

DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND 2531 NATIONAL CENTER BUILDING 3 WASHINGTON, DC 20362-5160

IN REPLY REFER TO

NAVSEAINST 3150.3 OPR 00C32 14 Jan 93

NAVSEA INSTRUCTION 3150.3

From: Commander, Naval Sea Systems Command

Subj: CIVILIAN DIVING PROGRAM

Ref: (a) SECNAVINST 12000.20A

- (b) OPNAVINST 3150.27
- (c) NAVSEA 0994-LP-001-9010
- (d) Code of Federal Regulation (CFR) 29 Part 1910 Subpart T-Commercial Diving Operations
- (e) OPNAVINST 4790.4B
- (f) NAVSEA SS521-AA-MAN-010
- (q) NAVMED P-117
- (h) BUMEDINST 6110.11
- (i) OPNAVINST 3120.32B
- (j) NAVEDTRA 4324B
- (k) Diver First Class Training (CIN A-433-0025)
- (1) S600-AA-PRO-010 (Series)
- (m) NAVSEAINST 10560.2B
- (n) NAVSEAINST 3150.2
- (o) OPNAVINST 3150.28
- Encl: (1) Example Training Program
 - (2) Example PQS Program

1. <u>Purpose</u>. To establish specific, amplifying guidance for the conduct of diving operations in naval shipyards and other activities under the cognizance of the Naval Sea Systems Command (NAVSEA). This guidance is in addition to the policies and procedures established in references (a), (b), and (c).

2. <u>Background</u>. As required by references (a) and (b), all civilian and military divers employed by the U.S. Navy are trained to the same standards, with all divers classified as Navy divers. Although all Navy divers are trained to identical standards, the conduct of diving administration and operations at NAVSEA facilities differs significantly from the same programs administered in the Fleet. The diving programs in NAVSEA facilities have existed independently without commonality of procedures or training. Clear and concise guidance for the conduct of diving operations, maintenance of diving equipment, and job order coverage for diving operations has not been provided.

S-005

3. <u>Scope</u>. This instruction applies to all naval shipyards, warfare centers, systems centers, systems stations, and other activities that conduct diving operations employing civilian divers and that report to the Naval Sea Systems Command. It defines the requirements for training of Civilian Supervisory Divers (CSDV) and Personnel Qualification Standards (PQS) for Navy divers, diver life support systems (DLSS) maintenance (Planned Maintenance System (PMS)), DLSS re-entry requirements, and the administration of the diving programs within these commands. Additionally, in direct support of reference (d), recompression chamber (RCC) requirements are provided.

4. Policy

a. <u>Maintenance of Diving Equipment</u>. Diver Life Support Systems (DLSS) and diver worn equipment will be maintained in accordance with reference (e). Accomplishment of required preventive maintenance is mandatory for continuation of DLSS safety certification as required in reference (f). The exemption stated in reference (e) for civilian maintained small craft does not apply to diving systems and equipment. DLSS re-entry controls will also be maintained in accordance with reference (f). Pre-dive and post-dive procedures are required for the conduct of all diving operations. Job order coverage will be provided for all pre-dive and post-dive preventive maintenance. Routine maintenance will be supported by a budget that is based on the quantity of diving equipment and diving life support systems held by the individual activity.

b. <u>Medical and Physical Fitness</u>. Medical requirements for diving duty are contained in reference (g). Diver entry level physical fitness standards and maintenance requirements are contained in reference (c). Divers aged 45 years and older will conform to requirements of reference (h).

c. <u>Diver Training</u>

(1) A diver training program will be maintained which includes training in diving medicine, physics, diving equipment, and diving operations and procedures, including diver tag-out procedures in accordance with reference (i). A sample training program is provided in enclosure (1).

(2) Diver Personnel Qualification Standards (PQS) will be maintained following reference (j), modified as appropriate to reflect local requirements. The diver training program should be designed to support and complement the PQS program. A sample PQS Program tailored for a naval shipyard is provided in enclosure

(2). Personnel qualifications will be reviewed during the NAVSEA Command inspections.

(3) A supervisory diver training program will be maintained to train and qualify individuals to supervise diving operations and diagnose and treat diving illnesses in accordance with reference (c). All designated diving supervisors must be qualified first class divers, having attended first class diver course of instruction, reference (k).

(4) An ongoing quality assurance (QA) training program for divers will be maintained to facilitate proper accomplishment of permanent underwater repairs on U.S. Navy ships. Training will include performance of underwater repairs in accordance with applicable technical manuals, documented procedures, ship's drawings and the Underwater Ship Husbandry Manuals (reference (1)).

d. <u>Diving Equipment</u>. All diving equipment will be certified in accordance with reference (f) or authorized for Navy use in accordance with reference (m). Diver's breathing air will be sampled semi-annually.

e. <u>Diving Operations</u>. Diving operations will be conducted in compliance with references (b) and (c).

(1) Diving operations conducted in the vicinity of active ship sonars will be accomplished in accordance with reference (n).

(2) Diving operations will be recorded using reference (c) and diving logs submitted in accordance with reference (0).

f. <u>Recompression Chambers</u>. Commands with recompression chambers (RCC) may conduct diving operations to the limits specified by reference (c). Commands that do not have a RCC will limit all diving operations to less than 100 feet and restrict all diving operations to the no-decompression limits of reference (c).

5. <u>Responsibilities</u>

a. <u>The Director of Ocean Engineering (NAVSEA 00C)</u>. As the technical authority for diving and hyperbarics in the U.S. Navy, NAVSEA 00C is responsible for this instruction and will provide assistance to requesting activities to support diving operations and requirements.

b. <u>Naval Shipyards, Naval Laboratories and Systems</u> <u>Centers/Stations</u>. Commanders and Commanding Officers of naval shipyards, naval laboratories and system centers and stations will ensure compliance with the requirements of this instruction during the conduct of all diving administration, operations, and system certification.

ENNETH C. MALLEY

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EXAMPLE TRAINING PROGRAM

PANAMA CITY NAVAL SHIPYARD NOTICE

From: Production Officer

Subj: DIVE LOCKER TRAINING PLAN

Encl: (1) Dive Locker Annual Training Schedule

1. PURPOSE. To issue the annual Dive Locker Training Plan.

2. <u>INFORMATION</u>. Enclosure (1) provides a detailed schedule for Panama City Navy Shipyard (PCNSY) Dive Locker training during the period of Day/Month/Year to Day/Month/Year.

a. Dive Locker classroom training will be accomplished weekly for 1 hour. Changing operational tempo prevents fixing weekly training to a particular day or time frame. The training topics in enclosure (1) will be adhered to unless special situations arise and a more advantageous training session is appropriate. In such cases of special lectures, the regularly scheduled lesson plan will be copied and distributed to the divers prior to the start of the special training session.

b. Diving supervisor training will be accomplished on the first Wednesday of every month for an hour at 1545 to 1645 (both swing and day shift supervisors/supervisor trainees will attend together). Training topics for diving supervisor training will vary depending on Diving Advisories or Diving Safety Grams received during the previous month and diving supervisor situations/problems which arise, in addition to standard supervisor training/reviews.

c. Practical training will be conducted semiannually as indicated in enclosure (1). Practical training sessions will run from 2 to 4 hours depending on the evolution. Practical training will be conducted during its scheduled month on a day with no diving job commitments.

d. Physical training will be conducted daily for 17 minutes at the beginning of each shift. Personnel who do not participate in physical training for health reasons will be restricted from the dive rotation for that day.

3. ACTION

a. Attendance is mandatory for all PCNSY divers as indicated in enclosure (1). The diving general foreman may excuse personnel as appropriate.

b. The Diving Locker Training Coordinator will maintain the Dive Locker Training Plan, individual lesson plans, and attendance records. Additionally, the coordinator will record topics discussed during the monthly supervisor training.

SIGNATURE

Distribution:

PANAMA CITY NAVAL SHIPYARD DIVE LOCKER ANNUAL TRAINING SCHEDULE

<u>MONTH</u>	<u>WK</u>	TOPIC	ATND	INSTRUCTOR
APRIL	WK1	GAS LAWS	ALL	LT.
	WK2	DIVING DISEASES (DIV	ALL ING MEDICA	GUEST DMO L OFFICER)
	WK3	COMMON SUBMARINE JOBS	ALL	LT.
	WK4	EMERGENCY PROCEDURES (BOAT)	ALL	TRNG COORD APPT.
МАҮ	WK1	UNDERWATER WELDING	ALL	TRNG COORD APPT.
	WK2	DIVE CHARTS/CHARTING	ALL	TRNG COORD APPT.
	WK3	DIVE SYSTEM PLANNED MAINTENANCE SYSTEM (PMS)	ALL	TRNG COORD APPT.
	WK4	EMERGENCY PROCEDURES FLY AWAY DIVING SYSTEM	ALL	TRNG COORD APPT.
	2,3,4	UNDERWATER WELDING PRACTICAL TRAINING	ALL	FOREMAN COORD.
JUNE	WK1	TREATMENT TABLES AND SYMPTOMS	ALL	LT.
	WK2	DIVE PHYSICS FORMULAS	ALL	LT.
	WK3	AIR SAMPLING SYSTEM AND HOSE LOG	ALL	TRNG COORD APPT.
	WK4	UNDERWATER TOOLS	ALL	TRNG COORD APPT.
	2,3,4	CHAMBER TREATMENT DRILL	ALL	LT./DUTY CHAMBER
JULY	WK1	SCUBA PLANNING/MAINTENANCE	ALL	TRNG COORD APPT.

Enclosure (1)

MONTH	<u>WK</u>	TOPIC	ATND	<u>INSTRUCTOR</u>
	WK2	NEUROLOGICAL EXAMINATION ()	ALL DIVING MEDICA	GUEST DMO AL OFFICER)
JULY	WK3	COMMON SURFACE SHIP JOBS	ALL	TRNG COORD APPT.
	WK4	EMERGENCY PROCEDURES (BOAT)	ALL	TRNG COORD APPT.
	2,3,4	SCUBA DITCH AND DON	ALL	FOREMAN COORD.
AUGUST	WK1	UNDERWATER WORK QUALITY ASSURANCE	ALL	CODE 130
	WK2	DIVE LOGS/FORM 3150	ALL	TRNG COORD APPT.
	WK3	SURFACE SUPPLIED PLANNING/MAINTENANCE	ALL	TRNG COORD APPT.
	WK4	EMERGENCY PROCEDURES FLY AWAY DIVING SYSTEM	ALL	TRNG COORD APPT.
SEPTEMBER	WK1	UNDERWATER CUTTING	ALL	TRNG COORD APPT.
	WK2	DIVING LIFE SUPPORT SYSTEM CERTIFICATION	ALL	TRNG COORD APPT.
	WK3	HAZARDOUS MATERIAL HANDLING	ALL	TRNG COORD APPT.
	WK4	LINE-PULL SYSTEMS	ALL	TRNG COORD APPT.
	2,3,4	UNDERWATER CUTTING PRACTICAL TRAINING	ALL	FOREMAN COORD.
OCTOBER	WK1	GAS LAWS	ALL	LT.
	WK2	DIVING DISEASES (D	ALL IVING MEDICAI	GUEST DMO L OFFICER)
Fnaloguro	(1)	2		

ł,

Enclosure	(1)	2
Enclosure	(1)	4

MONTH	<u>WK</u>	TOPIC	ATND	INSTRUCTOR
	WK3	COMMON SUBMARINE JOBS	ALL	LT.
	WK4	EMERGENCY PROCEDURES (BOAT)	ALL	TRNG COORD APPT.
NOVEMBER	WK1	UNDERWATER WELDING	ALL	TRNG COORD APPT.
	WK2	DIVE CHARTS/CHARTING	ALL	TRNG COORD APPT.
	WK3	DIVE SYSTEM PLANNED MAINTENANCE SYSTEM	ALL	TRNG COORD APPT.
	WK4	EMERGENCY PROCEDURES FLY AWAY DIVING SYSTEM	ALL	TRNG COORD APPT.
	2,3,4	UNDERWATER WELDING PRACTICAL TRAINING	ALL	FOREMAN COORD.
DECEMBER	WK1	TREATMENT TABLES AND SYMPTOMS	ALL	LT.
	WK2	DIVE PHYSICS FORMULAS	ALL	LT.
	WK3	AIR SAMPLING SYSTEM AND HOSE LOG	ALL	TRNG COORD APPT.
	WK4	UNDERWATER TOOLS	ALL	TRNG COORD APPT.
	2,3,4	CHAMBER TREATMENT DRILL	ALL	LT./DUTY CHAMBER
JANUARY	WK1	SCUBA PLANNING/MAINTENANCE	ALL	TRNG COORD APPT.
	WK2	NEUROLOGICAL EXAMINATION	ALL	GUEST DMO
	WK3	COMMON SURFACE SHIP JOBS	ALL	TRNG COORD APPT.

3	Enclosure	(1)
5	Enclosure	(1)

EXAMPLE PQS PROGRAM

PRODUCTION DEPARTMENT INSTRUCTION

- Subj: DIVER PERSONNEL QUALIFICATION STANDARDS (PQS) TRAINING PROGRAM
- Ref: (a) NAVSEA 0994-LP-001-9010
 - (b) OPNAVINST 3150.27
 - (c) PRODEPTNOTE, Dive Locker Training Plan
- Encl: (1) Topside Diving Supervisor Qualification Card
 - (2) Dive Boat Air System Operator Qualification Card
 - (3) Fly Away Dive System (FADS) Operator Qualification Card
 - (4) Topside Tender Operator Qualification Card
 - (5) Dive Boat Coxswain Operator Qualification Card

1. <u>PURPOSE</u>. To establish a personnel qualification standards (PQS) training program for Panama City Naval Shipyard divers to ensure safe diving operations.

2. <u>BACKGROUND</u>. Reference (a) requires the establishment of a training program to ensure that all diving operations are conducted in a safe manner. In accordance with reference (b), dive locker training programs will include personnel qualification standards (PQS) for essential watch stations. The PQS program will supplement the dive locker's formal (long range) training program, as defined by reference (c), and serve as the primary mechanism to ensure personnel are qualified to fill critical watch station positions.

3. <u>ACTION</u>. Panama City NSY diver PQS programs consist of the watch station qualification cards contained in enclosures (1) through (5).

a. The Diving Officer will ensure the dive locker personnel complete all qualification requirements for a particular watch station prior to being designated as qualified to stand the watch.

b. Candidates will qualify using the PQS qualification cards (enclosures (1) through (5)) which may be obtained from Code 339. Upon approval by the Diving Officer (and Shipyard Commander for Diving Supervisor) the candidate will be formally qualified and service/training record entry will be made.

MONTH	<u>WK</u>	TOPIC	ATND	INSTRUCTOR
	WK4	EMERGENCY PROCEDURES (BOAT)	ALL	TRNG COORD APPT.
	2,3,4	SCUBA DITCH AND DON	ALL	FOREMAN COORD.
FEBRUARY	WK1	UNDERWATER WORK QUALITY ASSURANCE	ALL	CODE 130
	WK2	DIVE LOGS/FORM 3150	ALL	TRNG COORD APPT.
	WK3	SURFACE SUPPLIED PLANNING/MAINTENANCE	ALL	TRNG COORD APPT.
	WK4	EMERGENCY PROCEDURES (FLY AWAY DIVING SYSTEM)	ALL	TRNG COORD APPT.
MARCH	WK1	UNDERWATER CUTTING	ALL	TRNG COORD APPT.
	WK2	DIVING LIFE SUPPORT SYSTEM CERTIFICATION	ALL	TRNG COORD APPT.
	WK3	HAZARDOUS MATERIAL HANDLING	ALL	TRNG COORD APPT.
	WK4	LINE-PULL SYSTEMS	ALL	TRNG COORD APPT.
	2,3,4	UNDERWATER CUTTING PRACTICAL TRAINING	ALL	FOREMAN COORD.

Enclosure (1)

Enclosure (1)

c. Once qualified on a watch station, an individual will be considered fully competent to monitor, operate, and instruct on all facets of that watch station. As individuals qualify as Diving Supervisors, they will be eligible for appointment to the Qualification Review Board.

SIGNATURE

Distribution:

TOPSIDE DIVING SUPERVISOR QUALIFICATION CARD

NAME:				
TRAINEE HAS BEEN INDOCTRINATED IN THIS PQS WATCH STATION AND GIVEN A REQUIRED COMPLETION DATE OF:				
SIGNATURE:	DATE:			
TRAINEE HAS COMPLETED ALL PQS REQUIREMENTS F AND SUCCESSFULLY COMPLETED AN ORAL REVIEW BO DESIGNATION AS A QUALIFIED TOPSIDE DIVING SU	ARD. RECOMMEND			
RECOMMENDED:	DATE:			
RECOMMENDED:(DIVER FOREMAN)				
RECOMMENDED:(DIVER GENERAL FOREMAN)	DATE:			
RECOMMENDED:(DIVING OFFICER)	DATE:			
RECOMMENDED:(SHIPYARD COMMANDER)	DATE:			
SERVICE RECORDDATE:				
1. <u>Prerequisites</u>				
a. Be a qualified diver.				
b. Be qualified in the following PQS:				
(1) Topside Tender	(Signature/Date)			
(2) FADS Operator	(Signature/Date)			
(3) Dive Boat Coxswain	(Signature/Date)			
(4) Dive Boat Air System Operator	(Signature/Date)			
	Enclosure (1)			

2. Requirements

a. Work one of each of the following charts:

- (1) No-decompression (Signature/Date)
- (2) Standard Air Decompression
- (3) Repetitive Work Sheet

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

b. Variation in rate of ascent. What is the corrective action(s) for the following situations?

(1) Rate of ascent less than 60 FPM delay occurs shallower than 50 FPM.

(2) Rate of ascent less than 60 FPM occurs shallower than 50 FPM.

(3) Rate of ascent greater than 60 FPM decompression required.

(Signature/Date)

(4) Rate of ascent greater than 60 FPM no-decompression required.

(Signature/Date)

c. Discuss symptoms, treatment, preventative measures, and probable causes of the following:

(1) Hypoxia

(Signature/Date)

(Signature/Date)

(Signature/Date)

(2) Carbon Monoxide Poisoning

(3) Carbon Dioxide Poisoning

Enclosure	(1)	2
Enclosure	(2)	4

Enclosure (2)

	(4) Hypothermia	(Signature/Date)
	(5) Near Drowning	(Signature/Date)
d.	First Aid and CPR	
	(1) Discuss Basic CPR	(Signature/Date)
	(2) Discuss Basic First Aid for the f	ollowing injuries:
	(a) Compound Fracture	(Signature/Date)
	(b) Simple Fracture	(Signature/Date)
	(c) Jellyfish Stings	(Signature/Date)
	(d) Lacerations	(Signature/Date)
	(e) Sunburn	(Signature/Date)
	(f) Frostbite	(Signature/Date)
e.	Discuss symptoms and treatment of:	
	(1) Arterial Gas Embolism (AGE)	(Signature/Date)
	(2) Pneumothorax	(Signature/Date)
	(3) Tension Pneumothorax	(Signature/Date)
	(4) Mediastinal Emphysema	(Signature/Date)
	(5) Subcutaneous Emphysema	(Signature/Date)
	3	Enclosure (1)

f. Give two neurological examinations in order to diagnose Type One, Type Two and AGE. Recommend treatment if using air Treatment Table and Oxygen Treatment Table.

(1) Neuro Exam One

(Signature/Date)

(2) Neuro Exam Two

(1) Table 1A

(2) Table 2A

(3) Table 3

(4) Table 4

(5) Table 5

(6) Table 6

(7) Table 7

(1) Vertigo

(Signature/Date)

g. For the following treatment tables discuss uses, treatment depths, descent rates, and ascent rates.

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

h. Discuss the following, including causes and treatments.

(Signature/Date)

(Signature/Date)

(Signature/Date)

(3) Alternobaric Vertigo

(2) Round/oval Window Rupture

Enclosure (1) 4

Enclosure (2)

i. Discuss various aspects of Panama City Naval Shipyard instruction on Re-entry control.

j. Know safe diving distances between and under vessels and the types of separators and camels authorized.

k. Discuss the safe diving distances for hooded and unhooded divers that must be maintained when active sonar is being used in the area.

l. Discuss the dive boat and FADS system limitations described in the PSOB Booklet.

m. Discuss the diver safety tag-out program procedures and other required ships' force interactions.

n. Describe how to find information of the duty Diving Medical Officer and (DMO) and duty chamber.

o. Discuss other Senior Officer Present Afloat (SOPA) Admin Messages as they relate to diving operations; namely diving and sonar restriction messages.

p. Discuss (in detail) RADCON related issues a diving supervisor need to know while diving on or near nuclear submarines.

q. Demonstrate a working knowledge of shipyard work permit program, Engineering Service Requests (ESR), and Panama City Naval Shipyard Re-entry Control.

r. Demonstrate the ability to attain and interpret drawing and/or plans required for diving jobs. (Signature/Date)

Enclosure (1)

Enclosure (2)

s. Successfully plan, assemble all equipment, supervise, and complete all necessary forms for three dives under the (Signature/Date) guidance of a qualified diving supervisor. Two surface supplied and one scuba. At least one of the dives must be nuclear related.

t. Satisfactorily pass an oral interview evaluation before the qualification review board.

(Signature/Date)

NOTE: Upon successful completion of Diving Supervisor Qualification, a letter of designation must be signed by the Shipyard Commander.

Enclosure (1)

Enclosure (2)

DIVE BOAT AIR SYSTEM OPERATOR QUALIFICATION CARD NAME: TRAINEE HAS BEEN INDOCTRINATED IN THIS PQS WATCH STATION AND GIVEN A REQUIRED COMPLETION DATE OF:_____. DATE: SIGNATURE: TRAINEE HAS COMPLETED ALL PQS REQUIREMENTS FOR THIS WATCH STATION. RECOMMEND DESIGNATION AS A QUALIFIED DIVE BOAT AIR SYSTEM OPERATOR. _____DATE:_____ RECOMMENDED: (DIVER FOREMAN) DATE:____ RECOMMENDED:______(DIVER GENERAL FOREMAN) ____DATE:____ RECOMMENDED: ______(DIVING OFFICER) SERVICE RECORD DATE:____ ENTRY: 1. Prerequisite. Be a qualified diver or support personnel assigned to the dive locker. 2. Requirements a. Discuss the capabilities and limitations of the Dive Boat Air System. (1) Diver's Air System (Signature/Date) (2) Service Air System (Signature/Date)

b. Demonstrate a basic knowledge of all major components and their operating parameters (i.e., flasks, reducers, reliefs, (Signature/Date) etc.).

Enclosure (2)

c. Line up the air system in accordance with operating procedure for:

(1) OP 1	(Signature/Date)
(2) OP 2	(Signature/Date)
(3) OP 3	(Signature/Date)
(4) OP 4	(Signature/Date)
(5) OP 5	(Signature/Date)
(6) OP 6	

d. Demonstrate a basic knowledge of all four emergency procedures.

Demonstrate a basic knowledge on e. procedures for taking an air sample.

Demonstrate a basic knowledge on f. procedures for charging scuba tanks and associated safety issues.

q. Demonstrate a basic knowledge of all air systems indicators and alarms.

h. Discuss the rolls the PMS Program, the Re-entry Control (REC) Program, the Calibration Program, and the proper maintenance of the Hose Log have in maintaining (Signature/Date System Certification.

i. Stand three watches under instruction with a qualified dive boat air system operator.

Enclosure (2)

Enclosure (2)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

10

FLY AWAY DIVE SYSTEM (FADS) OPERATOR QUA	LIFICATION CARD
NAME:	
TRAINEE HAS BEEN INDOCTRINATED IN THIS PQS WA GIVEN A REQUIRED COMPLETION DATE OF:	TCH STATION AND
SIGNATURE:	DATE:
TRAINEE HAS COMPLETED ALL PQS REQUIREMENTS FO STATION. RECOMMEND DESIGNATION AS A QUALIFIE	R THIS WATCH D FADS OPERATOR.
RECOMMENDED:	DATE:
RECOMMENDED:(DIVER FOREMAN)	
RECOMMENDED:(DIVER GENERAL FOREMAN)	DATE:
(DIVER GENERAL FOREMAN)	
RECOMMENDED:	DATE:
RECOMMENDED:(DIVING OFFICER)	
SERVICE RECORD DATE:	
1 Droroquigite Be a qualified diver.	(Signature/Date)
2. <u>Requirements</u>	
a. Discuss the capabilities and limitations of the FADS.	
Initations of the most	(Signature/Date)
b. Line up the low-pressure air	
system (OPs).	(Signature/Date)
	(Signature/Date)
	(Signature/Date)

Enclosure (3)

NAVSEAINST 3150.3 14 Jan 93 c. Operate the low-pressure air system (OPs).

(Signature/Date)

(Signature/Date)

(Signature/Date)

d. Demonstrate a basic knowledge of all emergency procedures.

e. Discuss the rated air flow output.

f. Demonstrate a basic knowledge on procedures for taking an air sample.

g. Discuss the rolls the PMS Program, the REC Program, the Calibration Program, and the proper maintenance of the Hose Log have in maintaining system certification.

h. Stand three watches under instruction with a qualified FADS operator. (Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

Enclosure (3)

TOPSIDE TENDER OPERATOR QUALIFICATION CARD

NAME:		
TRAINEE HAS BEEN INDOCTRINATED	IN THIS PQS WAT E OF:	TCH STATION AND
SIGNATURE:		DATE:
TRAINEE HAS COMPLETED ALL PQS RI STATION. RECOMMEND DESIGNATION	EQUIREMENTS FOR AS A QUALIFIEI	R THIS WATCH D TOPSIDE TENDER.
RECOMMENDED:(DIVER FOREM		DATE:
(DIVER FOREM	1AN)	
RECOMMENDED:(DIVER GENER	RAL FOREMAN)	DATE:
RECOMMENDED:(DIVING OFFI		DATE:
	·	
SERVICE RECORD ENTRY:	DATE:_	
1. <u>Prerequisite</u> . Be a qualified description by a qualified description.	iving	(Signature/Date)
2. <u>Requirements</u>		
a. Discuss the responsibilitopside tender as per the U.S. Manual.	ities of the _ Navy Diving	(Signature/Date)
b. Discuss and demonstrate signals per U.S. Navy Diving Mar	line pull _ nual.	(Signature/Date)
c. Demonstrate proper proce assisting in dressing and undres diver.	edures for _ ssing the	(Signature/Date
d. Stand two watches under with a qualified tender.	instruction _	(Signature/Date)
	-	(Signature/Date)
		Enclosure (4)
	13	Enclosure (2)

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NAVSEAINST 3150.3 14 Jan 93 DIVE BOAT COXSWAIN OPERATOR QUALIFICATION CARD NAME: TRAINEE HAS BEEN INDOCTRINATED IN THIS PQS WATCH STATION AND GIVEN A REQUIRED COMPLETION DATE OF: DATE: SIGNATURE: TRAINEE HAS COMPLETED ALL PQS REQUIREMENTS FOR THIS WATCH STATION. RECOMMEND DESIGNATION AS A QUALIFIED DIVE BOAT COXSWAIN. _____DATE:_____ RECOMMENDED:_____(DIVER FOREMAN) DATE: RECOMMENDED:______(DIVER GENERAL FOREMAN) ____DATE:____ RECOMMENDED: ______(DIVING OFFICER) SERVICE RECORD DATE:____ ENTRY: 1. Prerequisite. Be a qualified diver or support personnel assigned to the dive locker. (Signature/Date) 2. Requirements a. Demonstrate a basic knowledge of the following: (1) Rules of the road (Signature/Date) (2) Magnetic compass (Signature/Date) (3) Tides and currents (Signature/Date) (4) Weather (Signature/Date) (5) Instrument panel (Signature/Date) Enclosure (5)

Enclosure (2)

b. Explain the importance of a lookout for dive boat movements. (Signature/Date) Discuss the effect of high winds on c. (Signature/Date) boat operations. d. Discuss the effect of reduced (Signature/Date) visibility on boat operations. Discuss the different fire hazards e. on the dive boat and methods for combatting (Signature/Date) fires and correcting hazards. f. Define the following terms: (1) Meeting situation (2) Crossing situation (3) Overtaking situation (4) Give-way vessel (5) Stand on vessel (6) Right of way (7) Short blast (Signature/Date) (8) Prolong blast State the color and arrangement of the α. lights prescribed for use in the following situations in inland waters. (1) Steam vessel underway. (Signature/Date) (2) Vessel moored alongside a wreck. (Signature/Date) (3) Diving operations. (Signature/Date) h. Demonstrate the ability to get underway and moor with both engines on the line using both screws. (Signature/Date) i. Demonstrate the ability to properly tie the dive boat up to its moor. (Signature/Date) Enclosure (5) 2 Enclosure (2)

j. Demonstrate the ability to properly anchor the dive boat.

k. Demonstrate the ability to make a stern-to-landing.

1. Demonstrate the ability to make a bow-to-landing.

m. Demonstrate the ability to make a starboard-side-to-landing.

n. Demonstrate the ability to make a port-side-to-landing.

o. Demonstrate the ability to walk the dive boat in sideways to and away.

p. Supervise proper and safe refueling of the dive boat.

q. Discuss the parameters allowed for the following:

(1) Engine RPM

(2) Oil pressure

(3) Water temp

r. Simulate the corrective action for the following:

(1) Loss of steering

(2) Loss of engine control

(3) Man overboard

(Signature/Date)

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(4) Fire

(5) Leaking hull

s. Stand five satisfactory watches under instruction with a qualified boat coxswain. NAVSEAINST 3150.3 14 Jan 93

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

Enclosure	(5)
Enclosure	(2)