

# THE FACEPLATE



**OCTOBER 1963**

**DEEP SEA DIVING SCHOOL**  
**and EXPERIMENTAL DIVING UNIT**

WASHINGTON, D.C. 20390

ASSISTANT OFFICER IN CHARGE, DEEP SEA DIVING SCHOOL - LT W.R. BERGMAN, USN

This is my first article for the "Faceplate" as Assistant Officer in Charge since officially taking over the helm on 1 August. You will note that this issue is primarily occupied with staff written articles with the exception of the articles of the NAHANT and the range at Newport.

The faceplate is an unofficial document used to discuss plans, equipment, ideas and personnel and is only as complete as the operating forces make it. Rather than dwell upon past history an "article never printed", or "copies never received", which would avail nothing lets look ahead with a positive approach. If the faceplate is to continue, and personally I strongly feel it should, then let us hear from you at least once a quarter. The present administrative load on each of us is not so great that we cannot give a small amount of time and contribute to our specialized field of diving. I can't help but feel, and this is strictly opinionated, that the secondary diving power that the United States Navy is today, is partly attributed to the lack of interest of the officers and men in the diving field exhibit. In no way do I infer that writing articles for the Faceplate is the answer, I am merely giving a positive illustration of lack of interest.

There are great horizons ahead in the field of underwater exploration, as indicated by Captain Bond's forthcoming man under the sea in the Bahamas, the Ed Links recent studies on prolonged dives at deep depths and the Costeaus endeavor in men living under the sea, speaking of Costeaus project ex-LCDR AQUADRC one of our submarine medical officers, has resigned from the Navy and joined his staff.

U.S.NAVAL UNDERWATER ORDNANCE STATION, NEWPORT, R.I.

LT.M.A. HARRELL left this station in July to assume command of the USS PETREL (ASR-14).

WILKINSON, J.P., SFM (Master Diver), was transferred on short notice to USNAVMINEDEFLAB, Panama City, Florida to complete his normal tour of shore duty.

ORANCZAK, M., BMC was ordered to DSDS for cross training FFT USS NIPMUC (ATF-157) for duty.

Master Divers

TYLER, L.E., SFC  
TIERNO, H.J., BMC

Medical Diving Technicians

O'LEARY, J.M., HMCS  
SCHULTZ, R.E., HM2

First Class Divers

MC CLANAHAN, R.C., DC1  
THIBODEAU, C.V., BM1  
RIDENS, J.T., BM1  
HARRIS, W.G., QM2  
BENNETT, E., SFC  
WALLACE, J.S., SFM2  
MICHALSKI, E.M., BM2  
HAYDEN, A.C., DC1  
PULLIAM, L.L., SF1

Second Class Divers

ANDERSON, M.C., SF1  
PONAS, C.B., DC1  
MANNING, W.A., EM3

U.S. NAVAL UNDERWATER ORDNANCE STATION, NEWPORT, R.I. cont'd

The YDT-4 is scheduled for a yard overhaul commencing in September.

The weather here is rapidly improving which gives us much better diving conditions. At the present time, we are catching up on repairs to hydrophones, etc., on the range, plus repairs on various other installations around the island.

We have chamber runs for diving, submarine, EOD and UDT candidates each Thursday morning for the area.

ADMINISTRATIVE PROBLEMS AT DSDS

1. All correspondence regarding enlisted personnel records (i.e. STO's, (personnel do not report to DSDS) Examinations for Advancements (make recommendations for advancement prior to transfer), Page 13, Evaluation Reports, etc.) should be forwarded to the below address as DSDS is a tentant activity and do not maintain enlisted service records.

Commanding Officer  
U.S. Naval Station  
Washington, D.C. - 20390

DO NOT MENTION DIVING IN THE ADDRESS

2. All correspondence regarding pay for officers and enlisted personnel should be forwarded to the below address as they maintain our pay accounts.

Officer in Charge  
U.S. Navy Finance Office  
U.S. Naval Station  
Washington, D.C. - 20390

3. All correspondence for officers records, and all officer and enlisted personal mail should be addressed as follows:

Officer in Charge  
U.S. Naval School, Deep Sea Divers  
U.S. Naval Station  
(Washington Navy Yard Annex)  
Washington, D.C. - 20390

The Naval Station in Washington is broken into four separate physical locations. With a little caution in addressing mail it will save the administrative personnel a great deal of readdressal.

EDU's address:           Officer in Charge  
                          U.S. Navy Experimental Diving Unit  
                          U.S. Naval Station  
                          (Washington Navy Yard Annex)  
                          Washington, D.C. - 20390

TRAINING OFFICER'S NOTEBOOK - LTJG H.H. BAIMBRIDGE, USN

DIVING PAY. The "new" diving pay is still the source of many administrative problems for diving activities. This is partially due to many individuals, responsible for the administration of diving personnel and records, not being aware that SECNAV NOTE 7220 of 18 August 1961 is still effective. It was originally due for cancellation on 31 July 1962 but Change 1 extended it to 31 December 1962. Change 2 further extended it to 31 July 1963 and finally, ALNAV 19 of this year, extended it until its provisions have been incorporated into BuPers Manual. Many activities are still using old forms and service record entries (i.e. NavPers 2540) for substantiation of entitlement. Paragraph 4.f. of the Notice clearly states that substantiation is made by Military Pay Order (DD 114) for officers and by personnel diary entry in the case of enlisted personnel (with a concurrent page 13 entry). It also provides sample entries in each instance.

A frequent misinterpretation is the provision for filling Diver Second Class billets with Divers First Class. Only 50% of the vacant Second Class billets may be filled with First Class, NOT 50% of the billets. For example, if an activity has an allowance for four Divers Second Class and all are vacant, the maximum number of First Class for which payment may be authorized is TWO. If only two of the billets are vacant, then only ONE First Class can fill them. The First Class and below is always paid at the rate for his classification, regardless of the billet he is serving in. The Master Diver is paid at the First Class rate when he is filling a First Class billet. (The Master Diver can only serve in a Master or First Class billet).

A frequent omission is a statement on TAD orders that the temporary additional duty is for the primary purpose of diving. If it is not included, entitlement to diving pay stops at the end of 30 days. If the TAD is for duty "involving the performance of diving", the pay continues for the entire period. Divers on TAD count against the allowance of their permanent duty stations.

Medical Deep Sea Diving Technicians may not fill billets designated for divers of other classes, nor may their billets be filled by divers of other classes.

CROSS TRAINING. The last class of cross-trainees graduated from DSDS on 20 September. This was the 13 week course, for former Salvage Divers, which convened on 17 June.

BuPers has automatically removed the designators and NEC's of those Divers First Class and Salvage Divers who had not been cross-trained by 1 July of this year. (The last class continued as regular students and were redesignated as Divers First Class, NEC 5342, upon graduation).

Several persons have commented that they "know of" some individuals who did not receive cross-training and continued as divers. This is true since a Diver First Class (NEC 5312) who was a graduate of Salvage School, or had served for one year aboard an ARS or ARSD as a First Class, did not require cross-training, although assignment of NEC 5342 depended on his having

completed SCUBA training at an authorized training activity. In either case a change of NEC would have to have been recommended to BuPers, either by his command or the training activity. If this was not done, his NEC was removed right along with the rest.

SCUBA TRAINING. The deadline has now passed for all classes of conventional divers to meet the SCUBA requirements set forth in BUPERS NOTE 1500 of 5 October 1962.

This is another widely misinterpreted Notice. Many thought it was doing away with the SCUBA Diver (NEC 5345), even though the Subject line specified "SCUBA requirements for Divers Second Class and above". Though their numbers are increasing, the SCUBA diver is still considered "below" a Second Class.

Others interpreted the qualification factors as re-qualification requirements, to be added to those already required by BuPers Manual, rather than initial requirements to be included in their first qualification.

Then there was the question of who was authorized to train, designate, and qualify those divers requiring SCUBA. Again the answer was in the Notice itself, which specified those activities authorized to conduct SCUBA training by BuPers Instruction 1500.15 series.

As with the cross-trainees, BuPers has removed the designators and NEC's of those divers who had not met the SCUBA requirements by 1 July 1963. As a spot check on this, a total of 33 First and Second Class (NEC 5312 and 5313), from Atlantic Fleet ASR's, were checked in the classification section in BuPers. Only ten of these had been changed to 5342 and 5343. The NEC's of the other 23 had been removed and were no longer classified as divers. Some may still be erroneously carried as divers in their respective ships, so if in doubt, better check yours.

DIVERS NEC's. A few words are also in order with regard to diver NEC's. (some ships are still using the old ESM term). Only four are now effective. They are: Master Diver 5341, Diver First Class 5342, Diver Second Class 5343, and SCUBA Diver 5345. The dual designators (Master Diver/Scuba, etc) have been deleted. Salvage Diver 5344, will be retained for emergency service only.

Many are not familiar with the NEC priority system, consequently they are not aware that assignment of an NEC with a higher priority than that of the diver NEC (which is 3) will automatically relegate the diving NEC to a secondary. (Reference: Manual of Navy Enlisted Classifications, NavPers 15105 series).

ASSIGNMENT OF DIVERS. Contrary of popular belief, divers are not assigned to their ultimate duty station by BuPers. (Exception: Diver instructors in BuPers controlled instructor billets). Instead, they are made available to the Enlisted Distribution Offices (EPDOPAC, EPDOLANT, EPDOCONUS). Within the EPDO's they are assigned to type commander representatives, having a requirement for divers (i.e. SubLant, ServLant) (District Commandants in EPDOCONUS) who will assign them to individual ships or stations as force or district requirements dictate. Generally speaking, you may expect to be assigned, both ashore and at sea by NEC.

SCREENING OF DIVER CANDIDATES. The number of candidates reporting for training who do not meet one, or several, of the requirements, is still a major administrative problem, not to mention the wasted travel funds and loss of man hours. In fact, they seem to be on the increase in recent months. It is understandable, though not excusable, that non-diving type ships could overlook some of the preliminary screening requirements, but for an ASR, ARS, etc., it should be considered a cardinal sin. For example, a candidate was recently received from such a ship, who could not pass the test for a Class III swimmer. He could only be considered a non-swimmer, yet we were supposed to make a diver out of him. Another (not from a diving ship) had been receiving psychiatric treatment for over eight months. (His first act, on reporting aboard, was to ask for information about continuing his treatment). He said that he had requested diving school, because he had heard that divers only served at shore stations and he felt that this would be the best way to ensure his getting adequate treatment. (He needed it.)

The Catalog of U.S. Naval Training Activities and Courses (NavPers 91769) now lists each step in the screening process, with appropriate references to other pertinent instructions. It also listed authorized diver training activities, with course descriptions and class convening dates. It supersedes BuPers Instructions 1500.15 and 1500.25 series.

It should be noted that a number of changes have also been made in eligibility requirements--particularly in the ratings which are eligible for diver training. Most affected in this category is the Diver Second Class. The ship's cook or ship's yeoman, among others, are no longer eligible and pay grade E-2 has also been deleted. Seaman and Fireman must either be designated strikers or indicate a desire to pursue advancement to one of the authorized ratings. All diver candidates must now be First Class Swimmers since the requirement for SCUBA training.

DIVING UNDERWEAR. No doubt many activities are experiencing difficulties in obtaining diving underwear. Due to the small demand the Clothing and Textile Office cannot get economical bids for manufacture of this item. DSDS, in cooperation with EDU, is currently conducting an evaluation of the 100% cotton waffle knit underwear for extreme cold weather ( FSN 8415-270-2008 and FSN 8405-270-2012 series) as a possible substitute. To date it appears to be adequate and, in some respects superior, to the old wool underwear. However, with winter approaching we will be able to better evaluate its suitability under more adverse conditions.

ENLISTED EVALUATION SHEETS. In reviewing the service records of Master Diver candidates, and staff personnel, it is noted that seldom is any mention made, on evaluation sheets, of a man's performance as a diver. It is a particularly important factor in determining the man's suitability for Master Diver. Commendations from the civic organizations, non-diving activities, etc., speak well of a man's ability to represent the diving navy before the public, or the impression he made on personnel who wouldn't know a good diver from any other squared away bluejacket. But they say little or nothing about his everyday performance as a diver aboard ship. Comments pertaining to diving performance are as important to his career as any of the other traits listed and are an invaluable aid in evaluating a man for designation as a Master Diver.

TREATMENT OF CIVILIAN DIVERS. A number of inquiries are still received regarding charges for treatment of civilian bends cases. This is covered quite well in Volume III, NavCompt Manual, Articles 035125, 035126, 035128, and 035130. Other pertinent instructions are BuMed Instructions 6320.4 and 6320.31 series.

FORMS AND PUBLICATIONS. Many requisitions are received at DSDS for diving charts, diving log binders, curriculums, diving manuals, salvage notes, and various other forms and publications. All of these, with the exception of the Salvage Notes and curriculums, are available either through the supply system, or are procured locally from training funds (diving charts, diving log binders, etc.). Ship Salvage Notes and the Curriculums are printed locally and paid for out of a special training material fund in BuPers. They are for use at DSDS only and are not meant for general distribution. We enjoy being of service to the operating forces, but we cannot become a distributing point for diving publications. The Diving Manual, Cutting and Welding Manual, Demolition Manuals, etc., are all I cog items, so check the catalog.

MEDICAL DEEP SEA DIVING TECHNICIANS. The MedTech course has been reduced to 26 weeks and a new curriculum approved and in effect. Training in underwater work, cutting and welding, demolition, and the submarine rescue chamber, has been reduced to provide time for additional instruction and emphasis in the medical aspects of diving as well as more advanced gas mixing and analysis. The number of classes being scheduled is now two per year.

It is planned to delete the Hospital Corpsman Special Operations Technician (NEC 8492)(UDT HM). Therefore, all HM's engaged in underwater operations, will be graduates of DSDS.

REQUALIFICATION AT DSDS. This activity conducts requalification diving on a weekly basis. Quotas are not required, but personnel should be ordered TAD for a period of one week, to report prior to 0800 on Monday. He must have his health record with him and have a current annual diving physical entered therein, otherwise he will be returned without the required dives.

ANNUAL DIVING PHYSICALS. It seems that every other diver, reporting for requalification, has not had an annual diving physical and "didn't know he was supposed to have one". This is particularly true of Divers Second Class attached to Naval Air Stations or other remote activities. For those who don't have the work--its in BuMed Manual, Article 14-15(3). They are required for all qualified divers, to be conducted in January of each year.

DUTY AT DSDS. The diving school has an allowance for 18 instructors and four Medical Deep Sea Diving Technicians. There are currently 16 instructor and 3 MedTechs on board, with two instructors and one MedTech ordered. Four instructors billets and one MedTech billet will become available between May and August of '64. It's a 3 year tour for instructors (according to rate for HM's) so divers due to come ashore, and interested in this duty, should make their desires known now. A notation on your SeaVey card will be noted.

NEW TRAINING FILM. A new training film on new methods of laying beach gear from ARS's and ATF's is now being filmed. Completion date and ultimate distribution is not known at this time.

MASTER DIVERS. It is gratifying to note the improved preparedness of Master Diver candidates. It still holds true, however, that each candidate needs a comprehensive review in all phases of diving.

The number of Masters currently on active duty, still stands at 52, although four more have been designated (two are now enrolled) since publication of the last list. We're not losing ground, but we're not gaining either.

The following list is based on the latest information available as of 15 September. It is requested that any known corrections be forwarded to DSIDS, Attn: Training Officer.

<u>NAME</u>	<u>RATE</u>	<u>DUTY STATION</u>	<u>DESIGNATED</u>
ADAMS, A. (n)	DCC	PETREL (ASR-14)	7-23-63
BAILEY, J.W.	SFCA	PETREL (ASR-14)	6-27-62
BENNETT, E.B.	BMC	NOTS, PASADENA	6-7-57
BUHL, C.F.	SFCA	NOTS, PASADENA	5-29-63
COX, W.C.	SFC	PHIBASE LCREEK	8-21-61
CARROLL, H.R.	EMC	NOL SOLOMONS MD	5-11-60
CARROLL, R.C.	SFC	ESCAPE (ARS-6)	2-27-61
CRISLER, L.G.	SFC	TRINGA (ASR-16)	3-4-60
COLLINS, F.R.	SFCA	DSIDS	1-14-63
DINAN, T.E.	BMC	RECRUIT DUTY	1-27-61
DIEMER, W.C., Jr.	DCCS	NOTS, PASADENA	7-22-60
DOUGLAS, L.F.	BMC	KITTIWAKE (ASR-13)	5-9-61
DRISCOLL, R.F.	SFCA	HOLLAND (AS-32)	4-5-63
EISSING, F.E., Jr.	SFCM	KITTIWAKE (ASR-13)	5-20-58
FRENCH, F.	BMCS	NOTS, PASADENA	8-30-54
FAIRCLOTH, A.A.	BMC	PETREL (ASR-14)	3-8-62
FLANAGAN, J.L.P.	DCC	COUCAL (ASR-8)	10-13-58
GREENE, J.C.	BMC	ORDFAC, YOKOSUKA	5-9-61
HESS, C.E.	MMC	TORPSTA KEYPORT	1-15-63
HOLGERSON, A.	SFC	PENGUIN (ASR-12)	4-5-63
HAWES, D.D.	SFCS	ORION (AS-18)	5-29-63
JENSEN, F.G.	BMC	SHIPREPFAC SUBIC	5-9-61
KEANE, D.R.	BMC	NOL FT LAUDERDALE	3-5-62
KENNEDY, J.M.	SFCM	YFNB 17, NORFOLK	7-30-58
LINDLER, C.E.	BMC	NS, ROTA SPAIN	5-9-61
LAMAR, L.C.	EMCS	NOTS, PASADENA	2-7-51
LIDDLE, H.S.	DCCA	DSIDS	9-5-63
MULLIKIN, H.B.	SFC	SKYLARK (ASR-20)	7-5-61
MORRIS, R.K.	GMCS	CHANTICLEER (ASR-7)	8-1-61
MC ARDLE, R.F.	EMC	FLORIKAN (ASR-9)	1-8-63
MARCELL, C.T.	BMC	NS, SDIEGO	6-22-62
MURRAY, R.K.	MMCS	EDU	6-22-62
PAYNE, O.S.	GMCC	NAS, N. ISLAND	7-17-45
PARKS, R.	BMC	EOD SCOL INDIAN HEAD MD	6-22-59



SOPCHICK, E.J.	BMCS	EODU 1	2-19-57
SHEATS, R.	TMCN	NEREUS (AS-17)	12-30-58
SHIRCLIFFE, A.C.	BMC	DSDS	2-21-61
STOUT, J.	SFCM	SUBASE PEARL	11-12-52
SCHNEFF, R.J.	GMC	NEREUS (AS-17)	9-5-63
TIMMONS, J.M.	SFC	PENGUIN (ASR-12)	8-25-59
TIERNO, H.J., Jr.	BMCA	UWOS, NEWPORT	3-6-62
TAYLOR, C.V.	DCC	GREENLET (ASR-10)	1-24-62
TYLER, L.E., Jr.	SFC	UWOS, NEWPORT	1-30-61
THOMAS, D.E.	BMC	PRESERVER (ARS-8)	1-12-62
WILLIAMS, V.	BMC	EOD SCOL INDIAN HEAD MD	2-21-61
WEBB, D.W.	BMC	WINDLASS (ARSD-4)	1-19-60
WILKINSON, J.P.	SFCM	UWOS, NEWPORT	8-30-54
WALLACE, K.W.	BMC	EDU	5-9-61
WHITE, W.C.	BMC	UWOS, KEYPORT	1-8-63
WILHITE, R.W.	SFC	SPERRY (AS-12)	4-5-63
YENTES, R.D.	SFCS	SUNBIRD (ASR-15)	7-3-61

EXPERIMENTAL DIVING UNIT - LCDR R. PESCOTT, USN

On 30 August, LCDR R. PESCOTT relieved LCDR G.E. ENRIGHT as Assistant Officer in Charge of the U.S. Navy Experimental Diving Unit.

LCDR ENRIGHT is now the Assistant Officer in Charge of the U.S. Navy Training Publications Center here in the Navy Yard Annex.

Three dives have been made in the Unit to depths of 500 feet. These were working dives with a twenty minute bottom time. Five minutes to get down and actual working time of 15 minutes. On the first dive the diver received a slight shell natron burn on his chin at 50 feet and was taken out and into the chamber for a table four. On the second dive we had a little better luck. The diver got to 40 feet and had a slight pain in his left shoulder. On the way to 30 feet, the pain left him and he was O.K. until about 8 or 10 feet when the pain returned to both shoulders and both elbows and the left leg. The diver was taken out and treated on table II. The third dive was successful in all respects, and the diver suffered no ill effects. The total time of dive was 3 hours, 51 minutes and 55 seconds.

We know this is not a record and we aren't trying to set a record. We have succeeded in getting a diver to 500 feet where he performed useful work. This in itself is a tremendous breakthrough in diving.

The dives were performed on multi-inert gases, using shell natron for one dive and "Baralyne" on the last two.

Many, many more dives will have to be made before, this type of dive can be performed in the fleet. As it stands now, the diving complex will see some big changes in methods and procedures in the next few years.

The personnel involved were LAFERRIERE, P., HM1(DV) on the first dive, HARMON, E.C., SF1(DV) on the second, and GARRAHAN, R., MR1(DV) on the third.

SUMMARY OF NAVXDIVINGU RESEARCH: RECENT, CURRENT, FUTURE (?)  
by LT M.W. GOODMAN, MC, USN, Assistant SUBMEDRESOFF

1. CANISTER-ABSORBENT SYSTEMS FOR CO<sub>2</sub>: Now in progress is a detailed study of the relationships of effective duration of the absorbent charge, weight of the absorbent charge, and the structure of the canister itself. Canister design is just as important a factor in determining the efficiency of the system as is the precise type and amount of the CO<sub>2</sub> absorbent used. With the closed-circuit rig canister, different amounts of pellet baralyme are used, and different means of filling the otherwise unoccupied space are being tested. Laboratory testing of this sort is both difficult and tedious, because, in order for the tests to have real meaning for the operational situation, such factors as gas flow rate, number of breaths per minute and volume of each breath, carbon dioxide output, degree of saturation and water vapor, gas temperature, surrounding water temperature, canister gas flow resistance, and so on, must closely correspond to the values encountered during actual apparatus use.

Several dives have been made using granular baralyme in place of shell natron in the deep-sea helium-oxygen canister. This will be subjected to further study. Very preliminary results are encouraging.

2. TREATMENT OF BENDS: Although not a formalized project, the staff has been actively considering and, when appropriate, testing various alternatives to the standard recompression tables. Future efforts in this field will most certainly include a study of continuous, slow ascent techniques in place of stage ascent. The potential place of drugs in treatment is being investigated by the French Navy (GERS), but the study is still in the preliminary phases.

3. UNCONVENTIONAL DIVING: Within this broad classification several research projects have been undertaken. As noted elsewhere in this issue of Faceplate, working dives to 500 feet have been made, with varying degrees of success.

The potentials of gas mixtures containing both helium and nitrogen, as well as oxygen, are being studied by actually making the dives with Mark VI SCUBA, by investigating the saturation dive (12 hour exposure) no decompression limits, and by attempting to determine the ways in which the blood stream and the body respond to these gas mixtures. With the dives actually made thus far, the decompression time requirements are remarkable, and, generally, are at least 25% less than that for the same depth/bottom time with air or 68% - 32% HeO<sub>2</sub>.

4. HeO<sub>2</sub> REPETITIVE TABLES: The extensive testing phase should be completed within a few days, and, hopefully, these tables will be found acceptable and will be promulgated for operational use.

5. DEPTH NARCOSIS: The current series of studies indicates, so far, that inert-gas is real and, contrary to recently-prevalent ideas, is not due to carbon dioxide. However, narcosis is probably worsened if carbon dioxide accumulates in the divers' lungs because either the apparatus, the gas, or the amount of hard work (each singly, or combinations) causes insufficient ventilation of the lungs to occur. Various combinations of these factors are being studied during recompression-chamber simulated dives.

SHARK ATTACK - by LCDR A. H. BARSOUM, MC, USN

The area of the world's seas where sharks are active stretches around the globe and is extensively used by Navy ships. It is, therefore, desirable that divers should be fully aware of the problem.

1. Factors Affecting Shark Attack.

a. Turbidity. Turbidity and extensive discoloration of the sea along the coast is indicative of the presence of flood waters from rivers and it is probable that sharks are attracted to flooded areas due to the likelihood of finding food organisms there.

b. Temperatures. The temperature of the water is usually greater than 70°F although attacks have taken place in temperatures of 60°F or less. The predatory activities of sharks increase as a result of sudden changes of temperature.

c. Salinity. Salinity can be a factor of considerable importance especially in relation to the species of shark. Some species have a strong affinity for fresh water and it is possible that the presence of flood water from rivers along inshore areas has an attractant effect on some sharks.

d. Depth. Depths of attack can be as shallow as two to three feet.

e. Distance from the shore. This can be as close as thirty feet from the beach.

f. Type of Beach or Sea-floor. The attack usually takes place either in, or in the immediate vicinity of, a relatively deep channel. The presence of a channel provides comfortable access for sharks of large size to the shallow bathing areas.

g. Condition of the Sky. The condition of the sky apparently bears no relation to shark attack since approximately half the attacks investigated took place in bright sun and half with an overcast sky.

h. Color of Costume. The color of costume has no apparent effect since sharks are unable to perceive color. It should be stressed, however, that the color of a victim's skin or clothing in relation to the background is of importance since strong contrast would facilitate the ability of the shark to locate its prey by means of vision. The presence of a bright piece of jewelry might also have some significance.

i. Date and Time of Attack. Most cases occur in the summer although they can also occur at any time of year. Sixty percent of attacks take place between 1400 and 1700 hours although several have occurred during the morning hours.

j. State of Tide and Phase of the Moon. The state of the tide and phase of the moon appear to have no bearing on shark attack according to the records available.

k. Discharge of Sewage and Industrial Effluent. Sharks are usually attracted to outfall points because of the likelihood of finding organic material and food organisms there.

FIRST AID MEASURES. The shark attack file kept by the American Institute of Biological Sciences Research Panel contains records of 798 unprovoked attacks and show that 390 individuals recovered and 408 died. That is a mortality rate of 51 per cent. It would be interesting to know what proportion of this high death rate could be ascribed to inadequate first-aid services.

By the time the shark victim has reached the beach or boat, he is generally exhausted and shocked by the extreme exertion of struggling the the shark and the extra efforts that a crippled person has to make to swim to the safety of the beach or boat. Such a person appears to fare better spending 30-60 minutes lying quietly in the head-down tilted position and kept cool, rather than being carried bodily to a waiting car in which he is propped up, sheltered in coats and blankets in a warm atmosphere, suffering what often is a rough ride to the main road, after which he faces a hectic journey to the hospital. It is not surprising that such patients arrive at the hospital dead or in a state of ineversible shock. If tourniquets are properly applied little additional harm can come to him if he is kept still, cool and in a head-down position.

#### RESCUE AND IMMEDIATE TREATMENT.

a. In the Water. Try to chase the shark away as it may make a second attack. Help the patient ashore or into the boat as quickly as possible.

b. On the Beach. Move the patient no further up the beach than is required to avoid wave action, and place him at once in the head-down position on the slope of the beach. Apply tourniquets at once. Give no warm drinks or alcohol. Cover the patient with a light wrap or towel. Sips of fresh water may be given. Attempt no other local measures apart from stopping bleeding and covering the wounds with a clean towel. Call a doctor at once.

Probably the greatest task of the first-aid man, life-guard or ambulance worker on the spot is to protect the victim from members of the public, who can seldom restrain their desire to "do something" for seriously injured people.

#### THE REPORTING OF DIVING ACCIDENTS - by Medical Staff, DSDS

The Report of Decompression Sickness and all Diving Accidents (NAVMED 816) provides data for analysis concerning the safety of decompression tables and effectiveness of treatment procedures. This analysis is important to a continual effort to improve diving practices and increase the safety of diving as a whole.

A survey of all NAVMED 816's received during the past 15 years found that the majority of reports were adequate; however, there have been numerous instances of complete disregard for the instructions contained in NAVMED 816.

Since the basic purpose of NAVMED 816 is to increase the overall safety of all diving operations, it is considered highly desirable to report any happening or observation that calls attention to a potential hazard or can otherwise contribute to safe practices. In this sense, the report of a known escape from a serious accident under unusual circumstances would be of as much value as a report of a fatal accident of some nature. It is also extremely desirable to report observations, as an unusual number of cases of a particular type of respiratory infection among a group of divers or some peculiar set of symptoms appearing frequently with a certain type of equipment. It is only through such reporting that a new problem can be recognized early and steps be taken to deal with it.

Enough information should be provided to permit anyone reading the report to obtain a clear picture of the accident, circumstances, treatment, and outcome. If information is not available or not applicable, state so.

Reporting of the following types of accident is considered mandatory:

- a. Cases of decompression sickness requiring treatment.
- b. All cases of air embolism.
- c. All episodes of convulsion or serious impairment of consciousness during or after a dive, regardless of cause or outcome.
- d. Every accident that occurs during the course of a diving operation and results in death, serious injury, or more than brief incapacitation of the victim.
- e. Any serious mishap during the course of a dive, (i.e. blow-up, squeeze, fouling of more than brief duration, failure of SCUBA requiring free ascent from significant depth even though the diver escapes actual injury).
- f. Any event or aftermath of a dive which requires medical treatment beyond simple first aid or routine measures.

The original of NAVMED 816 is submitted to the Bureau of Medicine and Surgery (Attn: Code 75), Department of the Navy, Washington 25, D.C. and a legible copy is forwarded to the U.S. Navy Experimental Diving Unit, U.S. Naval Station (Navy Yard Annex), Washington 25, D.C.. Retention of a copy in the files of the diving activity is recommended.

The U.S. Navy Experimental Diving Unit now has a very impressive collection of case-reports which are constantly being reviewed and studied not only by the staff of the Unit but also by the staff of the Diving School where it is considered excellent teaching material for the students. It is also used for reference study by international authorities in the underwater specialties who are frequently amazed of the wealth of information that has been accumulated in one report. This is not surprising since there are in excess of 1000 cases of decompression sickness alone that are on file at the Unit.

The Diving School is at present in the process of compiling a collection of the most interesting diving accidents that have occurred through the years and will print them in book form and distribute them to diving activities ashore and afloat.

We are also thinking of publishing in Faceplate on a regular basis interesting cases that would stimulate discussion and active awareness of underwater hazards. We would appreciate your suggestions or criticism of such a project.

#### DEEP SEA DIVING SCHOOL (INSTRUCTORS/STAFF)

Recent happenings here at school.

A party was held recently in honor of Jack LAHM who has transferred to the Fleet Reserve after an outstanding Navy career (at the Diving School). Jack has taken a diving job with an offshore oil company in Louisiana. Any shipmates traveling in the Morgan City area be sure to look him up. We have a new senior instructor now "Chopper" SHIRCLIFFE. There was some doubt as to whether he could handle the job - he's only been here a short time. "Wally" BENT (out of shape), QMC is our new CMAA. Congrats to Chief LIDDLE on his recent selection to Master Diver. We've had a display of sailors trying to shirk duty here lately. The Exhibition Tank is being sent to Lima, Peru for about a month and no one wanted to go. The unlucky guys are LT EVANS; LIDDLE, DCC; WIGINTON, BM1; and RIBBECK, TM1.

We have had a big turnover of personnel since the last issue of Faceplate.

#### DEPARTED

LCDR G. E. ENRIGHT to Navy Training Publication Center  
LCDR R. PESCOTT to EDU (no travel time allowed)  
CWO3 C. H. REUSTLE to COMFLTACT Sasebo, Japan  
LTJG R. F. JAMES to USS GREENLET (ASR-10)  
DAW, A.N., HM1 to USS GREENLET (ASR-10)  
CRISLER, L.G. SFC to USS TRINGA (ASR-16)  
MURRAY, R.K., MMCS (all the way) to EDU.  
WILLIAMS, V., BMC to EOD School (dual pay)  
BROWN, J.C., BMC to USS TRINGA (ASR-16)  
LAHM, J.F., SFC to Fleet Reserve

#### RECEIVED

CDR C.H. HEDGEPEETH, USN, OinC DSDS from USS PERCH (APSS-313)  
LT W.R. BERGMAN, USN, AOinC DSDS from USS PENGUIN (ASR-12)  
LCDR R.C. BORNHANN, MC, USN, from UNIV OF PA, SCOL OF MED, PHILA  
BABCOCK, P.D., BM1 from USS SPERRY (AS-12)  
CLEVENGER, J.M., BMC from USS COCOPA (ATF-101)  
ELDRED, P.K., HMC from USS CONSERVER (ARS-39)  
KENEALY, J.J., ENC from USS KITTIWAKE (ASR-13)  
NOVELLO, S.A., BMC from JUSMMAT Istanbul, Turkey  
RIBBECK, W.D., TM1 from FLTSUBTRAFAC Pearl  
SMELLER, R.J., BMC from USS MATACO (ATF-86)  
WIGINTON, R.L., BM1 from SUBTRAPAC Pearl  
WILSON, R., SF1 from USS GREENLET (ASR-10)  
WOLFE, T.J., TM1 from SHIPREPFAC GUAN  
LIGHTSEY, C.C., DC1 from USS PENGUIN (ASR-12)

ORDERED TO REPORT TO DSDS

LTJG W.E. O'SHELL, USN from USS ISLE ROYALE (AD-29)

SPEER, H.L., SFCS from USS EVERGLADES (AD-24)

CURRAN, R.M., HMC from FLTSUBTRAFAC Pearl

PROMOTIONS

LTJG V.C. EVANS to LT

JONES, H., BM1 to BMCA

DIVING LOCKER KODIAK ALASKA

We were wondering if any of our fellow divers have ever made a dive on a 4200 ft mountain 36 miles inside the arctic circle. This command did such a job in 46 feet of water for the Air Force on one of their early warning sites. Actually it was one of our warmist dives because they have heaters in their fresh water tank, 42 degrees.

Another one of our dives, just before that, was also for the Air Force. We demolished their sewer system in Anchorage. We told them that we used the same suits for both dives. Needless to say we don't think the Air Force will call us for awhile.

At this command we have four First Class Divers: SMITH, J.A., EM1; SCHILL, MM1; ALLEN, MN3 and BRADY, DC2. Our Second Class Divers are: RUITZ, GM2; LETKO, BM1 and BRUBAKER, SF1. Our Diving Officer is CWO L.D. MEALOR.

## NAHANT SUMMARY

1. NAHANT HISTORY. With the outbreak of the Korean conflict, NAHANT was recommissioned 14 February 1962 and assigned to the FIFTH Naval District, Norfolk, Virginia, where she served as a net tender, installing harbor defense nets within the district. NAHANT was assigned to the Mine Hunting Unit, Little Creek, Virginia in March 1954 after receiving portable diving equipment on board and then participated in harbor clearance work.
2. ACQUISITIONING OF PERMANENT DIVING CAPABILITY. NAHANT was outfitted for use as a diving vessel with salvage capability by Norfolk Naval Shipyard during her regular overhaul in March 1954. Permanent diving equipment and a single lock Divers Recompression Chamber were installed completing the diving facilities for dives up to 150 feet.
3. DIVERS AND DIVING: The NAHANT divers are:

LTJG R. F. CAMERON, USN	Ship Salvage/HeO <sub>2</sub> Diving Officer
MERRELL, K.A., HM1(DV)	HM-8493
EDMONDS, R.E., BM2(DV)	5342
HUDSON, R., BM2(DV)	5343
TAPLER, W.L., ETN2(DV)	5343

The NAHANT participates frequently in fleet mining exercises, harbor defense exercises, and other projects assigned by COMINLANT. Prior to assignment to COMINLANT in June 1962, the NAHANT maintained a personnel allowance of EOD divers; however, that oversight has been corrected and the EOD allowance has been deleted.

This vessel also serves as a support vessel for EODU-2 divers, thus assuring them a ready recompression chamber when needed. In August 1962, this proved to be of vital importance as GARRETT, D.M., BMC, USN EODU-2 was "hit" in the right arm after making repetitive dives (within the prescribed time limits) to a depth of about 70 feet. Treatment was successfully completed in spite of temperatures in excess of 130°F inside the chamber.

As each fiscal year approaches, net tenders seem to disappear until at present there are only two remaining - the USS BUTTERNUT (AN-9) on the West Coast at Long Beach, California and USS NAHANT (AN-83) homeported at Charleston, South Carolina. Since the NAHANT is equipped with mine tracks, we do not expect to lose "our home" to the economy drive.

NAHANT's most recent assignment, servicing the Torpedo Net at Gould Island, Newport, R.I. has just been completed. A limited amount of diving was required which fell in the category of routine inspection and a few appropriate underwater photos. HUDSON, BM2; EDMONDS, BM2 and MERRELL, HM1 suited up and made the dives in plus 30 degrees water.



PATCHES is being presented again in the FACEPLATE. The drawings that you will see in the following issues are drawings which Charles G. PRICHARD did for the old FACEPLATE covers.

A rerun of PATCHES is mainly for a laugh and to let new men in the diving field see them. I know that there are a quite a few divers that had been diving when these were first run. I hope that they aren't too old to still enjoy a laugh from them. I hope that all will enjoy them.



CHARLES G. PRICHARD - USN

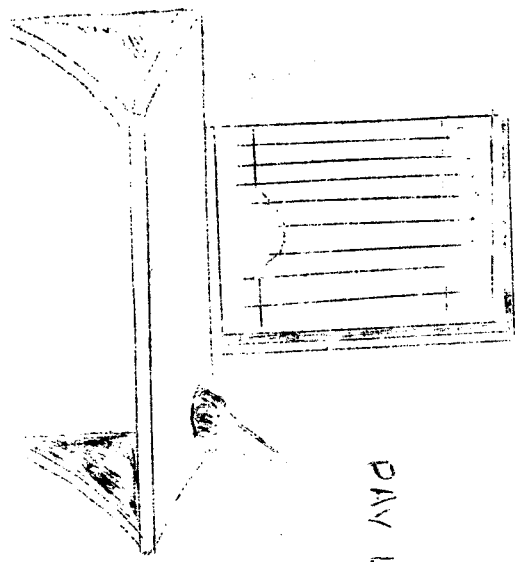
UNEMPLOYING OFFICE

Patience



DAY LINE FORMS HERE

NOTICE  
REMS PAY CAN  
20000



"IT ISN'T THE EXTRA MONEY THAT

BRINGS MEN INTO DIVING --- THE

THRILL OF ADVENTURE CALLS

BLA! BLA! BLA!

