October 4, 1967, letter to Alpine in which we indicated the book value of ANTON BRUUN and the independent evaluation of the value of ANTON BRUUN conducted by the underwriters.

Mr. Giuffra stated that there is a possibility that prior to ANTON BRUUN being converted in 1962, an evaluation had been placed by U.S. Salvage, Inc., upon request of the U.S. Government. We will attempt to locate such information if it exists in the files.

We are also trying to find a copy of the specifications for the conversion of ANTON BRUUN in 1962 in order to further validate the capital investment in the ship at that time. It is interesting to note that Mr. Giuffra states that it was his definite impression that if the Government were to supply satisfactory proof concerning evaluation of the ship, that the underwriters might be amenable to the funding of the full restoration of the ship to its precasualty condition without further delay or possible future litigation. I assume we will discuss this subject at your ten o'clock meeting tomorrow morning with the Department of Justice.

### New Subject

I received a call today from Mr. Roy Leifflen, attorney for Bigham, Engler, Jones & Houston, a legal firm in this city. He stated that his firm is representing, in Washington, the Hartford Underwriters for Bushey in regard to establishing

the value of ANTON BRUUN. He requested information as to the history of ANTON BRUUN and the proposal for transferring. the ship to India. I related to him the history of ANTON BRUUN from its early days to the present including all significant phases of ANTON BRUUN's life. He, naturally, was particularly interested in the value of the ship and I told him that when the WILLIAMSBURG was prepared as a Presidential yacht that there was a considerable investment of funds. I also emphasized that when the ship was transferred from Navy to the National Science Foundation for the IIOE, that the best information showed that it had a book value of approximately \$1 million at the time of transfer and that we expended approximately \$1 million for the conversion to a biological oceanographic ship, emphasizing the installation of winches, electronic equipment and laboratories.

Daniel Hunt, Jr.

cc: Dr. Haworth

Dr. Wilson

Dr. Carlson

Mr. Bolton

Mr. Phillips

Pend

# DOUGHERTY, RYAN, MAHONEY & PELLEGRINO Counsellors at Law

67 WALL STREET NEW YORK, N.Y. 10005

October 13, 1967

THOMAS M. DOUGHERTY

JOSEPH M. CUNNINGHAM

944-6490 CABLE DORYMAY

Alpine Geophysical Associates, Inc. 65 Oak Street Norwood, New Jersey 07648

### Attention: Mr. Julius Hirschman

Re: Alpine Geophysical Associates, Inc.
v. Ira S. Bushey & Sons, Inc.
R/V "ANTON BRUUN"
Our File No. 3541

Gentlemen:

LAWRENCE J. MAHONEY

ROBERT M. PELLEGRINO

JAMES B. WALLACE, JR. TERENCE J. CONNORS

MARGARET M. RYAN

ROBERT J. GIUFFRA

This will confirm our recent telephone conversation wherein we advised that we discussed the matter in detail with the attorney representing both Ira S. Bushey and their Underwriters.

At the conference we submitted to opposing counsel a copy of the National Science Foundation's letter of October 4, 1967 wherein they indicated the book value of the RV "ANTON BRUUN". The letter in itself, did not satisfactorily answer the questions raised concerning the value of the vessel. However, we pointed out to counsel that the RV "ANTON BRUUN" had been converted, in 1962 into an oceanographic research vessel at a substantial cost. In addition that further capital improvements were made in 1964 and 1965. We argued that these improvements would substantiate the book value of the vessel.

After further discussing the matter, counsel requested that we furnish him the specifications for the work accomplished in the noted years, and if possible, the invoices which were received. We do not see any objection to making this information available at the present time.

During the course of the discussions, we were advised that through independent sources the Underwriters had estimated that the value of the vessel is in the neighborhood of \$300,000. We were informed that this

We would like to be advised as soon as practical whether you and the Foundation agree with our recommendation. If you deem it advisable, we will be free at your convenience to further discuss the matter with your goodselves and the Foundation.

Very truly yours,

DOUGHERTY RYAN, MAHONEY & PELLEGRINO

RJG:pw

Mr Charles Distribution List October 10, 1967 Special Assistant to the Director Letter from State Department to Scientific Attache, New Delhi, re ANTON BRUUN Attached for your information is a copy of a letter from Addison E. Richmond, Jr., State Department, to Dr. Donald L. Fuller, Scientific Attache in New Delhi, dated October 5, 1967, concerning ANTON BRUUN. Daniel Hunt, Jr. Attachment cc: Dr. Haworth Dr. Carlson Mr. Hoff Mr. Bolton Mr. Charles Johnson (White House)

75Fju. Hunt

OFFICIAL-INFORMAL

661 5 1937

Dr. Donald L. Fuller Scientific Attache American Embassy New Delhi

Dear Dr. Fuller:

It's been some time since we have sent on anything substantive on the ANTON BRUUN, perhaps because little of a substantive nature has occurred of late. Anyway, a synopsis of the current situation does seem in order.

The BRUUN, as you know, was refloated in July and then chemically treated to preserve her from any further deterioration as a result of her immersion. This effort was successful. Unfortunately, there does not seem to be any equivalent formula to keep the legal situation from deteriorating.

A joint survey by NSF's contractor, the shipyard, and the insurance underwriters has produced an estimate of around \$650,000 to repair the damage (maily interior water damage) suffered. This figure would include complete replacement of the electrical system, thermal insulation and most of the inside "woodwork" paneling, workbenches, furnishings, etc. as well as some structural repairs. Accomplishment of this work, along with the originally scheduled overhaul, would result in a much improved ship having practically a brand new interior below decks.

LIMITED OFFICIAL USE

NSF has now requested the shipyard to begin the overhaul of the ship within sixty days. If there is no compliance, court action is a possibility. According to the Office of the General Counsel at NSF, it appears almost certain that the shipyard bears the responsibility for the accident and that the insurance would cover the damage, the real issue is the value of the ANTON BRUUN. NSF values the ERUUN at considerably more than the cost of repair, however, if the shipyard and underwriters can prove a lesser value in court it would lessen and possibly eliminate the amount of liability.

The Department is, of course, most interested in minimizing the legal maneuvering before the matter becomes completely mired (if suit is filed it could take two to three years before a decision) and L is looking into the possibility of our assisting in some way in expediting a solution. In any event it seems likely that matters won't move from dead center for another two months; I certainly hope that Indian interest in the BRUUN won't die out in the interim. We are still hopeful that the matter won't go to court and that the overhaul can begin by Christmas.

Enclosed is a copy of the <u>Mational Geographic</u> for October, 1967. The article entitled "Science Explores the Monsoon Sea" is quite good and contains several good pictures of the ANTON BRUUN in happier days. The special map supplement is excellent. Also enclosed is a copy of a letter from Mr. Shirdas Burman of the CSIR, concerning the Symposium on the Indian Ocean held in New Delhi in March of this year, which appeared in a recent issue of <u>Science</u>.

Sincerely,

Addison E. Richmond, Jr. Science Officer International Scientific and Technological Affairs

Enclosures:

cc: NEA/INC - Mr. Schaffer

LIMITED OFFICIAL USE

SCI - Dr. Joyce

SCI: AERichmond: dbu 10/5/67

As stated.

Clinch,

Per our

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Latest from Olpine
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following this up.

6 OCT 1967

Honorable Carl Eardley Acting Assistant Attorney General Civil Division U. S. Department of Justice Washington, D. C. 20530

Dear Mr. Eardley:

Thank you for your letter of September 22, 1967, concerning the R/V ANTON BRUUN which capsized on June 30, 1967.

We are indeed appreciative of the advice and assistance given to us by Mr. Gratkin of your Admiralty and Shipping Section in connection with the resistance by the Bushey Shippard to our assertions that they are liable for restoration of the ship. The impression stated by you in the last paragraph of your letter that we do not propose to refer the matter to you for litigation at this time is correct.

Consistent with Mr. Gwatkin's advice we have, in fact, caused our contractor, Alpine Geophysical Associates, to authorize Bushey to undertake the pierside work in accordance with the terms of the subcontract between Alpine and Bushey. A copy of this letter is enclosed. A copy is also enclosed of a letter from Mr. Bolton, Contracting Officer, to Alpine instructing them to take this position. As you are aware, this subcontract provides that the work shall be completed within sixty (50) days after receipt of such notice.

We have just received a transcription of a letter from Bushey to Alpine claiming the impossibility of complying with the contract terms as requested. I understand that Mr. Brown has informed Mr. Gwatkin of this letter and that Mr. Gwatkin will meet with us early next week to discuss what action to take. I am enclosing two copies of this transcription, one of which I hope you will pass to Mr. Gwatkin.

Very truly yours,

OGC:CFBrown:dma/bl/dma 10/6/67

cc: Mr. Bolton Mr. Hunt A/C Enclosures William J. Hoff General Counsel

### 10/5/67

Bea, Mr. Hirshman of Alpine called this afternoon and dictated the following letter for Mr. Hunt to see immediately. He asked that copies be sent to Joe Schurman, OGC.

Alpine will send Mr. Hunt the original letter.

Maydie

Letter to Alpine -- Subject: ANTON BRUUN

#### Gentlemen:

We have your letter of September 26 stating that you grant permission to commence the pier side work specified in your June 2, 1967 request for bids on which request our bid was submitted more than three months ago. Since that date the condition of the ANTON BRUUN has changed drastically. As you know, the cost of the work now necessary on the ANTON BRUUN is greatly higher than the amount of our bid, and a very substantial part of the presently required work involves the item described in the original specification. In view of the changed condition of the vessel, we must advise you that we require a new work order covering all work now necessary and containing the terms and conditions proposed in our letter of August 30, 1967.

We shall proceed with the work immediately upon receipt of a new work order covering all work now necessary and containing provisions for payment outlined in our August 30 letter. We await your further advice.

Very truly yours,

Ira S. Bushey



## ALPINE GEOPHYSICAL ASSOCIATES, INC.

OAK STREET, NORWOOD, NEW JERSEY 07648, U.S.A. Tel: (201) 762-2000 Telex: 125046 Cable: "ALPGEO"

September 26, 1967

Ira S. Bushey & Sons, Inc. 764 Court Street Brooklyn 31, New York

Centlemen:

. Re: R/V ANTON DRUUN

The contract between our respective concerns for the overhoul and drydocking of the R/V AMTON BRUUN provides, in accordance with the terms of our request for proposal of June 2, 1967, that the period of performance for all specified work shall be a period of sinty (60) calendar days from receipt of a letter giving permission to commone the pier-side work set forth in Section B of the specifications, and that the vessel shall be redelivered to the owner or operator in good order and condition within that sixty (60) calendar day period.

Permission is hereby granted to commonce the pierside work specified in the contract. Please take notice that the sixty (60) calendar day period within which all work is to be completed and the vessel-Kalivered to us in good order and condition shall commence as of the date of your receipt of this letter.

Very truly yours,

Walter C. Beckmenn President

WCB:EK

c/c √Mr. Daniel Hunt, Jr., NSF

September 21, 1967

Mr. Walter C. Beckmann President Alpine Geophysical Associates, Inc. 65 Cat Street Horsood, New Jersey 07648

Dear Mr. Bockmann:

This will confirm the position of the National Science Foundation pertaining to the Anton Bruum, and your subcentractor Bushey shippard, as discussed in the meeting here this morning.

The NSF does at this time assert that the ship must be rehabilitated and returned in good order and in condition meeting the specifications contained in the contract with Bushey. You are requested to take such action as necessary to accomplish that objective. The contract between Alpine and Bushey is still in effect, and they should be instructed to proceed with the plor side work. It is our opinion that Bushey is liable for the camage to the ship, and must restore it at no expense to the government above the price of the subcentract.

Should Bushey fail to perform the work under the contract or deny their liability for damage, we should be so advised in order that we may refer the case to the Justice Department for appropriate legal action.

Sincerely yours,

WILBUR W. BOLTON, JR.
Contracting Officer
Wilbur V. Bolton, Jr.
Contracting Officer

OPTIONAL FORM NO. 10
MKY 1002 EDITION
GSA FPMR (41 CFR) 101-11.0

UNITED STATES GOVERNMENT

# Memorandum

TO : Distribution List

Me andon Bonn

DATE: SEP 27 1967

FROM : Special Assistant to the Director

SUBJECT: Independent Evaluation of Casualty Concerning ANTON BRUUN

Attached letter from Crandall Dry Dock Engineers, Inc. dated September 6, 1967 is forwarded for your information.

Mr. Paul S. Crandall, one of the foremost drydock expects on the East Coast was retained by Alpine to provide an unbiased evaluation of the sinking of Bushey's drydock. The attached letter is his initial report.

Daniel Hunt, Jr.

Attachment

## Distribution List:

Mr. Bolton

Mr. Hoff

Mr. Phillips

Mr. Charles Johnson (White House)

Mr. Addison Richmond (State Dept.)



September 6, 1967

Alpine Geophysical Associates, Inc. 65 Oak Street
Norwood, New Jersey 07648

Attention: Mr. J. Hirshman

Dear Sire

On August 30, the undersigned flew to New York to inspect the floating dry dock No. 4 at Ira S. Bushey & Sons, Inc. Shipyard, Brooklyn, which had been involved in an instability accident with the ship "Anton Bruun" of National Science Foundation in July 1967.

Upon my arrival at the yard, I met you, Mr. Larsen, and Capt. Holm-Andersen. Because of mud conditions on the deck of the dock, we all were refused permission to go aboard. I did review the report of Mr. Larsen and concluded certain facts. On August 31 at 10:00 A.M., three of us were again refused admission to the dock, but finally at 1:00 P.M. permission was granted for a topside inspection only.

## My findings are as follows:

- The dock is a timber pontoon steel wing one-piece floating dry dock about 200 feet long over the pontoon and wings of about 2200 long ton capacity at one foot freeboard.
- 2. The wings have no safety deck to prevent excessive submergence.
- 3. The wing structure is relatively new and adequate for a dock of this size.
- 4. The pontoon structure is about 60 years old with some sheathing visible. It's blocking system is primitive but presumably adequate.

5. The leakage rate on one side with the dock empty is about 130 G.P.M. With a capacity vessel, this would increase to about 200 G.P.M.

It would therefore take about 3-1/2 to 4 hours of leakage for the loaded dock to sink down on one side until the wing was immersed.

 The sudden reduction of GM when the pontoon deck goes underwater causes a rapid multiplication of the list.

If we assume the GM full up to be 60 feet and the GM with deck submerged to be 5 feet, then a list of 2 feet would rapidly increase to 24 feet.

It is my opinion, therefore, that the capsizing of the dry dock was purely and simply a case of sudden multiplication of list with an initial list far too great. To put it another way, the list of the dock is caused by a moment due to excess interior water on one side. The ability of the dry dock pontoon to resist this moment is adequate so long as the pontoon deck is above water, but as soon as water begins to flood over the deck, the rotation is rapid. Then with the steep incline, the ship slipped off the blocks, tumbled and the ship crashed into the wing and dock floor. No large leakage was required but merely a large initial list or tipping moment.

When more particulars of the ship and dock are known, I will be able to work out more exactly the multiplication effect.

Floating dry docks are known to be more dangerous to operate in the sinking process than when lifting the same ship, and the casualty with the "Anton Bruun" is a case of an unintentional sinking from leakage on one side which creates the greatest instability in a very short time. I would estimate the rotation from 2 to 24 feet list to take only 10 minutes to 20 minutes.

Sincerely yours,

CRANDALL DRY DOCK ENGINEERS, INC.

Paul S. Crandall

September 27, 1967

### MEMORANDUM FOR THE FILES

SUBJECT: Discussion Concerning ANTON BRUUN

A discussion was held on September 21, 1967 on the status of ANTON BRUUN as a follow-up to the discussion of September 12, 1967 as summarized by memo for the file dated September 19, 1967. The discussion was attended by Mr. Wilbur Bolton, Contracting Officer; Mr. Charles Brown, OGC; Mr. Joe Schurman, OGC; Mr. Steve Franko, Contracts; Mr. Daniel Hunt, Project Coordinator; Mr. Gwatkin, Department of Justice; Mr. Julius Hirshman, Alpine; Mr. Peter Larsen, Alpine; and Mr. Bob Guiffra, Alpine's consultant admiralty lawyer.

### Pertinent Summary

- 1. Bushey's drydock #4 was drydocked in Todd Shipyard on Monday, September 18, 1967, and inspected by all parties concerned. Mr. Peter Larsen, consultant port engineer to Alpine who has been at Bushey Shipyard continuously since the casualty, reported on the inspection of the drydock and the probable cause of the casualty. A summary of his presentation follows:
  - a. The inspection of Bushey's drydock #4 while at Todd's removed the last vestige of hope that Bushey or their underwriters could have had that the sinking of the drydock was caused by some outside force as, for example, explosion or collision.
  - b. The drydock was structurally sound and with an estimated life of ten years or more if properly maintained.
    The heavy wood timbers of which the pontoon deck and
    tanks were constructed were in sound condition. That
    is, the wood was not deteriorated or rotten. The
    division walls providing the required compartmentation
    of the ballast tanks were in need of major repair due
    to excessive leakage, but this did not cause the
    casualty.
  - c. The casualty was believed to be caused by a combination of circumstances of leaking valves and valves left open. There are four large pumps in the drydock, two per side, which are piped and valved to the ballast tanks of the pontoon section through four 20" mains. Mr. Peter Larsen discovered, and has verifying photographs, that the main shut-off valve to one of

pumps was in the open position due to a broken reach rod. This valve being open would not have been fatal if all other valves had been closed. However, it was the practice of the drydock operation to leave the 2" priming and drain line to each of the pump housings in the open position. Also it was discovered that there was a piece of rope lodged in another sea valve which caused additional leakage. So the combination of (1) the broken and open shut-off valve allowing water to enter the pump housing and leak into one side of the drydock through the 2" priming line; (2) the sea valve stuck open with a piece of rope; (3) the normal leakage of the wood drydock; and (4) the possible lack of personnel vigilance at the start of the 4th of July weekend are considered to have caused the casualty. By observation and calculation it was estimated that the foregoing contributing material discrepancies caused the drydock to list to one side and reduce the freeboard by 13" in 6 hours. With the material discrepancies corrected, the normal leakage of the drydock caused a uniform reduction in freeboard of about 4" in 24 hours. Also, by calculation, it was estimated that as soon as the drydock had suffered sufficient list and loss of freeboard for water to flow over the pontoon deck, the stability of the dock became critical and it would take only 10 to 20 minutes for rapid sinking to take place. As a matter of explanation, the standard method for operating floating drydocks is to have a qualified watchstander or patrol who checks the draft marks hourly and keeps the drydock pumped out periodically to maintain a safe freeboard.

2. Mr. Gwatkin, Department of Justice, discussed at length the admiralty law aspects of this case, his interpretation of the overhaul contract between Alpine and Bushey, the operational characteristics of underwriters, the relationships between the parties involved, and the position of the U. S. Government. His recommended position can be summarized by the statement, "You damaged our vessel; you fix it!" Underwriters will do all possible to avoid payment of insurance claims. Their philosophy is to delay as much as possible, using all tactics, the payment of any claim.

Mr. Gwatkin agreed that the contract with Bushey for overhaul of ANTON BRUUN is not yet in default due to lack of authorization to proceed with pierside work (Phase B of contract). He proposed that a letter be sent by Alpine to Bushey authorizing Bushey to proceed with the pierside work. A draft of Mr. Gwatkin's letter is attached.

- 3. It was agreed by all parties that this proposed letter should be sent after Alpine's conference with Bushey and interested parties. This proposed meeting has now been scheduled for Monday afternoon, September 25, 1967.
- 4. Mr. Bolton, Contracting Officer, presented Alpine with a signed letter stating the Foundation's position regarding ANTON BRUUN and directing Alpine to report to the Foundation should Bushey fail to perform their contract work or deny their liability for damage. This advice is necessary in order to refer ANTON BRUUN case to the Justice Department for appropriate legal action should such be necessary. A copy of Mr. Bolton's letter is attached.

Daniel Hunt, Jr.

cc: Dr. Haworth

Dr. Wilson

Mr. Bolton

Mr. Brown

Mr. Hoff

Dr. Newton

Mr. Phillips

Mr. Schurman

Mr. Charles Johnson (White House)

Mr. Addison Richmond (State Dept.)

September 21, 1967

Er. Walter C. Beckmann
President
Alpine Geophysical Associates, Inc.
63 Oak Street
Norwood, New Jersey 07648

Dear Mr. Beckmann:

This will confirm the position of the National Science Foundation pertaining to the Anton Bruun, and your subcontractor Bushey shippard, as discussed in the meeting here this morning.

The NSF does at this time assert that the ship must be rehabilitated and returned in good order and in condition meeting the specifications contained in the contract with Bushey. You are requested to take such action as necessary to accomplish that objective. The contract between Alpine and Bushey is still in effect, and they should be instructed to proceed with the pier side work. It is our opinion that Bushey is liable for the damage to the ship, and must restore it at no expense to the government above the price of the subcontract.

Should Bushey fail to perform the work under the contract or deny their liability for damage, we should be so advised in order that we may refer the case to the Justice Department for appropriate legal action.

Sincerely yours,

WILBUR W. BOLTON, JR.
Contracting Officer
Wilbur W. Bolton, Jr.
Contracting Officer

### AM: WWBolton: rad

Dr. Haworth 520
Dr. Wilson 520
Mr. Hoff 501
Mr. Hunt 5184
Contracts 213

Dear Ira Bushey,

The contract between our respective concerns for the overhaul and drydocking of the R/V ANTON BRUUN provides, in accordance with the terms of our request for proposal of June 2, 1967, that the period of performance for all specified work shall be a period of sixty (60) calendar days from receipt of a letter giving permission to commence the pierside work set forth in Section B of the specifications, and that the vessel shall be redelivered to the owner or operator in good order and condition within that sixty (60) calendar day period.

permission is hereby granted to commence the pierside work specified in the contract. Please take notice that the sixty (60) calendar day period within which all work is to be completed and the vessel delivered to us in good order and condition will commence as of the date of your receipt of this letter.

OPTIONAL FORM NO. 10 MAY 1962 EDITION GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

# emorandum

TO : Distribution List DATE: September 15, 1967

FROM :

Special Assistant to the Director

National Science Foundation

SUBJECT: Report of The Survey Activities of the R/V ANTON BRUUN

The attached report of The Survey Activities of the R/V ANTON BRUUN prepared by Alpine Geophysical Associates, Inc., dated September 7, 1967, is forwarded for your information.

Daniel Hunt, Jr.

Attachment

Distribution List:

Mr. Charles Johnson (White House)

Mr. Addison Richmond (State Dept.)

Mr. Bolton

Mr. Hoff

Dr. Keck

Mr. Phillips







ALPINE GEOPHYSICAL ASSOCIATES, INC.

OAK STREET

NORWOOD, NEW JERSEY

Report of THE SURVEY ACTIVITIES

of the R/V ANTON BRUUN

### Prepared by:

FACILITIES MANAGEMENT DIVISION
ALPINE GEOPHYSICAL ASSOCIATES, INC.
Norwood, New Jersey

Submitted to:

NATIONAL SCIENCE FOUNDATION 1800 G Street Washington, D.C. Report of the survey activities of the R/V ANTON BRUUN, subsequent to the mishap at the Ira S. Bushey and Sons, Inc.

Drydock and Shipyard as described in the report dated July 16, 1967.

Following the raising of the vessel as described in the report dated July 24, 1967, the undersigned and Mr. A. Wolff, Associate of Captain Holm-Andersen, Independent Marine Surveyor representing National Science Foundation and Alpine Geophysical Associates, Inc. on July 18, 1967 requested that a joint survey of representatives of interested parties commence immediately to ascertain damages sustained by the vessel as a result of the mishap, and to recommend remedial action. In addition to the before named individuals representing NSF and Alpine interests, the following interests were involved. Captain Kaminsky from U.S. Salvage representing the Shipyard's underwriters, Mr. Davella, Independent Surveyor representing the Shipyard, and Mr. O'Leary representing the shipyard directly.

The request to start the survey immediately after raising was denied by the people representing the shipyard. The reason stated was that the vessel was too hazardous to enter, due to fumes, cleaning operations and a certain amount of locked-in water in various compartments. Also, that it would be impossible to obtain

a true picture of damages, until the ship had been substantially cleaned and machinery preservation efforts completed.

The week of July 17 was spent in making preliminary ground rules for the survey. The yard had their electricians count and list all electric fixtures, motors, and appurtenances throughout the vessel. Captain Holm-Andersen and his Associate, Mr. Wolff, had at their expense retained one additional independent surveyor, Mr. Hendriksen, to do a space by space and measurement survey of damages. On July 24, the actual joint survey commenced with all interested parties present.

There was a general optimistic feeling among all participating surveyors in the beginning as to the extent of damages resulting from the casualty, inasmuch as structural damages to the vessel appeared to be very moderate, also that water damage to engines and other mechanical implements seemed to have been checked by the preservation effort. However, as the survey progressed, it became clear that the water damage to insulation and panelling was very heavy, and water damage to the electric equipment and wiring had been most destructive. In the light of the latter it was deemed advisable by Alpine to conduct a separate survey of the electrical installations by someone known by the Company, familiar with research vessels,

and familiar with the ANTON BRUUN in particular. Aris Electric

Company represented by Mr. Rene Sygnecki who had done considerable

trouble-shooting and repair aboard the BRUUN after its last conversion, and who was very familiar with the electric installations

on board, was retained to survey and report directly to Alpine

as to the conditions and recommend remedial action concerning

the electric installations on board.

The ship was put in drydock on July 28 for bottom survey with all of the before named surveyors in attendance, and including Captain Hunt from the National Science Foundation, Mr. Hirshman from Alpine, Mr. Graham from Lloyd's Registry of Shipping and Commander Cove from U.S. Coast Guard Marine Inspection. The survey indicated moderate damages to the hull and propeller on the port side of the vessel, as can be observed in the official survey report. On this date, Captain Holm-Andersen personally took over as surveyor representing Alpine and NSF.

The progress of the joint survey was very slow, due to the very detailed nature of same, as can be seen in the official report and the difficulty of having all the principals present at all times, a prerequisite for this particular survey. The detail work, however, was largely completed during the week of August 14 and the pricing of the items began.

Since the original survey in many instances called for "repair or renew" large price discrepancies were encountered in the beginning by the various participants due to the fact that some based prices on renewals, whereas others based prices on repairs and reconditioning. Other delays were encountered in the pricing due to the need of consultations by surveyors with their principals, in particular, surveyors representing underwriters and yards. However, an agreement was finally reached between all interested parties with the total agreed price of \$722,500.00 for repairs and/or renewals required as a result of the casualty, based on the survey "as written". This price includes the already accrued expense of cleaning and preservation, but did not include the cost of salvage of the vessel.

Included in, and as part of the price before named was an item of \$339,000.00 for repairs and/or renewals of electrical installations and wiring for systems as now existing on board. Observing this very large figure, and knowing that many of the existing systems are archaic, makeshift, obsolete and/or indadequate, Alpine with their representatives in the

field felt that a more practical, updated and adequate electrical system for the ship could be developed and installed for less money. The suggestion was made to the other participating interests in the survey and was enthusiastically received and accepted, in particular by the underwriters.

Alpine, through their field representatives, and the electrical contractor who had made the original survey of electrical damages, collaborated to develop preliminary specifications for this modification, and these were given to all interested parties for pricing. The price was made understood to have to include cost of necessary engineering and sufficient drawings to obtain U.S. Coast Guard approval and acceptance by Alpine. After several days of evaluation and estimating an agreed figure for electrical work as per modified specifications was mutually agreed on, at the total of \$264,500.00. This represented a saving of \$74,500.00 from the original price and placed the total for all work as of this date at \$648,000.00.

The surveys and pricing are as of this writing largely completed, however, there remains yet two (2) items to be resolved.

a) the underwriters through their representatives insist that

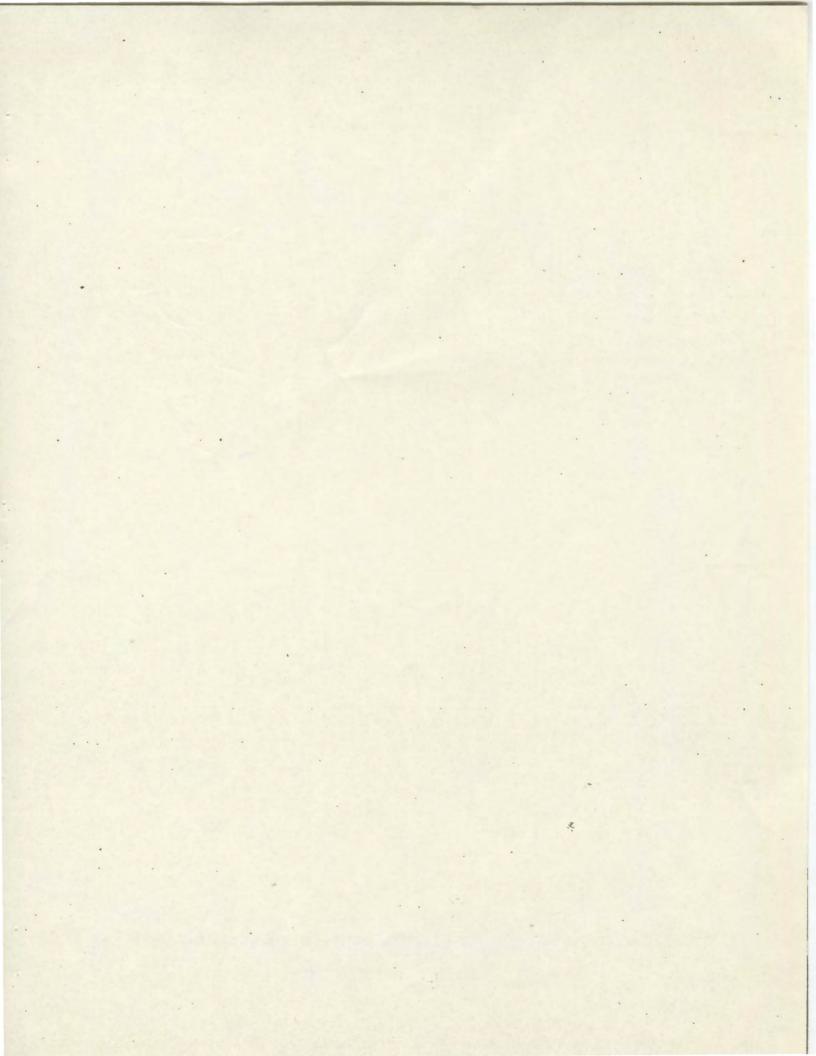
there be an overall reduction of the total cost of the work contained in the survey report, due to duplications of work required in the original contract between Alpine and the Shipyard, and the work called for as a result of the casualty,

b) a survey and cost estimate has to be made of the ships stores, tools and spare parts that were damaged and/or destroyed on board the ship as a result of the casualty. These items have now been removed from the vessel and are stored in the shipyard. It is hoped that these remaining two (2) items shall be resolved soon.

Respectfully submitted,

PL:EK

Peter Larsen Consulting Port Engineer





UNITED STATES GOVERNMENT

# Memorandum

TO

Distribution List

DATE: August 21, 1967

FROM

Daniel Hunt, Jr

SUBJECT

ANTON BRUUN

The attached report on the Cleaning and Preservation Activities aboard ANTON BRUUN from July 16, 1967, through July 29, 1967, is forwarded for your information.

Daniel Hunt, Jr.

Distribution List:

Charles Johnson (White House Staff) w/attachment Addison Richmond (State Department) w/3 copies of attachment

Dr. Spencer, BMS, w/attachment

Mr. Brown, OGC, w/attachment

Mr. Phillips, Contracts, w/attachment

For information w/o attachment:

Dr. Haworth

Dr. Wilson

Dr. Keck







ALPINE GEOPHYSICAL ASSOCIATES, INC.

OAK STREET

NORWOOD, NEW JERSEY

## R/V ANTON BRUUN

Report of

Cleaning and Preservation Activites
July 16, 1967 through July 29, 1967

Prepared by:

FACILITIES MANAGEMENT DIVISION
ALPINE GEOPHYSICAL ASSOCIATES, INC.
Norwood, New Jersey

Submitted to:

NATIONAL SCIENCE FOUNDATION 1800 G Street Washington, D.C.

#### Report

of the cleaning and preservation activities on board the R/V ANTON BRUUN, following the casualty as outlined in the report by undersigned dated July 6, 1967 and the salvage operations contained in the report dated July 24, 1967.

On July 16, 1967 after lengthy negotiations and mediations between all interested parties, the Merritt, Chapman and Scott Salvage Company, the salvor of the vessel permitted the cleaning and preservation crews, contracted to do this work by the Ira S. Bushey and Sons, Inc., Drydocks and Shipyards, to board the vessel and commence the work of cleaning the vessel and its appurtenances and apply preservative coatings to all the vital parts subjected to submersion.

The work started on a moderate scale on July 16, 1967 but on the following day July 17, 1967, had grown to a massive operation encompassing virtually all parts of the vessel simultaneously. The sequence of cleaning and preservation was generally as follows: Under the direction of Mr. Lee Green a representative of the Magnus Chemical Co., of Garwood, New Jersey, workers from Oil Tank Cleaning Corp of Brooklyn, New York, who were doing the actual work, would spray a solution of fresh water mixed with Magnus Degreaser 7 - 11 and 1 or Magnus Compound 756 over

all surfaces that had been submerged. This was followed by a rinsing with fresh water from power hoses. In areas where this would not suffice to remove the dirt, the surfaces were hand scrubbed and wiped with compounds and in sequence as outlined. The waste water was removed from vessel and compartments worked on, by a system of vacuum suction hoses from and into a floating tank barge moored adjacent to the vessel.

Subsequent to the cleaning, mechanics from the Ira S.

Bushey & Sons, Inc., Drydock and Shipyard commenced to open up all electric motors and appurtenances, also both main engines and all auxiliaries in order to permit the people from Water

Damage Protection Co., of Detroit, Michigan to apply their protective coatings. This consisted of spraying CRC formula 2.26 over all electric windings, contacts, brushes, terminals, etc. This procedure was stated, to drive out and seal out moisture, together with acting as a corrosion preventer. The engines and all other mechanical appurtenances were sprayed with CRC formula 3.36 which was stated to work as a coating to prevent corrosion while simultaneously act as a light lubricant. Also this formula as was stated has a high degree of capillary action which enables it to react otherwise inaccessible surface.

The cleaning and coating work continued on an almost around-the-clock routine all through the week of July 16 to 22,

hampered in the beginning measureably by the fact that the
Alfred E. White Marine Chemical Company refused to permit the use
of ordinary electric extension lights for temporary lighting
purposes, due to the stated danger of an explosion of gases from
fuel oil and other combustible matters on board, released through
the cleaning process. Only explosion proof lights, which were in
short supply were allowed on board, limiting the areas where work
could be performed, until additional lights of this type were
procured and installed. However, all protective work was largely
completed by the end of the week and the people from Water Damage
Protection Co., departed leaving behind sufficient chemicals and
instructions to permit the yard personnel to follow up the protective
applications should the need arise.

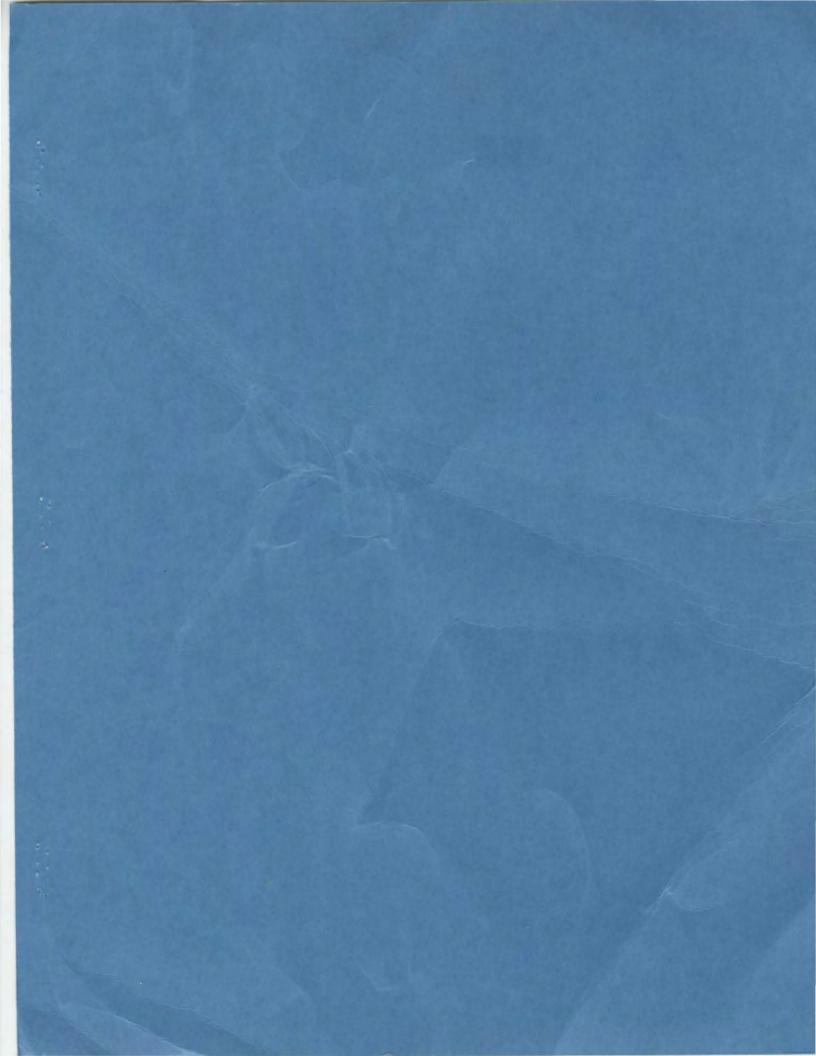
The cleaning operation continued during the week of July 23 to 29 with emphasis placed on hull and superstructures, also with the removals of debris and wreckage resulting from the casualty, including removal to shore storage of ship's supplies, tools and spare parts damaged or destroyed as a result of submersion. This for purpose of a later damage survey of these items.

The shipyard personnel continued to search for, open up, clean and preserve as before outlined various ships appurtenances in remote areas and/or in areas overlooked during the initial phase of this work. This operation is still continuing as of this writing.

Respectfully submitted,

PL:EK

Peter Larsen Consulting Port Engineer



THE WHITE HOUSE 32
WASHINGTON

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NSB-67-163

NATIONAL SCIENCE FOUNDATION OFFICE OF THE DIRECTOR Washington, D.C. 20550

August 10, 1967

MEMORANDUM TO MEMBERS OF THE NATIONAL SCIENCE BOARD

Subject: ANTON BRUUN

My memorandum to you, dated July 10, 1967, summarized the casualty to ANTON BRUUN on June 30 in which the drydock at Bushey Shipyard sank, causing the ship to capsize.

The salvage of the ship by Merritt, Chapman & Scott, a sub-contractor to Bushey Shipyard, was carried out with some difficulty. However, finally on July 15th, the ship was successfully refloated and the cleaning and preservation commenced. This cleaning and preservation effort was sub-contracted for by Bushey Shipyard and was completed on July 26th. ANTON BRUUN was inspected at this time by representatives of the State Department, the Foundation, and our prime contractor, Alpine Geophysical Associates, Inc. The cleaning had been well done and apparently the machinery and systems within the ship had been preserved in the best manner possible in order to minimize immersion damage and deterioration. The damage sustained by ANTON BRUUN, due to her immersion in salt water for over two weeks, was in the following major categories:

- (a) Main and auxiliary machinery
- (b) Complete electrical system and components
- (c) Sheathing, insulation, and deck coverings
- (d) Interior non-structural components, particularly those made of wood.

The ship was drydocked on the afternoon of July 27th for an inspection of the underwater body to determine the damage that had been caused by the casualty. The underwater hull appeared in good condition. There were several indentations in the hull and the keel which were not critical from a strength and structural standpoint. Two small areas of the

hull will have to be replaced and the U.S. Coast Guard will require approximately a 12-foot section of the keel to be renewed. The port propeller was damaged and the port tail shaft and main rudder may have sustained deflection. The foregoing items are relatively minor and can easily be repaired. The ship was undocked on Tuesday, August 1st, after the complete hull inspection had been made.

The consultant marine surveyors for Alpine, Bushey, and Hartford Fire Insurance (underwriters for Bushey) have completed their joint survey in order to specify all casualty damage. This survey was completed this week and, at present, the casualty damage list is being refined and cost estimates are being prepared. After final preparation to the satisfaction of all parties, this survey will be forwarded to U.S. Salvage, Inc. (marine consultants to Hartford). After review of the casualty specifications and their estimated costs, a meeting will be scheduled by U.S. Salvage, Inc. for representatives of Bushey, Bushey's underwriters, Alpine, and the Foundation. The tentative date for this meeting is August 18th.

The subject of the value of ANTON BRUUN has been informally raised by U.S. Salvage, Inc., the marine surveyors for Bushey's underwriters. The reason this subject has been raised is that if Bushey is deemed liable for the sinking of ANTON BRUUN, and if the cost of restoring the ship to its original condition should exceed the value of the ship, then extensive negotiations will be required.

There is no official estimate as yet as to the cost to restore ANTON BRUUN to her pre-casualty condition. We should have this estimate next week. An informal guess by Alpine's consultant port engineer and consultant marine surveyor is \$400,000 to \$500,000. This figure includes the specified work in Alpine's fixed price subcontract with Bushey for the \$160,000 overhaul. Since Bushey has funded the \$56,000 for salvage of the ship, certain amounts for the cleaning and preservation subcontracts, a precedent has been established even though "without prejudice." If we can assume that Bushey's underwriters will advance insurance funds for repair of casualty damage, then, based on risk advice from our Office of General Counsel and Alpine's consultant admiralty lawyers, we would proceed with the repair and overhaul of ANTON BRUUN. A new schedule would be prepared for the transfer to India and it is possible that we could receive a ship

in better condition than if the casualty had not occurred. In any event, we estimate a minimum of increase in cost to the Foundation due to this unfortunate casualty. On the other hand, if the underwriters refuse to advance funds to Bushey, due to determination of liability, a question as to the value of the ship, or some other legal aspect, then ensuing court action could take many months. At this juncture, based on advice from our General Counsel, the alternatives would have to be reviewed.

Bushey's drydock No. 4 is being salvaged by Bushey. The drydock has not been refloated as of this date, but it is expected that it will be successfully raised within the next two weeks. There is a strong possibility that there will be no specific cause pinpointed for the sinking of the drydock. It is still suspected that the drydock sank due to its poor material condition.

I will keep you advised as to further developments and whether or not the final decision will be to proceed with the planned program for the transfer of ANTON BRUUN to India.

Leland J. Haworth Director

### NATIONAL SECURITY COUNCIL

August 2, 1967

Note for Mr. Rostow

Walt -

At the risk of boring you, I suggest you may find this summary report of interest -- also the photos in the blue pamphlet.

Charles E. J

p. "Anton

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Charles Johnson The Director July 31, 1967 Daniel Hunt, Jr. Status of ANTON BRUUN Representatives of the State Department, the Foundation, and our prime contractor, Alpine, visited ANTON BRUUN at Bushey Shipyard in Brooklyn on Thursday and Friday, July 27th and 28th. The principal representatives were: Mr. Addison Richmond, State Department (July 27th only) Mr. Julius Hirshman, Facilities Manager for Alpine Mr. Daniel Hunt, Jr., NSF The following is a synopsis of the present status of ANTON BRUUN: (1) The attached brochure, prepared by Alpine, includes narrative reports of the casualty and salvage of the ship plus several representative photographs. Mr. Richmond is being furnished three copies for his use in relationships with India. (2) Since the refloating of ANTON BRUUN on July 15th. Ira S. Bushey & Sons, Inc., has subcontracted to have the ship cleaned and equipment and systems preserved. These tasks are about completed. (3) Upon inspection of the ship on Thursday, July 27th, it was apparent that the cleaning had been expertly accomplished and that machinery and systems had been preserved in the best manner possible in order to minimize immersion damage and deterioration. The damage sustained by AMTON BRUUN , due to her immersion in salt water for over two weeks, is in the following major categories:

- (a) Complete electrical system and components
- (b) Main and auxiliary machinery
- (c) Sheathing and insulation
- (d) Installed wooden facilities, particularly those made of plywood.
- (4) The ship was drydocked on the afternoon of July 27th. The underwater body inspection revenled the hull to be in good condition and that no major structural damage had been sustained by the casualty. There were several indentations in the hull and two of the areas will require plate reasonl. There are three indentations in the keel which do not appear to be critical from a strength and structural point of view. However, there is a possibility of pulled rivets. As inspection was accomplished on Friday, July 28th, by consultant marine surveyors, a U.S. Coast Guard official and representatives from Lloyds of London. It was determined that the two aforementioned areas in the hull would have to be repaired by welding in insert plates and that a 12-foot section of the keel would have to be replaced.
- (5) In addition to the minor bull damage, the port propeller was damaged and the port tail shaft may have sustained deflection. Also, the main rudder will have to be completely disassembled for inspection. These items are necessary because the attitude of the ship in its capsized condition, on its port side, caused undue stress to be placed on the rudder, port shaft and associated propeller.
- (6) The consultant marine surveyors for Alpine, Bushey, and Hartford Fire Insurance (underwriters for Bushey) are conducting a joint survey in order to list all casualty damage. The procedure to be followed is that Alpine and Bushey will prepare a master list and submit this list to the marine surveyor for Bushey's underwriters. The underwriters will then make a determination of allowability. The marine surveyors involved are as follows:

Captain William Kaminsky of U.S. Salvage, representing Hartford Fire Insurance Company

Mr. Michael J. Davella, representing Bushoy

Mr. Holm Andersen, representing Alpine

- (7) The foregoing damage survey is estimated to be completed on August 4, 1967. Upon its completion, we should have an estimated date by which the underwriters will make a decision as to the future course of action. At that time, a conference will probably be required between Alpine, Bushey, Hartford, and the Foundation, and the associated management, legal and technical representatives of all concerned.
- (8) Bushey's sunken drydock No. 4 is being salvaged by Bushey. After two weeks of recovery attempts, the drydock has not been raised. Further attempts are to be made during the week of July 31 and it is expected that the raising of the drydock will be successful. There is a strong possibility that there will be no specific cause pinpointed for the sinking of the drydock. It is suspected that the drydock sunk due to its poor material condition, including tank leaks while in service and poor surveillance while ANTON BRUUN was in the drydock.
- (9) The subject of the value of ANTON BRUUN has been informally raised by Captain Kaminsky, surveyor for Bushey's underwriters. The reason this subject has been raised is that if Bushey is deemed liable for the sinking of ANTON BRUUN and if the cost of restoring the ship to its original condition should exceed the value of the ship, then extensive negotiations will be required. The Office of the General Counsel has been asked to establish the worth of ANTON BRUUN, should this figure be necessary. Alpine's consultant marine surveyor, Mr. Holm

Andersen, has been informally advised that due to the uniqueness of ANTON BRUUN, the intended transfer to India, the cost of replacement of an oceanographic research ship, and ANTON BRUUN's present book value, her appraisal would exceed several million dollars.

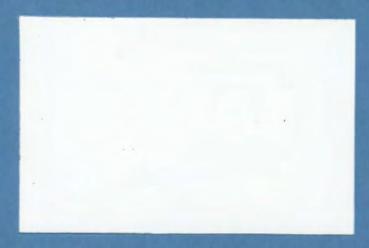
- (10) There has been no estimate prepared of cost to restore ANTON BRUUN to her pre-casualty condition. Such an estimate will be made after the survey is completed. An informal guess by the undersigned and Alpine's consultant port engineer, Mr. Peter Larsen, is \$250,000. Since Bushey has funded the \$56,000 for salvage of the ship, certain amounts for cleaning and preservation subcontracts, a precedent has been established even though "without prejudice." If we can assume that Bushey's underwriters will advance insurance funds for repair of casualty damage, then based on risk advice from our Office of General Counsel and Alpine's consultant admiralty lawyers, we could proceed with repair and overhaul of ANTON BRUUN. A new schedule could be prepared for transfer to India and a better overhauled ship may result at a minimum increased transfer cost to the government. On the other hand, if the underwriters refuse to advance funds to Bushey, due to determination of liability, establishment of value of the ship, or some other legal aspect, then ensuing court action could take many months. At this juncture, based on advice from OGC, the alternatives would have to be reviewed.
- (11) Mr. Hirshman of Alpine will keep us advised of developments.

Daniel Hunt, Jr.

Attachment: Alpine Geophysical Associates, Inc. R/V ANTON BRUUN Casualty and Salvage Report JC-1090, dated July 24, 1967

Charles Johnson, White House (w/1 copy of attachment)
Joseph R. Schurman (w/1 copy of attachment)
Horris T. Phillips (w/1 copy of attachment)
John T. Wilson
Randal M. Robertson
Randal M. Robertson
William J. Hoff
Edward Todd
Arthur Roe
Robert Fleischer

Arthur Roe
David D. Keck
Frank C. Sheppard
Jack T. Spencer
Wilbur W. Bolton, Jr.





ALPINE GEOPHYSICAL ASSOCIATES, INC.

OAK STREET

NORWOOD, NEW JERSEY

R/V ANTON BRUUN
report of
CASUALTY
and
SALVAGE OPERATIONS
leading to the
Raising of the Vessel
July 1, 1967 through July 17, 1967

Prepared by:

FACILITIES MANAGEMENT DIVISION
ALPINE GEOPHYSICAL ASSOCIATES, INC.
Norwood, New Jersey

Submitted to:

NATIONAL SCIENCE FOUNDATION 1800 G Street Washington, D. C.

JC-1090

July 24, 1967

This report is produced at the request of Mr. Hunt of the National Science Foundation and consists of two smaller reports of Mr. Peter Larsen's, Consulting Port Engineer, and Alpine's senior field representative responsible for the supervision of the overhaul of the R/V ANTON BRUUN. His first report covers the casualty to the vessel, and his second report covers the salvage operations. Several photographs are included showing broad views of the vessel as she lay submerged and as she looks after being raised and partially cleaned. These reports are of a predominantly technical nature and have been included in broader reports to N.S.F. concerning other aspects of the casualty.

A reader not familiar with all facets of this situation should keep in mind that:

- a. Alpine's contract with the shippard clearly places full responsibility for the vessel with the shippard. Thus the shippard is held liable for all contracted work (the overhaul) as well as for all damages to the vessel, its equipment, and any third party damages.
- b. The shipyard, without admitting liability, has contracted for the salvage, cleaning, and preservation of the vessel and its machinery.

Neither Alpine nor any of its representatives have played an active role in the raising of the vessel other than that of observer. It is felt that to do otherwise might jeopardize the Owner/Operator's position that the yard is fully responsible for what has occurred or for what might occur in the future. We have supplied plans, stability information, and other information regarding the vessel and its structures and arrangements as requested by the Salvor to the best of our ability.

At the present time, the vessel has been raised, cleaned, and the machinery has been preserved. Surveyors representing all the principals involved are on board to determine the full extent of damage due to the casualty and the repairs required to put the vessel back in good operating order. When this survey is completed, a full report of damages, repairs required, and estimated costs and times for this repair will be compiled and will form the base for future work to be done on the vessel.

J. Hirshman, Director Facilities Management Division

#### Report

of the capsizing of the R/V ANTON BRUUN together with the floating dock No. 4 at the Ira S. Bushey and Sons, Inc., Shipyard, Brooklyn, New York the night of June 30 to July 1, 1967 and the events immediately prior to and following the mishap.

This report is the consensus of documented facts, official and unofficial statements, and information obtained from persons on the scene and undersigned's own observations.

On the morning of June 29, 1967 after completion of negotiations between Alpine Geophysical Associates, Inc., of Norwood, New Jersey, operators of the R/V ANTON BRUUN owned by the National Science Foundation of Washington, D.C., a contract concerning the vessel was entered into by Alpine Geophysical Associates with Ira S. Bushey and Sons, Inc., based on specifications for overhaul and drydocking of the R/V ANTON BRUUN dated June 2, 1967 and Alpine Geophysical Associates, Inc., purchase order #C-11617 dated June 28, 1967. This was accomplished in the forenoon with all documents duly signed by interested parties.

Following the signing of contract and receipt by Bushey Shipyard of a telegram from Alpine stating the availability of the vessel to their custody, the undersigned proceeded to deliver to the production manager of the yard, Mr. J. Hogan, the necessary dock plans, drawing of modification to bilge keels and other plans

and information pertinent to a safe drydocking procedure of the vessel.

On or about 2 p.m. the same day the vessel trimmed to a near perfect inclination and with a draft of approximately 14 ft. fwd and 16 ft. aft, was picked up at her berth at New York Port Authority Grain Terminal foot of Henry Street, Brooklyn, New York by a tugboat from the Red Star Line, hired for this purpose by the shipyard. The vessel was then hauled to the yard and placed stern in first, in floating drydock No. 4. On board the vessel at the time were Mr. Peter Duhr, Assistant Port Engineer for Alpine Geophysical Associates, Inc., and watchstanding caretaker engineers Mr. Fred Griffith and Mr. William Downie both employed by Alpine.

On or about 4 p.m. June 29, 1967, the vessel was high and dry on drydock No. 4. This drydock is constructed of a combination of wood and steel and has a total length of 270 feet, a total width of approximately 85 feet and 75 feet between wing walls. The drydock is located parallel with and in close proximity to a wooden pier supported by wooden piling, with right hand side of drydock adjacent to pier, left hand side exposed to an open slip between piers, inland end of drydock close to shore bulkhead line and offshore end of drydock exposed to open slip.

Determination of left and right side of drydock is based on standing on inland open end of drydock, looking the length of drydock toward the open off shore end.

This particular drydock is constructed of a compartmented wooden pontoon, built around the turn of the century, with newer wingwalls constructed of steel about 15 to 20 years ago, is raised and lowered in conventional fashion utilizing electric pumps and the opening and closing of flood valves. The drydock has a stated rated lifting capacity of 2600 tons.

The R/V ANTON BRUUN at the time of drydocking, with an observed mean draft of 15 feet displaced approximately 1700 tons.

After completion of the initial drydock operation, it was noted that the drydock had difficulty in gaining level fore and aft trim. The bow or offshore end of the dock was almost awash, while the stern or inshore end had a freeboard of approximately 20". There were discussions between the yard personnel as to the necessity of shifting the vessel further back on the drydock to even the weight, but the actual operation was put off the following day. On or about 5:30 p.m. all of Alpine's personnel had left the ship and yard.

Arriving on the morning of June 30, 1967, undersigned observed that the bow end of the drydock had gained a freeboard of approximately 4 to 6 inches, with the stern maintaining its

approximately 20 inches freeboard. It was also noted that two (2) gasoline driven portable pumps were employed pumping water out of the fwd. end of drydock, taking suction through holes in deck in the vicinity of the off shore termination at the left and right wing walls. It appeared that the drydock had been under surveillance by the yard personnel all through the night.

personnel, that the vessel should be shifted approximately 10 feet further back on the drydock, so that equal freeboard fore and aft could be attained, and that the contract requirement of shifting the ship on the blocks to paint the hull portions originally covered by the blocks. Painting operations were commenced in the area of keel and bilge blocks, and on or about 2:30 p.m. the shifting of the vessel took place. The drydock was lowered, the vessel was refloated and shifted aft, and the drydock was again raised. After completion of shifting and raising of drydock it was noted that the freeboard at the drydock now stood at approximately 18" fwd and 17" aft.

During the day the vessel was examined in the drydock
by workers and officials of the shipyard and owner/operators
also as a result of notification by Alpine Geophysical Assoc., Inc.
by representatives of Lloyd's Registry of Shipping, represented
by Mr. Graham and Mr. Schizas and by U. S. Coast Guard Marine
Inspection representative Lieutenant Ross and Mr. Calhoon.

On or about 5:30 p.m., all of owner/operators personnel and officials had left the ship and yard and it wasnoted by undersigned that all of the yard personnel associated with the drydock operation had also departed.

During the night of June 30 to July 1, 1967, as reported by officials of the shipyard and information obtained from questioning of individuals at or near the scene of mishap, the following is a concensus. The shipyard's regular roundsman had completed his rounds up to 11:30 p.m. and found nothing unusual. It shall be noted in this connection that undersigned prior to departure from yard at about 6:00 p.m. noticed that the drydock was fully lighted as were the ship at that time receiving shore power. This condition was more pronounced due to the fact that the day had been rainy and murky. From conflicting reports as to the exact time, somewhere between 11:30 p.m. and 12 midnight a man, identity unknown was seen running from the vicinity of drydock and toward the gatehouse shouting that the drydock and ship were sinking. Simultaneously, this condition was observed from a nearby vessel the U. S. Navy Ship, MIRFAK located high and dry on drydock No. 3. Personnel from this vessel sounded an alarm which brought forth a large number of fire apparatus police and emergency vehicles, together with fireboats.

Officials of the shipyard were alerted and upon arrival at yard proceeded to take measures to prevent further expansion of the calamity, in this instance the measure was sinking at the right hand side of dock to prevent a total capsizing of both dock and vessel. Also diving and salvage personnel from Merritt, Chapman and Scott salvage company were called in immediately to ascertain cause and damage to ship in dock. Officials of Alpine Geophysical Associates were notified during the night and arrived in the early morning hours.

Upon undersigned's arrival at the yard on or about 8:00 a.m. July 1, 1967, the following conditions were found to exist. The drydock appeared to have sunk entirely to the bottom, with the offshore end having slid approximately 15 ft. away from pier and aft end in original position. The vessel located between wing walls of dock appeared to have shifted from center line in addition to listing on a 45° angle to port, resting on the left wing wall of drydock with the aft superstructure of vessel. The vessel having sunk with the drydock had her portside decks awash to the level of bridge wing and top of aft deck house (laboratories). Water on the stb. side reached to within a few feet below the plimsoll mark.

Questioning the salvage company diver after his underwater survey the following are the findings. All forward keel blades

are rolled over, the vessel is resting on the portside bilge blocks and superstructure as noted before. There appears to be no broaching of the shell nor any indentations. However, due to the delicate position of the vessel this survey only reached one quarter the length of the vessel on the port side from each end of bow and stern. As for the status of the drydock proper there seemed to be no broaching of any members either, and all flood valves on the left side were closed. Flood valves on the right side had been voluntarily opened as noted earlier. From examinations above water, of valve positions the following were found. All flood valves on the left side were closed, all pumps valves on the left side were closed with exception of valve near pump No. 3. All flood valves on the right side were fully opened with exception of the last two on the offshore end of dock, these were partially opened. All pump valves on the right hand side were closed with exception of valve near pump No. 4 which were fully opened.

As of 12 noon, July 1, 1967, no exact determination as to the cause of mishap has been reached.

Respectfully submitted,

Peter Larsen Consulting Port Engineer Record of salvage efforts to the R/V ANTON BRUUN as she lay capsized inside floating drydock No. 4 at the IRA S. BUSHEY & SONS, INC. drydock and shipyards, Brooklyn, N.Y.

This report is the consensus of documented facts, official and unofficial statements, and information obtained from persons on the scene and undersigned's own observations.

On or about 5 PM July 3, 1967, at the conclusion of a meeting held in the executive office of Ira S. Bushey and Sons, Inc., Brooklyn, N.Y., it was announced by Mr. Frank Bushey, President of the shipyard that a salvage contract would be entered into by the shipyard with the Merritt Chapman & Scott, Inc. salvage company for the raising and pumping out of the R/V ANTON BRUUN. The terms of the contract were announced to be a lump sum contract for \$56,000, time of operation not to exceed 14 days and all on a condition of "no cure no pay". Bushey would also contract with chemical cleaning and water damage control firms who would commence cleaning the vessel and preserving the machinery as soon as it would be safe for them to board, during the raising or shortly thereafter.

Subsequent to this meeting a private meeting was held between Capt. Hunt from the National Science Foundation, owners of the vessel, Mr. Hirshman, Director of Facilities Management of Alpine Geophysical Associates, Inc., operators of the vessel and the undersigned, during which Capt. Hunt requested that the vessel and drydock be held under around the clock surveillance by technical personnel from Alpine during the entire refloating operations of ship and drydock. A schedule was established so that Mr. Duhr, Assistant Port Engineer of Alpine and Mr. Griffith, former caretaker engineer of the vessel would alternately serve during the evening and night hours, with undersigned serving during the day in addition to being on call at all hours for special contingencies. The schedule was put in effect immediately.

In the content of this report the following abbreviations of principals involved are used. The National Science Foundation is designated as N.S.F., Alpine Geophysical Associates, Inc., is designated as "Alpine", Ira S. Bushey, Inc. Drydock and Shipyards is designated as "Shipyard", and Merritt Chapman & Scott, Inc. is designated as "Salvor".

During the morning of July 4, 1967, representatives of the Salvor arrived at the shipyard, specifically Capt. Halbert, Salvage Captain and Mr. DeAngelo, Chief Engineer. It was stated that Capt. Halbert would be in charge of the total salvage operation.

The method to be employed was stated to be generally as follows: The vessel listing heavily to port away from the pier adjoining the sunken drydock would be secured with cables, blocks and tackle to a large barge placed on the opposite side of the pier, with cables crossing the pier and being pulled tight with the help of beach gear winches. The purpose of the barge for anchoring the tackle was to distribute over a large area of the pier the pulling force required to hold the ship which was estimated to reach approximately 200 ton. This would relieve the load on the port wing wall of the drydock and stabilize the vessel. After securing the tackle and beach gear, divers would explore the submerged part of the hull not hitherto examined, close up all openings, and the vessel should then be pumped out employing portable pumps and refloated, with the tackle and beach gear assisting in straightening up the vessel from her estimated 40 degree list to port and preventing further capsizing.

During the afternoon of July 4, 1967, a large empty coal barge, the "Blue Mountain", arrived and was placed alongside the pier opposite the location of the capsized vessel. The barge obstensibly chartered by the Salvor from the Red Star Line, a subsidiary of the shipyard. No other action was taken this

date, save lengthy discussions and consultations between representatives of the Shipyard and Salvor.

On the morning of July 5, 1967, the Salvor's derrick barge, the "Chapman", arrived and tied up at the offshore end of pier directly in back of the barge, and began discharging and placing the beach gear and tackle. Simultaneously a chemist from the Alfred E. White Marine Chemist Co. arrived, tested and issued a gas free certificate for the barge. Representatives from various chemical cleaning companies visited the location during the mornings and offered their services to the shipyard. Later in the day, Mr. Ira Bushey, Vice President of the shipyard stated to undersigned that the shipyard had at 11:00 AM signed a salvage contract with the Salvor for the before stated amount and that time of performance would commence, retroactive to 5:00 PM, July 3, 1967. Had also arranged with Magnus Chemical of Garwood, New Jersey to supply supervision and chemicals to do the cleaning with others to do the actual labor, and with the Water Damage Protection Co. of Detroit, Mich. to supply the services of experts and chemicals to do the rust and corrosion control protection. Both of these services were essential to have ready inasmuch as the greatest benefits from the services is obtained if applied immediately after the raising of the vessel. In this connection Mr, Ira Bushey further voiced an opinion that it might be advantageous to let workers from the Salvor do the cleaning during the operation of raising inasmuch as these men would be more experienced in working on sunken vessels, also offsetting the obvious higher cost would be the fact that the vessels appurtenances would be protected somehwat sooner. However, nothing more was heard about this arrangement.

During the day it was decided by the Salvor, that it would be necessary to attach pad eyes to the side of the hull for securing of cables for the beach gear, inasmuch as nothing on board the vessel would be strong enough to withstand the severe pull. An order from the Salvor to the Shipyard was given to provide the pad eyes. In the meanwhile the chemist from before mentioned company tested the vessel for possible fire hazards and issued a gas free certificate containing certain reservations, mainly that major foam type firefighting equipment be held on the ready during all periods of hot work.

During July 6, 1967, as on the previous day workers from the Salvor distributed various gear and tackle in selected locations on pier together with two (2) double drum, gasoline driven winches. These were placed and secured with cables to the pier, one each abreast each end of the anchoring coal barge. Scaffolds were built on the side of the ship in way of locations for pad eyes. A total of four (4) of these would be secured to the hull of ship by welding, placed approximately evenly spaced the length of the ship directly below maindeck. During the afternoon the pad eyes were delivered from the Shipyard and work commenced immediately to "tack" them to the vessel in their respective locations. Late in the day Capt. Halbert, the salvage master for the Salvor, informed undersigned that he was being transferred to a different assignment and that Capt. Thurmond would take over as salvage master.

On the morning of July 7, 1967, the production welding commenced on the pad eyes. Capt. Thurmond and Capt. Hiller from the Salvor were on the scene as was Capt. Halbert who, however, left later in the day. The welding operation on the pad eyes was concluded in the afternoon and work attaching cables and tackle commenced. A request was made by the Salvor of a docking plan and other drawings important to the salvage operations.

The docking plan together with drawing showing bilge keel modification and a displacement chart were supplied together with deck plans and all other available drawings deemed important and necessary to the salvage operation. This is in addition to the Stability Booklets and General Arrangement Plans supplied July 1 and July 3 by Mr. Hirshman to the Salvor. Information as to compartmentation of the ship, and numbers of watertight doors known to have been open at the time of mishap were supplied (later events proved all of this information to have been accurate).

In the early evening all gear and cables having been placed and secured, the restraining tackle was pulled tight employing the winches and all work stopped for the night.

On the morning of July 8, 1967, the ship having now being secured from capsizing further, through the employment of restraining tackle, a diver was made ready to survey the submerged section of the ship not previously investigated. It was learned later, after the survey, officially and unofficially, that in addition to information already gathered during the survey immediately following the capsizing which indicated no broaching and no major hull damage; that in reality the ship was resting on its rudder and the bilge blocks, had one blade broken off the active rudder propeller, had its port propeller severely bent, and that the hull had several moderate to heavy indentations in was of the bilge blocks. It was revealed that some of the bilge blocks might have been driven through the deck of the drydock pontoon. However, there was still no detectable broaching of the hull.

During the same morning the Chapman was pulled alongside the outside of the capsized floating dock and pumps were being readied to be installed on board. It was decided by the Salvor to make an attempt to pump the vessel out and refloat it through the use of the following pumps, placed in the following locations: One six (6) inch gasoline driven pump taking suction straight down to bottom compartment through the hatch in the shelter deck directly aft of the anchor windlass. This hatch was never submerged even during the highest tides. Two three (3) inch gasoline driven pumps taking suction from the passageway in vicinity of the crews messroom through the hatch located in the athwartship passageway forward of the midship house maindeck. This hatch would be submerged during average high tide. Two six (6) inch electric submersible pumps taking suction through the engine skylight from lowest attainable location in engine room. The engine room skylight would be underwater during moderate high tide. Without having all pumps in place, the derrick barge returned to pierside and the crew left for the night on or about 7 PM.

On the morning of July 9, 1967, the derrick barge returned to the side of the sunken floating dock and work continued on installation of pumps on board the vessel. All being ready and tested by the early afternoon it was decided by the Salvor to commence pumping operations approximately 2 hours before the afternoon low tide. Alerted by the shipyard a representative from Magnus Chemical Co., Mr. Lee Green arrived with a substantial amount of degreasing chemicals together with workers from Oil Tank Cleaning Corp of Brooklyn, N.Y., who were to do the

actual labor. Work commenced immediately on pouring the degreasing chemical on top of the water in all accessible compartments inside the vessel. Mr. Ira Bushey from the shipyard, informed undersigned that the Water Damage Protection Co. had been alerted and that their representatives would arrive the next morning.

The pumping operations commenced on or about 3 PM, with Capt. Thurmond and Capt. Hiller from the Salvors in attendance. The forward six (6) inch pump was stopped after approximately 1 1/2 hours of service, the reason being that the forward compartment had emptied out quite rapidly. However, the intermediate compartment and the engine room, failed to hold against the incoming tide rising above the hatches as mentioned before, the compartments were swamped and all pumping operations were stopped for the night on or about 6 PM. It was decided by the Salvor to send a diver down the following morning to look for additional openings and leaks. All work stopped on or about 7 PM.

Commencing on or about 7 AM July 10, 1967, the Salvor's diver found a number of submerged portlights in the main deck house still open and proceeded to close them.

In the meantime the people, with chemicals and equipment from Water Damage Protection Co. arrived, represented by Mr. York and Mr. Reinard and stood by awaiting the next attempt in raising the vessel.

It was decided by the Salvors to employ one additional ten(10) inch gasoline driven pump taking suction from the engine room through the engine room skylight. Work on this project was started and completed, and pumping operations commenced shortly before the afternoon low tide.

As on the previous attempt one day earlier, the bow section emptied out

rapidly, the intermediate section during this attempt also emptied out somewhat, causing the bow to rise perceptively. The aft end however, seemed to sink lower, causing concern for the rudder, which the diver reported to be resting on the dock. In the engine room the combined efforts of the two 6 inch electric pumps and one 10 inch gasoline pump drove the water level to approximately 7 feet below sea level, but at this point failed to gain any further; however, the pumping operation continued despite at this time a very severe rainfall. On or about 6:45 PM as seen from above, a flash of fire and a heavy pall of smoke rose from the vicinity of the engine room skylight, and both of the 6 inch submersible electric pumps stopped totally. A later investigation showed that the heavy rainfall had caused the controls for one of the pumps to burn out with the subsequent result of blowing the mainfuses on the powerlines in the shipyard. Shortly afterward all pumping operations stopped for the night.

During the pumping operations, on a visit onboard the vessel, it was noted from the watermark on various bulkheads, that the vessel had at one time or another, presumably during the initial capsizing heeled over to port considerably more than her approximate 40° list of her settled position. It was also noted that Capt. Thurmond was not present during operations of this date, and this and other indications showed, even though it was not officially announced, that Capt. Hiller now in effect was in charge of the operation.

Pumping operations were started on or about 7:30 AM July 11, 1967, with the remaining workable pumps, namely one six (6) inch pump fwd, two three (3) inch pumps in the intermediate section and one ten (10) inch pump in the engine room, this for the purpose of locating additional openings in the submerged hull proper. It had been pointed out earlier to the Salvor, that

several ventilating ducts existed leading from the submerged section of port maindeck passageway to compartments below. On earlier occasions the diver had failed to locate these, this time however, with assistance in pinpointing the locations, the openings were found and sealed. All pumping was stopped during incoming high tide.

During the day the burned out fuses in the shipyard powerlines were replaced and one of the six (6) inch electric pumps was made workable.

Approximately 1 hour prior to the afternoon low tide all workable pumps were put in action, this time the combinations were as follows: One six (6)inch pump fwd, two (3) three inch pumps in the intermediate section, one (10) ten inch and one (6) six inch in the engine room.

As on previous occasions the bow section and now also the intermediate section were pumped out rapidly, with the resultant rise of the bow, and the necessity of stopping the fwd pumps, stern section continued to remain low or in the instance of the incoming tide sink lower than normal; this situation obviously creating a great strain on the members of the vessel resting on the dock aft. The (10) ten inch and remaining (6) six inch pumps in the engine room also gained against the outside water, so much indeed, that the 10 inch pump on or about 7:30 PM, had to be reduced to half speed to avoid loosing suction. An inspection by undersigned revealed that the lowest termination of the suction hoses in the engine room rested on a level with the top of the port main engine.

With the tide rising, and unable to reduce the water level in the aft compartments, on or about 9:00 PM, the tide rose above the engine room skylight, swamped the compartment and the vessel settled to the bottom of the dock with an indication of, that the bow had risen slightly higher, and the stern sunk slightly lower than prior to the pumping operation. The restraining wires and tackle which had been pulled tight during the entire pumping operation were slackened off, and all work stopped for the night. During the days operations the site of salvage effort, was visited and inspected by Capt Hunt from NSF and Mr. Hirshman of Alpine.

began to remove the (6) six inch gasoline driven pump previously employed in pumping out the fwd compartment, it had been discovered the previous day that all fwd compartments drained back into the engine room and could be pumped out with the pumps in that location, while the aft compartment after a certain level could not be reached with any pumps so far employed. It was decided to place the released (6) six inch pump in a location aft, so that the suction hose with assistance of a diver could be placed in the active rudder engine room where the greatest volume of water could be handled. Also two additional (3) three inch gasoline driven pumps would be placed midship to take suction from passageway below maindeck aft of engine room bulkhead. The day was consumed making the above installations of pumps, with work completed on or about 6:00 PM. After completion of the installations, all pumps were tested and it was decided by the Salvor to start the pumping operation on the mornings low tide. Capt. Hunt from N.S.F. visited and inspected the work site during the day.

A portion of the work crew from the Salvor arrived at 5:30 AM, on July 13, 1967 and commenced to start all the salvage pumps throughout the ship and by 6:00 AM, all the pumps were working, location number and size of pumps as follows: One (10) ten inch and two (6) six inch from the engine room (the other (6) six inch pump having been repaired and reactivated), two (3) three inch from the passageway aft of engine room and one (6) six inch aft from the active rudder engine room. As on all previous attempts the bow rose rapidly so much indeed that it became necessary to slacken the forward restraining cable and tackle, lest the bow be pulled in excess to starboard. However, as on the previous day, the engine room pumps lost suction in level with top of port engine, and the aft compartment could not be pumped out sufficiently to gain buoyancy prior to the arrival of high tide and subsequent swamping of all compart—

ments. During the settling of the vessel, loud reports were heard on board the vessel following by sounds of rushing water.

Several hours before evening low tide all pumps were again started, and a search for leaks in the aft compartments started both from inside and outside of hull. The explosion like reports was found to have been caused by ruptures in the "Marinite" partitions separating the scientist staterooms from areas where the pumps were taking suction, causing the locked in water combined with outside pressure during the settling of the ship to build up pressure sufficient to break the material. Recognizing this, it was surmised that the leaks had to be inside these quarters.

A search partially confimed this, inasmuch as several port lights were found to be leaking badly. However, it was deemed improbable that this would be sufficient to nullify the displacements of the pumps. It was suggested that perhaps the water could be leaking through the toilet and shower drains from the bathrooms in the scientist focsle on the deck above which was wide open to the ocean due to rupture of the outside bulkheads, into the toilets in the lower quarters which in all other respects should have been sealed off. Exploration of this possibility was put off to the following day, all pumps were stopped together with all other work on or about 7:00 p.m.

All salvage pumps on board the vessel were started on or about 6:00 a.m., on July 14, 1967 and the search for leaks including efforts to seal off the bathroom drains in the scientist focsle began. As on all previous efforts in succession, the forward compartments were emptied the engine room lost suction while the aft compartments materially remained at the usual level.

Efforts were made to lower the suction of one of the (6) six inch electric pumps further down the engine room, also work began on installing one additional (6) six inch pump midship to take suction from the aft compartment.

On the approaching high tide all pumps were stopped and all efforts were bent on sealing off the bathroom drains and installation of the additional (6) six inch pump and by time the salvage crew quit for the day at about 7:00 p.m., most of this work had been accomplished.

The morning of July 15, 1967 saw the salvage crew turn to at about 6:30 a.m., and immediately started to pump out the ship with all available pumps with exception of the pumps installed the previous day. As usual the bow started to rise, but there was one notable difference. On or about 6:30 a.m., the port edge of the scientist focsle appeared to be rising out of the water an occurrence which had never happened before, through all of the previous attempts. This precipitated a discovery that a ventilating duct on the port side of the focsle had been severed, during the capsizing of the vessel and had been, and was now allowing a large amount of water to pour into the lower compartments.

A diver was dispatched to seal off this opening and the vessel started to rise slowly. Inside the vessel the water in the fwd as well as aft compartment was now being pumped out with great rapidity, however, the vessel still maintained a heavy list to port. About 11:00 a.m., a shudder was feld onboard the ship, the redraining cables and tadde was seen to slacken and when taken up with the winches the vessel moved to starboard. The ship was afloat. All efforts were now bent on

lightening up the ship and removing the list to port berore the next low tide. The suction hose from the (6) six inch pump installed the previous day was managed into a deeper position as well as the pumps taking suction in the engineroom. A number of airdriven stripping pumps were employed in various compartments with locked in water, with the result that on or about 3:00 p.m., the port side of the main deck was out of the water. By 5:00 p.m., the port side of the vessel maintained approximately 16 inch freeboard with the water level approximately 16 inch below the plimsoll mark on the starboard side, the vessel leaving an approximately 7 degrees list to port.

by Capt. Shiller and Capt. Tecurinard, who had arrived earlier in the day, that the cleaners and the water damage protection people be permitted to board the ship, and begin their work. The request was refused, the reason given was that the ship had still too much list to afford the safe footing in combination with slippery conditions, contained too many fumes from spilled fuel oil, contained too much water to permit additional water from cleaning and with the approaching darkness, in its unlighted state prevented hazardous conditions for people not familiar with the interior of the vessel. The cleaning people were dismissed for the night and were told to report the following morning.

The pumping and stripping operation continued until 11:00 p.m., at which time all work stopped. The vessel at this point had a draft of 17 foot forward, 17 foot 3 inches aft and a list of approximately 6 degrees to port.

Mr. Hirshman and Mr. Roberts from Alpine attended a major part of the day's activities.

The vessel's position did not materially change during the night and on or about 7:00 a.m., July 16, 1967, the salvors continued the stripping operations of locked in water. Approximately 8:30 a.m., the shippard again asked permission from the salvor to let the cleaning and preservation crew to enter the vessel, and again were refused for the same reasons as stated the previous day. However, the salvor stated that if the shippard would accept the ship in her present position, they could do what they pleased, a condition the shippard refused to accept, primarily because the ship still had an approximate 6 degree list to port.

After lengthy discussions and mediation attempts, a compromise was reached by which the salvors would permit the cleaning and preservation crews to enter the ship, provided the tank cleaning barge, which had been called in to assist in the cleaning, would use its vacuum suction equipment to assist in the pumping out of the vessel and to remove the list, without theshipyard having to accept the vessel before this had been accomplished. All of this having been agreed on, two tug boats from the Red Star Line arrived at approximately 11:00 a.m., and removed the vessel from the sunken drydock and towed her to the west side of pier 5 within the shipyard, and tied her up with port side to the pier.

Cleaning and preservation operations commenced immediately and continued through the night. The port side fresh water tank in the shaft alley which had been flooded through the vent pipes during the capsizing was opened up and pumped out, which greatly helped in removing the list to port. The rudder stock packing gland leaked badly

and had to be sealed, also both stuffing boxes for tail shafts had to be tightened to stop leaks. An interior examination of the before mentioned fresh water tank revealed several indentations in way of locations of bilge blocks and in one location modevate leaking through the hull.

On the morning of July 17, 1967 with the cleaning and preservation work well on the way, and with the pumping and stripping work almost completed, the vessel attained zero inclination with a draft of 15 feet 3 inches forward and 17 feet 6 inches aft. The shippard signed the acceptance certificate of the vessel at 11:00 a.m.

The salvage operation of the vessel was attended by, in addition to the named persons in this report, from time to time, by the following principals representing interest involved:

Captain Kaminsky from U. S. Salvage representing the shipyard's insurance underwriters. Mr. Davella, Independent Marine Surveyor representing the shipyard. Mr. Wolff, Associate of Captain Holm-Andersen, Independent Marine Surveyor representing N.S.F. and Alpine. Mr. Kendrick from London Salvage representing the insurance underwriters for Alpine and Lt. Kulak from the U. S. Coast Guard Investigating Body.

Respectfully submitted,

Peter Larsen Consulting Port Engineer



drydock #4 at Bushey & Sons, Inc. shippers. The submerged wing of the drydock can be seen in the foreground. The high water mark is seen on the vessel.





Figure 4- Starboard side of the R/V ANTON BRUUN after she has been refloated.









