U. S. NAVY PURCHASING OFFICE

929 SOUTH BROADWAY

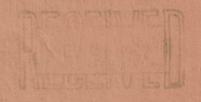
BOX BOSO, METROPOLITAN STATION

LOS ANGELES 55, CALIFORNIA

TELEPHONE:

RICHMOND 5-4711

IN REPLY REFER TO: 086:dc Schedule 30719/63 Serial 5135 16 November 1962



#### Gentlemen:

You are invited to submit your proposals for furnishing the necessary services and meterials to design, develop and fabricate an Underwater Search Vehicle in accordance with the following specifications, for delivery to the Pacific Missile Range, Point Mugu, California.

### A. INTRODUCTION:

This specification describes an Underwater Search Vehicle which will search areas of the ocean bottom at depths ranging from approximately 10 to 50 fathoms. The system shall have the capability of locating objects on the ocean bottom and releasing a clump and buoy to mark the object.

#### B. TECHNICAL SPECIFICATIONS:

## 1.1 General Considerations

- 1.1 The minimum area over which the vehicle must be capable of maneuvering shall be 360 degrees about the "mother" ship, with a radius of 300 feet and a depth of 300 feet.
- 1.2 The system shall include a fathometer with a full scale accuracy of two percent on each scale. The preferred scales are 500 feet, 100 feet and 50 feet.
- 1.3 The vehicle shall operate in a slightly positive buoyant state or have equivalent fail-safe features.
- 1.4 The vehicle shall be capable of operating in the following sea condition: Wind 13 to 18 knots, wave height 5 to 8 feet.
- 1.5 The primary area for intitial use of the search vehicle is the Eniwetok Lagoon.

The bottom conditions of the Eniwetok Lagoon consist mostly of a sloping fine sand bottom with coral heads varying in size from a few feet in diameter to one mile in diameter. The large coral heads

are numerous close to shore and becoming scattered to about one per every three square miles. The bottom area in the north part of the lagoon around island Mack, which is out of the recovery area, consists mostly of fine silt.

- 1.6 The entire system shall be capable of disassembly and reassembly without impairing the effectiveness of any system components. This will be demonstrated by the contractor in the following manner:
  - 1.6.1 The system shall be assembled and operating at the contractor's facility at the time of preliminary inspection.
  - 1.6.2 The system shall be disassembled and shipped to Point Mugu, Calif.
  - 1.6.3 The system shall be assembled and operated at Point Mugu. (Note: PMR personnel shall be instructed by the contractor during this period.)
  - 1.6.4 The system shall be disassembled and shipped to Eniwetok. (Disassembly and shipping by PMR personnel with contractor assistance.)
  - 1.6.5 The system shall be assembled and operated satisfactorily at Eniwetok for system acceptance. (Assembly and operation by PMR personnel with contractor assistance.)
- 1.7 The vehicle and all systems shall be capable of operating for a minimum of 500 hours between major maintenance overhauls.
- 1.8 Throughout system development, operational or already qualified subsystems and components shall be used where possible without limiting or restricting overall system capabilities.

# 2. Alternate Bid Items Desired

Separate proposals shall be submitted for a manned vehicle and/or an unmanned vehicle in accordance with the requirements stated below.

Selection of type of vehicle to be procured may be determined by vehicle cost.

- 2.1 Unmanned Vehicle: Shall utilize a television system to search for articles to be recovered.
  - 2.1.1 The television system shall be image-orthicon type or equivalent.
  - 2.1.2 The television shall be capable of discerning objects comparable to a diver's visual acuity, or better, consistent with water conditions.

I. SURMISSION OF PROPOSAL: Your proposal should be submitted, in quadruplicate, in sufficient time to insure receipt by this office no later than 3:00 P.M. on Thursday, 27 December 1962, and should be addressed to the Officer in Charge, U. S. Navy Purchasing Office, 929 South Broadway, P. O. Box 5090, Metropolitan Station, Los Angeles 55, California, and should reference Schedule 30719/63, Attention: Code OS6.

Very truly yours,

R. I. BROWN

Contract Negotiator By direction of the Officer in Charge

Encls:

(1) Additional Information, Conditions & Requirements

(2) NAVEXOS 3445

(3) 11ND-NPOLA 4270/14

(4) Non-Discrimination Clause

(5) Form DD-633

(6) Late Proposals Clause