THE
FACEPLATE

JANUARY 1965

DEEP SEA DIVING SCHOOL

and EXPERIMENTAL DIVING UNIT

WASHINGTON, D. C. 20390

C. H. HEDGEPETH, CDR, USN, OinC, DSDS - Foremost in our mind at present is the urgent requirement to improve our salvage capability throughout the fleet. This is not meant to imply that our present capability is poor, because it is not, as attested by some very good salvage jobs completed recently, but to emphasise to all hands that we must be constantly alert to exploit each situation to obtain the maximum benefit in training of new members and broaden the experience of old hands.

All of us have a desire to "look good" in any situation and turn in a "record" for any given task. Records are fine but if accomplished because the first team is always used, even though not dictated by worsening weather or a operational dead line or whatever reason beyond our control, at the expense of increased experience for the entire salvage gang then this "RECORD" looses a great deal of its luster. Search for the opportunity to move the new men in with the old hands even though it means a little loss of efficiency.

Another area that would perhaps be worthy of attention is our readiness in both material and training to handle a job, which requires special installed equipment, rigging, and handling techniques, but has not been needed for perhaps several years. We tend to lose track of equipment in stowage and remove installed equipment to make "that area look better", and at the present rate of crew turn over even reach the point to where no one knows why it was ever put there in the first place. The best example ofthis is the 80 ton structural pontoons, specifically designed for submarine salvage, but most useful in other salvage, such as, the refloating of the MISSOURI at Hampton Roads in 1950. To the best of our knowledge CHANTICLEER was the last ship to rig and operate one of these pontoons and that was in 1954. Since the ASR is specifically rigged to handle these pontoons it follows that this ship will be required to do the job if the need arises. Could you respond? I have heard it argued that the ASR is no longer responsible for salvage, just rescue. This is an illusion. The proper phrasing is that the Submarine Type Commander is responsible for the rescue phase of the operation and the Service Force Commander takes responsibility for the salvage phase if considered feasible. The ASR is not automatically released but will most likely receive orders to report to the Officer in Charge of Salvage. No doubt of this happening exists if the depth of water is 150 feet or more, the 80 ton pontoons are to be used or large quantities of high pressure air is required.

I don't believe we can afford to continue to ignore this problem, it won't go away, and therefore suggest that some effort should be made to schedule a structural pontoon exercise at regular intervals, say once or twice each training cycle as a minimum. Who knows, that urgent message may be on the air now and catch us with our fittings not installed or onboard. THINK SALVAGE - THINK DIVING - THINK DEEP!!

A. P. FESTAG. LT, USN, AOinC, DSDS - When I relieved LT BERGMAN last August I fully expected this tour to be "different" from any other I've had and I have not been disappointed. Among other things it has been an introduction to the overall "Diving Navy" picture and has shown me many of the reasons for policies and procedures that I could not understand while onboard ship. It has been much like the move from the crew's quarters to the wardroom.

It is also my first exposure to salvage diving and the Salvage Navy. Fourteen years with SUBPAC and SUBLANT had tended to channel my thinking to ASR and submarine repair diving. If nothing else I've learned the difference between beach gear and beaching gear.

I'm glad to be aboard and I'm sure I will be much better off for the experience I will get from this tour.

LCDR John HARTER, Project Officer, EDU -

A Brief Look Into the Future

Diving will advance to deeper capabilities within the next five years. The Deep Submergence Systems Review Group has completed (among other things) an extensive study of our diving capability and has forwarded recommendations for advancement of diving to deeper depths to the Secretary of the Navy. These recommendations and resultant requirements have been passed to the Special Projects Office of the Bureau of Weapons for implementation. The Special Projects Office has been the responsible management organization for development of the Polaris Missile System and was chosen to undertake the Deep Submergence Systems project due to its past performance in providing our Navy with a Polaris capability.

The equipment that will be developed from this endeavor along with the contributions of the Experimental Diving Unit and the Mine Defense Laboratory will prove to be a welcome aid even for diving to depths presently within the fleet capability. The result will be a more efficient diving organization and a deeper diving capability on the ASR type vessel. In addition, the ocean staging station concept (Sea Lab) will be developed into an operational capability.

The mainstay of this capability will be the Submerged Decompression Chamber (SDC) which will provide a means of transferring divers under pressure from the bottom work site to the topside recompression chamber. This will allow the divers to work for longer periods on the bottom (for instance up to two or more hours at 300 feet) without the prospect of "hanging-off" at stops for a time that would be prohibitive. The problem of hauling hundreds of feet of gas hose and life line behind you will be eliminated because the gas mixture will be supplied from manifolds within the chamber. Only that hose necessary to reach from the diver to the SDC on the bottom will be required. Furthermore the chamber and tender will be in close proximity in event of casualty to equipment or sickness of the diver.

It is anticipated that equipment other than the hard hat suit will be utilized in conjunction with the SDC. Here at the Experimental Diving Unit we have performed dives to 600 feet with what consists of the backplate, CO_2 absorbent canister and breathing bags of the MK V1 apparatus and a control block designed and manufactured by GARRAHAN, MR1(DV) of the Experimental Diving Unit. This apparatus is hose supplied in the tank. All dives with this equipment in the wet pots support the feasability of this type apparatus for use with an SDC.

One of the biggest labor saving devices will be a gas mixing system that ideally will supply gas from three large flasks of either high pressure or liquid gas stowage. One flask will be provided each for oxygen, nitro-

gen and helium. A mixing and proportioning system will automatically provide the required mixture of gas when valves or indicators are properly positioned by the rack operator. This system will eliminate the handling of gas cylinders and mixing of gas by split and mix system or jamming with an oxygen pump. Any desired mixture of HeO2 or HeN2O2 will be available almost immediately with valve positioning. Replenishment of shipboard gas would be accomplished by charging from a truck on the pier or from a tender in a deployed area.

Automatic control of the ascent during decompression will be provided by either electronic or mechanical means or a combination of both. This will allow fine control of the chamber pressure for continuous ascent decompression from deep dives after transferring from the SDC to the recompression chamber.

New types of diving dress and breathing apparatus can also be expected to be developed and evaluated. The Experimental Diving Unit is presently accomplishing dives to 300 feet with a closed-circuit mixed gas SCUBA that automatically maintains the desired partial pressure of oxygen from surface to depth and return. The safe diving limits and development of this type apparatus for fleet use will be established in the near future.

These comments cover only equipment associated with the rapid excursion type dive. Further developments will be accomplished in the Deep Staging Station area to provide for the life support and human comfort in habitations under the sea.

These concepts and expected developments have been widely discussed here at the Experimental Diving Unit and in BUSHIPS with many valuable ideas contributed by the divers included in projected plans. Your comments, and ideas for improvement of diving equipment, procedures and support systems are welcomed and desired.

If you have ideas developed on your diving station that you feel are applicable to the advancement of our deep diving capability forward them from your command to the Officer in Charge, Experimental Diving Unit for evaluation.

A. W. SPAHN, LTJG, USNR, FIRST LT. USS RECLAIMER (ARS-42) - The USS RECLAIMER (ARS-42), under the command of LCDR W.E. EVRARD, USN, has recently returned from a WESTPAC tour. The following divers are onboard : Four officer divers: Jim STAGGS, John PETTERSEN, Clark THOMPSON, and Al SPAHN. - Two First Class Divers: SHAWL, SF1 AND HILL, BM2, Five Second Class divers: ELLIS, SM1, BRADY, BM2, BOND, SFP2, REILLY, QM3, and ALVARADO, SN. The Hospital Corpsman is E.L. SMITH, HM1.

While in WESTPAC, RECLAIMER conducted diving operations under many and varied conditions. In Chinhae, Korea, Korean divers were instructed by RECLAIMER divers in underwater welding practices. RECLAIMER was again called on for instructor duty in Tsoying, Taiwan where 40 Nationalist Chinese Divers under the command of CDR Peter Pan and CDR Liu, both DSDS graduates, were trained in bottom search and underwater demolition.

In connection with her primary mission of Salvage, RECLAIMER divers utilized a search method which proved effective in the poor visibility of Buckner Bay. Here, while searching for a boat, SCUBA divers were pulled along by lines

attached to grappling hooks pulled by MIKE boats. If the grappling hooks caught something, the diver could immediately investigate the object and free the hook.

The worse diving conditions encountered by RECLAIMER divers were in the Saigon River while raising the USNS CARD. Here divers were called upon to work around the clock at times, in water contaminated by filth, refuse and NSFO, using only SCUBA and shallow water masks. Currents in the Saigon River were as high as 5 knots.

H. T. HARPER, BM2, USN, USS SIMON LAKE (AS-33) - SIMON LAKE is nearing completion here at the Puget Sound Naval Shipyard. Progress is right on schedule and commissioning is scheduled for 7 November 1964. As the divers are being assembled, its like "Home coming" to most of us, old shipmates getting together again. The gang includes: ENS Billy STEEL (Ex SFC(DV)) Diving Officer, Virgil WILLIAMS, BMC, Master, John LANKFORD, BMC, 5342, Homer MCODY,SFC, 5342, John DAVIS, BM1, 5342, Richard JOHNSON, BM1, 5342, David SIZEMORE, EN1, 5342, Herb HARPER, BM2, 5342, Max SOLLOWAY, SFP2, 5342, Walter WOUTERS, SFC, 5343, Lloyd COOK, SF1, 5343, Ted McCARLEY, EON2, 5332 and Steve MILLER, HM2, 8493 is the HM. The allowance projection calls for, 2 BM1 5342's, 1 MR1, 5342 and 1 DC3, 5343 some time in the future.

We are having a hard time trying to gather up all the paper work pertaining to and concerning diving, divers, and diving equipment. It sure would be a lot easier to write to one organization, (say EDU or DSDS) for a complete listing of instructions, pubs, etc.

Ken WALLACE, RMCS, Jack HANSEN, BTCA, - EDU ENLISTED PERSONNEL - Its been quite some time since we put out a list of the divers here at EDU. Maybe someone will spot an old buddy. We've had a pretty good turn over in men in the last few months. The older hands still here are, DUFF, HMC, LAFERRIERE, HM1, BIGGER, BM1, GARRAHAN, MR1, ZURER, RM1, BROWN, BM1, RUBIN, BM2, and SIMEONE, SF1. Nick is due to leave us soon, and is bound for the GREENLET. In December Slim SEELER made Ensign and moved to the wardroom. Our new men just recently checked in are: JAMES HM1, (His second time around at the Unit), WYATT, BM1, TAYLOR, BM1, MULALLY, DC1, MULLENS, BM2, KENNEDY, ST1, YOUMANS, EN1, and HOYT, PH1. We'll be losing HOYT early this year to the Fleet Reserve.

There are still open billets here at the Unit. Just a little reminder to any one who would be interested in working with new experimental gear, tables, and deep dives. On our deep dives we've been working toward the SDC type of dive, using modified MK VI gear with multi Mix gases. We pull our decent and bottom time (including work period) in the water, and then on the ascent we transfer to the dry chamber with soft mattresses, reading material, and beautiful girls, (must have had a slight visual disturbance there). Quite a few of the boys have joined the 500' club, and the rest are looking forward to getting in their licks of it. Then on to better ons.

Been seeing so many toothpaste adds recently, can't resist throwing in a little advertisment of our own. Our group used Baralyme and came up with 21% fewer cavities than the group using Shell.

Till next time, Howdy, So long for now, and drop us a line.

USS FLORIKAN (ASR-9) - LT W. R. BERGMAN, Commanding Officer - FLORIKAN is presently in her WESTPAC Deployment and enjoying the oriental change of pace. Diving Ops have been rather limited thus far confined to training dives and a few services for forces afloat. During a routine air dive 170/15 had a table IV on BAKER, Gerald R., DC2(DV), which came out just fine. Present diving gang is made up as follows:

OFFICERS
LT W.R. BERGMAN
LT. E. WHITAKER
LT A.A. STRUNK
LT J.D. MUSTARD

MASTER DIVERS

MAY, Alan, ENC

2ND CLASS DIVERS

BROUILLET, J.E., EN3
VANCE, E.L., MRC

1ST CLASS DIVERS
BAKER, G.R., DC2
BECKER, V., BM1
BRESLIN, J.F., SFM2
DRENNAN, J.R., DCC
IRELAND, R.A., HM2
JACKSON, K.E., SF1
KOSKIMAKI, J.G., MN2
PARFINSKY, A.J., MM1
ROMAINE, W.P., EN1
SCHWARTZ, M.B., TM1
SPICKERMAN, G.L., SF1
SUNDSTROM, E.B., MMC
WALSH, J.P., MM1

Receipt of CH BUSHIPS ltr ser 622AI-1208M of 22 December 1964 tells us we along with many other units of the fleet are recieving 'underwater breathing apparatus' and 'filler attachment and gauge'. Keep smiling, this will be like Christmas, because from FLORIKAN's reading of the letter we have no idea what is coming.

Recruiting divers has been rather slow, but we have tagged LTJG R.G. MILLER for the 26 week course in May 1965.

Editors note: Hate to spoil the suprise but the BUSHIPS letter is refering to non-magnetic, opencircuit SCUBA.

LT R.E. DOLL, MSC, USNR, - EDU - Before returning a diving log book, NAVSHIPS 1000 (Rev. 11-57), to the U.S. Navy Experimental Diving Unit be sure to record inside the log book the diving activity for which the log book was used.

R. C. BORNMANN, LCDR, MC, USN, DSDS - A number of individuals are still being transferred to Diving Schools for training who do not meet the physical standards for diving as outlined in article 15-30 of the Manual of the Medical Department. Personnel Officers are sending these people for physical exams as required, but often the examining medical officer is not familiar with the physical standards for diving duty or overlooks a disqualifying defect. However most of these candidates are sent to a diving activity for a pressure test and an oxygen tolerance test, and this is a good opportunity for the diving corpsman to review the candidate's Health Record and see that there are no discrepancies. Surprisingly most of these are easily apparent to someone who looks for them, because almost all fall into these five categories: (1) age, (2) weight, (3) color vision, (4) visual acuity, and (5) psychiatric treatment. Such discrepancies should be made known to the Diving Medical

Officer of the chamber facility and to the medical officer who performed the initial examination. Many such discrepancies can be waived, but the waiver should be in hand before the candidate is ordered to diving training.

FROM THE ADMIN OFFICE, EDU, R PESCOTT, LCDR, USN, AOinC - This office would like to bring to the attention of ALL DIVERS the following information:

Several incidents have been noted recently where a page 13 entry of the service record of individuals has NOT been made, prior to transfer, to show a diver's NEW qualification lapse date (and due to this, no record is made on a pay record). Some page 13 entries were not made for almost a year and a half (2 qualification lapse periods).

In accordance with BUPERS MAN. Art. C-7408(16), substantiation of entitlement to Special Pay for diving duty must be made by a personnel diary entry (for enlisted) or a Military Pay Order (DD114) (for officer), and in addition a concurrent page 13 entry will be made in the service record of the individual concerned. (Your individual diving record WILL NOT get you diving pay).

An example of a page entry for requalification is as follows: (refer to BUPERS MAN. Art.s A4202(3)3.b and C-7408(6) for complete details)

_____ (DATE): Having completed qualification dives, at least two of which were made with a helium-oxygen mixture as a breathing medium, in accordance with BUPERS Manual, Art. C-7408, you are hereby qualified a _____ for the period _____ through _____.

(This entry is of course for a command having helium-oxygen capability)

It is to be noted that it is the individual diver's responsibility to insure that his qualification lapse date is up-to-date, and that a page 13 entry has been made in your service record showing the up-to-date qualification lapse date PRIOR to your transfer to another command; and, as taken from BUPERS MAN. Art. A4202(4)(b), it is the Commanding Officer's responsibility for insuring that divers are afforded an opportunity to maintain their qualification without lapse.

It is suggested that all articles mentioned in this note be read by all divers.

R. A. MURDOCH, ENGINEERING DEPARTMENT, EDU - Some time back a meeting was held with SPCC Mech. to see what could be done about getting out a supplement to the Navy Stock List Descriptive Supplement to cover Demand, Semi-closed and Closed circuit SCUBA spare parts. As a stop gap marked-up pages for the instruction manual will be issued. Pending issuance of these pages, the following part numbers comprise an essentially complete listing of spare parts for the Mark VI.

The following four part numbers should not be ordered as individual pieces. They comprise parts assembled together as 56-2080A, FSN 4220-022-2991, and only the assembly will be stocked.

11-2086 FSN 4220-022-2982	46-2231 FSN 4220-022-2987
54-2084A FSN 4220-022-2989	46-2085 FSN 4220-022-2990

NSI stands for Non Stocked Item, it will be added to stocked items when requisitioned the appropriate number of times.

55166	NSI		55309-5	4220 022 2824	
55374	NSI		55309-7	4220 022 2825	
55323	5330 965 0793		56897	4220 022 2826	
55190	4220 022 2690		55356	4220 022 2827	NSI
55192	4220 022 2691		55297	5340 022 2836	
55295-T52-1	4220 022 2692		56875	4220 022 2862	
55333	4220 022 2700		MS28775-022	5330 585 7725	NSI
10109	4220 022 2701		55328	4220 022 2868	
26202	4220 022 2717		AN6227-10	5330 530 1991	
55251	4220 022 2718		56858	4220 051 1311	
55170	4220 022 2720		8391	5330 051 1331	
2827-42(55368)	4220 022 2721		0525-21	4220 022 2869	
56862	4220 022 2722		0502-08	5330 951 3035	
55382	4220 022 2723		0501-09	4220 714 3517	
55338	5310 053 7951		56886	4220 022 2918	
55370	4220 022 2724		13728	4220 022 2979	
55334	4220 022 2727		55298	4220 022 2980	
AN6227-3	5330 641 0247		46-2283	4220 022 2981	
55295	4220 022 2808		20-2803-A	4220 022 2983	
55168	4220 022 2809		19-2250AE	4220 022 2984	
55309-3	4220 022 2810		X5133-31C	5340 344 2413	
43-2106	4220 051 1316		AN6227-1	5330 641 8338	
11-2170	4220 022 2988		56861	4220 573 4067	NSI
56-2080A	4220 022 2991		55393	5325 051 1326	NSI
56895	5310 051 1315		56850	4220 022 3033	NSI
AN6227-8	5330 050 1211		55173	4220 022 3036	
55379	4220 022 2994		55103	4220 022 3037	NSI
AN6227-7	5330 640 9613		55330	4220 022 3045	
55347	4220 022 2995		26202	4220 022 3047	
55390	4220 022 2996		56898	4220 022 3075	
55391	4220 022 2997		26202-17	4220 022 3077	
55392	4220 022 2998		26202-22	4220 022 3078	
55145	4220 022 2999		26202-11	4220 022 3079	
55374	5330 559 1291		26202-10	4220 022 3080	
55142	4220 051 1321		26202-7	4220 051 1322	
55141	4220 151 3582		26202-6	4220 022 3085	

55346	4220 022 3000		26202-20	4220 022 3111	
56866	4220 022 3001		26202-3	4220 022 3112	
55378	4220 022 3005		26202-2	4220 051 1323	
55377	4220 022 3006		26202-13	4220 022 3119	
AN6227-5	5330 530 2008		26202-14	4220 022 3186	
55130	4220 051 1310		55280	4220 022 3187	
MS29512-3	5330 268 8011		55302	H4220 022 3118	
55191	4220 022 3008		55275	H4220 051 1314	
56860	4220 051 1313		55287	4220 022 3189	
55128	4220 051 1333		55268	4220 022 3220	
55384	4220 022 3009		55327	4220 022 3221	NSI
AN6227-6	5330 196 5368	NSI	55299-3	4220 573 4068	NSI
185	4730 810 9750		55299-5	4220 573 4069	NSI
55383	4220 022 3030		56887	4220 022 3222	
	5330 251 8839			5120 224 2540	

BOB SHEATS, TMCM, U.S. NAVAL TORPEDO STATION, KEYPORT - Divers presently at Keyport are: Diving Officer CWO MOLNAR; First Class and Master Divers: SHEATS, TMCM, LANKFORD, BMC, FREEMAN, BM1, JOHNSON, EN2; Second Class Divers: LEDING, GMG1, BRADLEY, DC2, LANGDON, DC2, LOCKARD, EN3, MOSCA, GMG1, MARKHAM, MRC, LOUDERMILK, EN2, NEITZEL, TM2, BROWN, EN2, WAGNER, GMG1, and BRUCE, EN2. LANKFORD, SMITH, FREEMAN, LOUDERMILK, NEITZEL, and BRUCE will be leaving soon for transfer, so it looks as though we will be pretty short-handed.

We have just completed treating 2 cases of bends without a diving corpsman or Doctor. Taking into consideration that we are the only activity in the NW with chamber facilities this lack is deeply felt.

The SeaLab project is history now, but a few things are worthy of mention. First, the depth requirements for support diving necessitated diving in excess of Navy standard limits in SCUBA. Permission was granted by the Principal Investigator to conduct this. All support divers were qualified in controlled free ascent to a depth of 110 feet. A submersible decompression chamber was placed about 30 feet above the dive area bottom whenever possible. This served to reduce the dangers involved in equipment failure, and air supply shortage. If a communication need arose the chamber was also used. A diving bell with an open bottom would have served the need just as well.

With proper training and adequate precautions it would be valuable to have deep diving teams which could be used in unusual situations, such as special projects operations.

SeaLab descent was delayed about one week when 2 aircraft collided during a Gemini training operation. Our diving team located the planes in 190-210 feet of water, but after recovering one body and some odds and ends, operations were discontinued, and the PETREL called in to complete salvage.

We learned on the plane work that any unusual effort causing body CO2 buildup is a very definite hazard in deep SCUBA work. This apparently adds to the narcotic effect of nitrogen in direct proportion to energy expended. We used a suggestion from LT KUNZ in some of our work, where the divers try to glide to the bottom using as little energy as possible

during descent. Arriving at the bottom in a completely rested condition seems to be an asset to a clear head.

One bit of information on our use of MK VI semi-closed units. These are aparently not designed for rough use. We encountered considerable difficulty with flooded units, lost gas, etc. during handling in and out of rubber rafts and while effecting transfer to and from Sea-Lab itself. To implement the MK VI's on the diving of the subjects out of Sea Lab, We used 90 cu. ft. units filled with a 50-50 mix of air and Helium.

The decompression phase of the subjects was accomplished at a speed of about 3 ft. per hour at as close to a constant rate of ascent as possible. We raised Sea Lab to about 80 ft. before the surge became so bad that subjects had to be transferred to the SDC to complete decompression on the surface. In future operation it would be desirable to have a submersible chamber that could be attached to our standard double lock chamber.

All in all, much was learned and a big stride taken in our deep diving program. Over 135 dives were made to approximately 190 feet without major injury. Tiger Manning had a close call in a MK VI. I expect you have that report by now. I expect that a complete report of the project will be made by Dr. BOND, but an example of one thing that will make any diver set up and take notice, was that the amount of 02 that had to be bled into the Sea Lab, and the amount of time that the CO2 scrubbers had to be run indicated that the salt water inter-face in the hatch openings seemed to be absorbing CO2 and giving off 02. If this was true the implications are tremendous. It would mean that, given enough surface to work with man could maintain a safe level of these gases with almost no artificial means to change the atmosphere!

I will close with a mild gripe about how diving rates are charged against station allowances. Our problem isn't unique, but having divers charged by rate against manpower allowances tosses a curve at the Personnel Officer. We have 5 diving enginemen here and can't use 2 of them for diving because they have to be used to run the small craft. If divers were on a separate allowance this problem would be solved.

Our diving officer would like to know the present school output. We won't have enough first class divers by the first of the year to conduct a deep diving operation if one comes up. Are first class divers from school ever assigned right to shore stations or do they all go to sea??

One more bit of information on Sea Lab diving that could have been instrumental in preventing bends. As far as possible the diving schedule was arranged so as to allow a days rest from deep diving every third day for the support divers. We had also planned to have the divers use 02 during the 20 and 10 feet stops, by the use of hookah rigs on the stage. When we had to shift the diving station to Argus Is. we abandoned this plan.

Best of Luck, How about that symposium??

Editors Note: LT EVAN's article covers Deep Sea Diving Schools output.

Article 3.43 1c (2) of the Transfer Manual states in part: Upon completion of a service school and the man is on Seavey and returns to the fleet after eight months he should submit a new rotation Data Card, then in most cases he would be picked-up promptly and transferred ashore.

LTJG NYSWONGER (BUPERS) who handles Diver assignments and I might say we have been very corporative in giving our divers what they ask for when ever possible and on only rare occasions will a diver be assigned from school to State side shore duty, this would be to meet urgent needs of the service or in a hardship case. BUPERS only makes assignments to the EPDOs, then the needs are filled as the EPDOs see fit.

LT V. C. EVANS, USN, Training Officer, DSDS - To let everyone know how diver training has fared for the past few years, a breakdown of statistical data for all classes of divers both officer and enlisted is included for your information.

The training problem is no more or no less than it has been over the years. We still get students that do not meet all the qualifications. The ones that give us the most trouble are, swimming qualifications, a good interview by a qualified diving officer and the old test dive in a deep sea rig.

Over the past few years the class size has been set at 20 students to begin each class, which convens every two months. Two years back this number was increased to thirty due to a continuous drop in the number of divers in the fleet, which presently stands at approximately 75% of the authorized billets. The only time this quota has been filled is when the HM class is convened twice each year. To let you understand the problem more fully the last two classes convened with eleven and nine students respectively. The class that graduated 15 January 1965, sent six divers to the fleet.

We are hoping that our divers in the fleet will generate some interest and recruit more students for your old almamater. We have more than a hundred diving ships and stations in the Navy. If each ship and station would send one candidate each year it would more than fill the bill. Most of the current input comes from non-diving ships and stations.

It comes down to cold hard facts, divers have to recruit divers. Ask yourself this question, "How many men have been transferred from this command to be trained as a diver since I have been aboard?".

STATISTICAL DATA
U.S. NAVAL SCHOOL DEEP SEA DIVERS
1 JULY 1958 THROUGH 30 JUNE 1964

OUTPUT

FY	HEO2 OFF	SALV OFF	MED OFF	DV1*	MED TECH	DV2	FOR-EIGN	5 WK PCO/ PXO	5 WK EDO	MAS-TER	RE-QUAL
1959	18	24	20	75	6	57	12	15	9	0	200
1960	21	19	16	90	13	18	19	16	6	0	126
1961	9	16	13	78	2	7	17	11	0	13	129
1962	9	41	36	75	2	18	22	10	0	11	112
1963	10	26	25	80	22	9	21	3	4	12	98
1964	13	30	8	99	11	31	27	19	9	18	73
TOTAL	80	156	118	497	56	140	118	74	28	54	738
ANN. AVER.	13	26	19	83	9	23	19	12	4	8	123

* Includes 123 Salvage Divers cross-trained to Diver First Class

NOTE: Not included above, 137 First Class Divers cross-trained in SCUBA, Salvage and Demolition.

ENLISTED BREAKDOWN

	FIRST CLASS						MED TECH				SECOND CLASS			
FY	INPUT	DROP	ATTR %	OUT	SALV DV1	TOT.	IN	DROP	ATTR %	OUT	IN	DROP	ATTR %	OUT
1959	31	2	6.4	29	46	75	6	0	0	6	60	3	5	57
1960	95	30	31.6	65	25	90	17	4	23.5	13	37	19	52	18
1961	103	42	40.7	61	17	78	3	1	33.3	2	24	17	71	7
1962	80	25	31.3	55	20	75	5	3	60	2	28	10	35	18
1963	88	23	26.1	65	15	80	28	6	21.4	22	25	16	64	9
1964	100	28	28	72	27	99	16	5	32	11	43	12	35.8	31
TOT.	497	150	30.2	297	150	497	75	19	25.3	56	217	77	34.1	140

BENT, W. E., QMC(DV), USN, DSDS -

OMITTED DECOMPRESSION

The U.S. Navy Diving Manual, NavShips 250-538, Sec. 1.5.6, starting on page 123 spells it out very nicely for you. I whould still like to cover a few points on it that might not be clear to everyone.

There are causes and reasons for decompression being omitted (Blow up, loss of communication, loss of air supply, bodily injury, etc.). But regardless of the reason or reasons, corrective steps must be taken immediately.

Let's say we had a diver that had made a dive to 189' for 14 minutes. The table used for this dive should be 190/15 (4 min at 20' and 7 min at 10') When coming from 20' to 10' the diver's dress becomes overinflated. Diver blows to the surface. Diver is brought aboard immediately and found to be sympton free. What do we do? Some of you are probably thinking, treat on table 1 or 1-A. This requires taking the diver to 100' for 30 minutes and full treatment on table 1 or 1-A. Table 1 requires 2 hours 21 minutes. Table 1-A requires 6 hours 21 minutes. Are we right in doing this? How about table 1-18, Surface Decompression Air? This calls for 4 minutes at 20' in the water which we had completed. Recompress in chamber to 20' for 4 minutes, 10' for 7 minutes, and out. A total time of 11 minutes and 20 seconds.

Don't ever cut your divers short, but lets become more familiar with our other tables also. Table 1-18 would have been the correct table to use in this case.

LIDDLE, H. S., DCC, USN, DSDS - I am sure all activities concerned have received the instruction about the use of Baralyme as a C02 absorbent in place of Shell Natron, and I am sure some if not all of you are using it. Having been in on the initial test of Baralyme, I would like to hear some of the remarks pro and con from the Masters in the fleet who have used it on actual working dives, I hope and I am sure it has lived up to all our expectations. For any of you who want more background on Baralyme obtain a copy of the Experimental Diving Units Evaluation report 1-64, project F015-06-02 task, Test 1.

Personnel, U.S. Naval School, Deep Sea Divers -

New arrivals:

LT A. P. FESTAG, USN from USS KITTIWAKE (ASR-13)
LT J.L..PUTMAN, USN, from USS PENGUIN (ASR-12)
THOMAS, L. E., DCC(DV), USN, from USS SUNBIRD (ASR-15)
THOMPSON, R. H., SFC(DV), USN, from USS CHANTICLEER (ASR-7)
TOLLEY, J. L., BM1(DV), USN, from USS OPPORTUNE (ARS-41)
JENKINS, T. A., GMG1(DV), USN, from USS CADMUS (AR-14)
MILLS, R. P., DC1(DV), USN, from USS KITTIWAKE (ASR-13)

New Master Divers:

SPEER, H. L,, SFCM(DV), USN, BENT, W. E., QMC(DV), USN, CLEVENGER, J. M., BMCS(DV), USN, KENEALY, J. J., ENCA(DV), USN, STUART, R. D., BMC(DV), USN

Promotions:

CLEVENGER, J. M., BMCS(DV), USN from BMC to BMCS

Departures:

LT W. R. BERGMAN, USN, to CO, USS FLORIKAN (ASR-9)
LT H. H. BAIMBRIDGE, USN, to USS COUCAL (ASR-8)
SMELLER, R. D., BMC(DV), USN, to SRF, Subic Bay, PI.
GREENHALGH, C. H., HMC(DV), USN, to National Navy Medical Center, Bethesda,
NOVELLO, S. A., BMC(DV), USN, TAD to Colombo, Cylon

We should have an interesting article for the next issue when Chief NOVELLO returns from Cylon where he is working on a harbor clearance project.

STUART, Ray D., BMC(DV), USN, JONES, Harry (n), Jr., BMC(DV), USN and WILSON, Ronald (n), SF1(DV), USN are busy making preparations for transfer to the Fleet Reserve in the near future.

Deep Sea Diving School Notes: - Semi-annually BUPERS will send the school a list of all the enlisted divers in the Navy and their present duty station. If you would like to get in touch with an old buddy drop us a line and we will let you know where he is.

We are hurting for students. The recruiting work being done by diving ships and stations is well appreciated but not enough has been done. LT EVANS goes into the problem in more detail in his article.

Our address has been changed (again). Here is the new one;

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

We are still receiving requests for quotas for diver requalification. A quota is not necessary. 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. In addition to the required dives the requalifier now received a refresher course in the class room.

Some ships and stations are still stopping diving pay when a man comes here for TAD or failing to put " For primary duty involving diving" on TAD for over 30 days (Master Divers Course for instance). We can only pay student divers $55.00 per month here. If a man is entitled to more the ship or station he is reporting from must make sure that the diving pay is not stopped on his pay record and that his orders are written correctly.

The new E8, E9 assignment procedure is causing some problems in the fleet. In one case we know of, an E9 First Class diver is serving onboard a carrier in an non-diving billet. The cold hard fact is that E8, E9 carries a higher priority than an NEC 5342 when it comes to billet assignment. To help prevent this from happening to our master divers BUPERS is in the process of requesting at least one E8 master diver billet for sea or shore station having an authorized allowance for two or more master diver billets.

Either an E8 or E9 master diver could fill this billet. The only advice we can give E8, E9 first class divers is to get hot and make master diver.