

The FACEPLATE

October 1958



EXPERIMENTAL DIVING UNIT
and DEEP SEA DIVING SCHOOL

OFFICER IN CHARGE

Manual

I have been tempted to drop this item from the "Faceplate" because it seems, at times, as though the manual will never get printed. As the months progress I have been given estimates on the distribution of Part I from May through November. A call this morning disclosed that there isn't a chance for November, so it's anyone's guess. Parts II and IV (Surface Supplied and Accessories) have been completed by EDU and sent to the Bureaus for approval. They will complete the new manual.

Diving Pay

There isn't much to report this time except that all proposed rates have now been set after agreement with UDT and EOD representatives present. Next steps are submission - through naval channels - to congress for approval.

Torpedo Air Flasks

In order to answer an inquiry about the use of torpedo air flasks for diving I did a little research with BuOrd and came up with NAVORD INSTRUCTION 8510.54 of 29 May 1953. It says (generally) that surveyed (or otherwise available) torpedo air flasks can be used for any purpose, but that BuOrd will not assume any responsibility nor will they retain any cognizance over the material or for spare parts. The flasks may be requested from BuOrd who will keep a list of requests and arrange for shipment when air flasks are surveyed.

Diving School - Student Input

Student input to the school is booming after we reached a low point during the summer. At times we had as many officer students as enlisted and the total wasn't too much more than the staff. Apparently removal of the restriction that incoming students must be second class or salvage divers had an effect, because quotas are now being filled to the limit.

Diving School - Ship Salvage Project

We have obtained permission from the Army Engineers and will move the LCI used for ship salvage from its Potomac River cove to the Stump Neck, Maryland demolition area where our other LCI is sunk. This will give us deeper water to work in and make the students' patch and pump job a little harder. Our old spot is being taken over by construction of a new bridge across the river.

EDU ADMINISTRATION

LCDR G. O. FOFLIN, USN

The Unit has received several requests from individuals asking that they receive a personal copy of the "Faceplate", or that their ship or unit be placed on the mailing list to receive the "Faceplate". Because of the limited number of clear copies which our duplicating machine will reproduce, we can supply only ships or units having the largest complement of divers. No individual is mailed a copy for his personal use.

The Unit has also received several requests from diving activities for a large number of NAVSHIPS 1000 books. In order to make economical distributions, we normally supply about 4 to 6 copies to each such request, unless, request for a larger number of copies can be justified.

There has been promulgated to the Navy the following instruction which will be of possible news and interest to you:

BUDOCKS INSTRUCTION 11012.75 dtd 17 Sep 57, subj: "Use of Copper Tubing for Acetylene Piping; Prohibition of"

This will probably be my last effort in the editing of the "Faceplate" and quite probably my last direct connection in "Hard Hat Diving" after 22 years association with diving. I have received orders to report to the Commander, Pearl Harbor Naval Shipyard for duty. LCDR Norvil Wickerson (present C.O., USS TRINCA) will relieve me in January 1959.

EDU PERSONNEL

POWELL, B.L., TMC(DV), USN

STRICKLAND, F.T., GMC(DV), USN, Master at the Unit the past 2½ years is leaving us soon - probably to west coast. However, prior to his departure he is being rewarded with a 10 day recruiting trip to Harrisburg, Pa. where every "doll" is a living "doll".

ZAMPERINI, A.L., SFC, USNR, has the proud claim of being the only reserve "Master Diver" in the Navy. "ZAMF" takes quite a beating on this subject.

"Red" ANDERSON, BN2, the jovial redhead from the USS FULTON (AS-11) has orders to EDU. Welcome aboard "Red".

LEEDEN, C.J., EML, known by EDU personnel as the "Big Electron", for his outstanding work in this field as a project engineer, will be leaving us soon. His departure will be missed by EDU and "Johnnie's".

GWINN, R.L., EML has reported aboard for a tour of duty. Welcome aboard.

JENSEN, F.G., EML the Unit's "Ace" Scuba man the past 3 years has recently left for the USS PRAIRIE (AD-15). Happy sailing Jensen.

PROJECT NEWS

LCDR W.F. SEARLE, JR., USN

CO-TWO Absorbants

An extensive study of CO-TWO absorbants is underway, particularly applied to mixed-gas scuba but with future application to helium deep diving.

Improved CO₂ absorbants of U.S. and foreign manufacture are being studied. The only CO₂ absorbant authorized at this time for field use in MIXED-GAS AND CLOSED CIRCUIT SCUBA is the Baralyme, pellet (old) type which comes in 8 pound cans only. None of the newer types of Baralyme, containing caustic compounds and produced for hospitals, are authorized for use. In general, these later types come in wax paper, milk-carton containers though they can be procured in bulk quantities in cans. Activities have procured the later types on open purchase after being contacted by the sales representatives or distributors of the product. The authorized absorbant is a stock item and should be procured through normal supply channels. Pertinent data follows:

Stock Numbers:	IS-6505-299-8205
Item:	Calcium Hydroxide - Barium Hydroxide Mixture - 8 lb. can
Unit:	Per can
Price:	\$3.92 per can

If you have Baralyme in milk cartons or in the five-gallon can, DON'T USE IT. If you have Baralyme in the 8 pound can and got it through the supply system on the above stock number, it is no doubt the proper type. If you have 8 pound cans of Baralyme purchased "open-purchase" DON'T USE IT until you have checked the manufacturer and are sure it conforms to the stock number.

A BuShips notice on this subject is anticipated.

Webbing For Scuba Harnesses

We are frequently asked to advise regarding proposed harness arrangements for scuba. At the present time several different models are being informally evaluated and we are discussing optimum buckles, clips and quick release fittings with a well known manufacturer of similar equipment for paratroops and aviation personnel in general.

BuAer has recently developed a nylon webbing specifically for use in low temperatures which may remove one of the objections (stiffness when cold) to the use of nylon for scuba straps. Identification is as follows:

Webbing, Textile, Nylon, Abrasion Resistant Low Temperature Fliable

MIL-W-19011A

Stock Number: RM 8305-5114-5135-1980

Prices: \$0.70 per yard

This webbing comes in one width only; namely 1 23/32 inches. It is approximately 0.1 inch thick, weighs 2.9 oz. per yard, and is olive drab in color.

Leak Detection

In assembling scuba of all types it is desirable to be able to test for minute gas leaks without having to put the whole rig under water. Soapy water is an obvious liquid for testing but has numerous disadvantages. The Air Force and Army carry a specification (MIL-L-25567A) for testing for leaks in oxygen systems which is suitable for all scuba. Ordering data as follows:

Items: Solution, leak detecting

Stock No.: 6810-286-6019 (Air Force)

Unit: Bottle (polyethylene squeeze type), 3 1/2 oz.

Prices: \$1.50

The above stock number covers American Gas and Chemical Co. "Leak-Tec" formula #16-OX (Type I) for temperature range +35°F to 160°F. For cold weather uses, specify Leak-Tec formula OX-65-C (Type II) for temperature ranges -65°F to +35°F.

This MIL spec. is not a soap and inhalation toxicity has been reported as negative in Air Force tests.

UNDERWATER TELEVISION

ENS G. M. JANNEY, USNR

The underwater television project has been progressing slowly but steadily in recent months. Investigation of various types and techniques of artificial illumination for use with television has occupied the largest portion of the time.

Both daytime and nighttime tests were conducted and a comparison of the data is now being made to determine whether any significant differences exist.

During the summer months, a visibility range of six feet was cause for elation, but during a demonstration for personnel from ECOTC, the light transmission of the water was over 90% and the visibility was about 20 feet. The marine biologists from the Chesapeake Bay Institute say that this is due to the disappearance of the plankton from the water in the fall and winter months.

Weather permitting, we should be able to get some very good results in the next few months. At least we will be able to see what we are doing for a change.

EDU & DSIDS MEDICAL

LT R. T. VAN ORDEN, MC, USN

A recent report of a diving accident involves a sport SCUBA diver who somehow escaped alive and well from an amazing series of unfortunate and awkward circumstances. His training consisted of nine months experience with a local skin diving club. At the time of the accident he had been swimming at about 120 feet for 30 to 40 minutes (requires decompression according to both "old" and "new" tables) when upon running low on air he found his reserve valve stuck and his buddy swimming away. After rapid ascent with forceful exhalation he was taken aboard the diving launch immediately. Typical decompression sickness pain and nervous system symptoms developed within minutes. He was taken to the nearest dispensary in 45 minutes. Since pressure facilities weren't available, he had to be transferred by 3 hour low altitude flight to another activity. But again, no recompression treatment facilities were available within many hours traveling time. Therefore he was recompressed in the water and improved at such a depth that Treatment Table IA would be properly chosen.

Water recompression is miserable at best though, so he surfaced once and then returned to depth to complete treatment. It was not surprising that a partial recurrence followed. Fortunately it did not become life threatening by the time a portable recompression chamber arrived by plane eleven hours later (24 hours after the dive). Twelve hours flight in the portable chamber breathing H_2O_2 at 66 feet (the new depth of relief) finally brought him to a treatment chamber where, by taking the small chamber into the large chamber, he was able to complete a modified Treatment Table III and escape unscathed.

If adequate treatment facilities are absolutely unavailable, there is tremendous risk in undertaking such a dive as the one in this case. The risk is multiplied if no local facilities are available for treating any casualty which might occur. A minor mechanical failure of the diving gear can then lead to a series of tragic events which only good luck and later good management can save.

Horse Collars

The importance of "horse collar", "dough-nut" or some jury-rigged equipment to protect the diver's shoulders from weight of helmet and breastplate has recently come to our attention. Some divers may consider a couple of black and blue callouses as a proud badge of their profession but the repeated bruising which causes such callouses isn't worth it. One diver recently underwent surgery because of a "bursitis" which almost surely was aggravated by just such bruising.

The school has taken on an international flavor of late, on board are:

- 7 Taiwan Naval Officers
- 2 Canadian Naval Officers
- 2 Argentine Naval Officers
- 2 Indonesian Naval Officers
- 1 Chilean Naval Officer

LCDR THOMPSON, RCN, who is Officer in Charge of the Diving Trials and Development Unit in Canada has paid us his third visit to pick up some of the Ship Salvage units of instruction.

Master Diver Candidates

The Master Diver selection Board established in accordance with BuPers Manual, Article C-7408 requests that when letters of recommendation are forwarded, a more detailed summary of diving duties performed be submitted as an enclosure to the basic letter.

Article C-7408 states: Commanding Officers may recommend by letter to the Chief of Naval Personnel via the designated selection board any qualified Diver, First Class who fulfills without exception the requirements listed therein.

There are now 58 Active Master Divers to fill 68 allowed Master Diver Billets.

Staff News

LT "Bill" Wise has relieve LCDR Ullrich as training officer and is doing a fine job. Another Greenlet sailor is ordered to report. ENS "Billie" Delaney will relieve LTJG "Ed" McConkey when he finishes the Knife and Fork School. Mr. McConkey has orders as Diving Officer on the USS AMPHION (AR-13). Five year Tallant finally leaves this month for his Newport training.

Other new arrivals are:

CHBOSN Moss from the USS PETREL (ASR-14) as diving officer.
 CHBOSN Burnette completed the course and is now CinC of the Diving Barge.
 CHBOSN "Bob" Upchurch from the USS FLORIKAN (ASR-9) reported and is now CinC of Service Craft.
 Nick Nerison, GMC from the USS CHANTICLEER (ASR-7) and Jack Lahm, SFL from the USS GRAND CANYON (AD-28) both reported for instructor duty.

"WELCOME ABOARD"

CHMACH Fred "The Senator" Wofford has gone out on 20 and is now working for American Dynamics at the Electric Boat Company, New London, Conn. "Good Luck Senator".

Divers Log

The DSDS has had printed with School funds a limited number of the Divers Log binder and the Diving Duty Summary. The amount on hand is sufficient only for

personnel graduating from the School.

A copy of the Diving Duty Summary is attached for the use of Commanding Officers of all diving activities who so desire to modify it, if required, and to have it reproduced locally.

A regular file folder, stock number G7520-222-3443, is all that is required to start a Divers Log. The left side should contain the Diving Duty Summary and all diving Reports of Decompression Sickness and all diving accidents (NAVMED-816).

The right side is reserved for all personal copies of the Record of Dive Form (NAVJERS 2540/NAVCCITT 2039).