



DEPARTMENT OF THE NAVY
NAVAL SAFETY CENTER
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NORFOLK, VA 23511-4399

COMNAVSAFECENINST 5100.9A
Code 32
21 Sep 07

COMNAVSAFECEN INSTRUCTION 5100.9A

Subj: DIVING SAFETY SURVEY PROGRAM

Ref: (a) OPNAVINST 5450.180 Series Mission and Functions of Naval Safety Center
(b) OPNAVINST 3150.27 Series, Navy Diving Program
(c) U.S Marine Corps Technical Instruction TI-10560-14, Maintenance and Accountability for U.S. Marine Corps Dive Lockers
(d) Marine Corps Parachuting and Diving Policy and Program Administration MCO 3500.20 Series
(e) MILPERSMAN 1220 The Diver/EOD/Seal/UCT Program

Encl: (1) COMNAVSAFECEN Operational Diving Evaluation Procedure
(2) Required Reading List for Survey Team Members

1. Purpose. To detail the scheduling of, and procedures for, diving safety surveys and inspections.

2. Cancellation. COMNAVSAFECENINST 5100.9A.

3. General. Due to numerous changes, additions, deletions, and revisions, throughout this instruction, recommend individuals read this instruction in its entirety.

4. Background. References (a) and (b) task the Naval Safety Center to conduct periodic safety surveys of Navy operational diving commands. References (c) through (e) require the Naval Safety Center to conduct periodic safety surveys and inspections of operational diving commands from the U.S. Marine Corps. These surveys and inspections identify actual and potential diving hazards and allow Commander, Naval Safety Center to better advise and assist Naval Leadership.

5. Scheduling of Diving Safety Surveys.

a. The survey schedule for diving activities, depends on several factors, including but not limited to command location, team availability, command's operational commitments, and TAD funding availability.

b. U.S. Navy commands and U.S. Marine Corps dive lockers with a master diver assigned will normally be scheduled for a survey every two years. U.S. Marine Corps dive lockers with no master diver assigned are visited annually. Requests for additional visits, including assist visits, will be considered on a case by case basis.

c. Code 32 will draft AIG message outlining the proposed fiscal year by 30 June. Once commands have firmly scheduled their inspections a quarterly AIG message with exact dates will be released 30 days prior to the beginning of the quarter.

6. Survey Protocol.

a. Each survey team, whenever feasible, will have at least two members. The survey teams, as designated by the Diving/Salvage Division Head (Code 32), will use the current diving safety survey checklists to determine the overall safety posture of the command. Each survey question will list at least one reference. Applicable questions will be marked "C" (Complies, no further action required), "R" (Requires further action) or "N/A" (Not Applicable).

b. When requested by the command, the survey team is authorized to evaluate an operational dive. Enclosure (1) contains the evaluation procedure for an operational dive. The senior team member will give the results of the operational evaluation to the commanding officer or officer-in-charge during the debrief.

c. After completing the survey, the team will tally the number of applicable questions and the number of questions marked "R" and the senior team member will debrief the commanding officer or officer-in-charge of the command. The debrief will cover total applicable questions and a review of each question marked "R", with emphasis on major concerns. The team will leave a copy of the completed checklist with the command.

d. The senior surveyor will ensure the post-survey letter(s) is promptly submitted. The overall performance of the command will determine the type of post-survey letter (regular, commendable, or recommend cease diving). The senior surveyor will provide recommendations, draft and forward the appropriate post-survey letter to Code 32. If Code 32 agrees with recommendations, the post-survey letter will be forwarded to Code 30.

e. The post-survey letter will be mailed to the Commanding Officer or Officer-in-Charge. Commands identified with action items ("R's") are required to provide feedback to COMNAVSAFECEN (Attn: Code 32) within 30 days on the status of the discrepancies that have been identified, indicating those that have been corrected, those on the CSMP (list JSN), and those beyond capability of the command to correct without outside assistance (personnel, resources, etc.). One copy will be kept on file at the Naval Safety Center.

7. Action

a. The Diving Division will:

(1) Maintain the diving safety survey and inspection database and schedule.

(2) Ensure enclosure (1) and the diving safety survey checklists continually reflect current naval diving directives. Annually, or when major changes warrant, submit checklists to the cognizant diving authority (COMNAVSEASYS COM (SEA-00C), CNO (N873), or the other services' diving liaison office) for review and approval.

(3) Analyze mishap and safety survey result trends, and submit general trends to the appropriate authorities.

(4) Provide qualified teams to support the diving safety survey program.

b. Survey Team Members:

(1) Periodically review diving and salvage technical manuals, Navy training plans, diving advisories and other appropriate references to maintain proficiency in current systems and stay abreast of changes.

(2) Review planned maintenance system (PMS) software for diving and salvage-related equipment. Maintain a working knowledge of diving and salvage-related maintenance requirements.

(3) Review and update the planned diving safety survey checklists.

(4) Routinely conduct or be involved with diving operations to maintain requalifications and proficiency of diving procedures.

c. Survey Team Member Indoctrination and Qualification:

(1) Newly reporting personnel shall read applicable sections of the publications listed in enclosure (3).

(2) Prior to serving as a survey team member, personnel shall complete a minimum of two diving safety surveys under the instruction of a qualified diving surveyor.

(3) A qualified team member is defined as a graduate of the USN Dive School (Officer or Enlisted) currently qualified per reference (e).

//s//
M. W. VANOUS
Deputy Commander

Distribution:
COMNAVSAFECENINST 5605.1P
Case A

NAVAL SAFETY CENTER OPERATIONAL
DIVING EVALUATION PROCEDURE

EVOLUTION/DESCRIPTION

1. PRE-DIVE SETUP

a. Does the diving equipment employed meet mission requirements?

Remarks: _____.

b. Are pre-dive checklists used?

Remarks: _____.

c. Is the diving equipment in proper operating condition?

Remarks: _____.

d. Are assigned divers familiar with the proper setup and maintenance of the diving equipment employed?

Remarks: _____.

e. Is there a properly stocked emergency medical kit available?

Remarks: _____.

f. If used, is the diving boat properly outfitted and manned by a formally qualified crew?

Remarks: _____.

g. Is there a quick response craft ready and properly manned by a formally trained crew (mandatory for scuba operations)?

Remarks: _____.

h. Is the divers stage in good condition and rigged with an anti-spin line?

Remarks: _____.

i. Have the operating procedures been properly followed, verified and signed by the diving supervisor and diving officer?

Remarks: _____.

j. Has the ship been properly tagged out and the ship check-off sheet verified by the diving supervisor and diving officer?

Remarks: _____.

k. Are the proper day shapes/flags/lights displayed? Is the proper word being passed over the LMC?

Remarks: _____.

l. Has the nearest recompression chamber been identified and contacted concerning the impending diving operations? Has emergency transportation to the chamber been arranged?

Remarks: _____.

m. Is there any equipment critical to the safety of the diver that is not fully operational?

Remarks: _____.

2. PRE-DIVE BRIEF

a. Are the following personnel assigned and thoroughly familiar with the requirements of their position?

- Diving Officer:
- Diving Supervisor:
- Primary Divers:
- Standby Diver:
- Diver Tenders:
- Console Operator:
- Charts/Phones:
- Capstan Operator:
- Compressors:
- Recompression Chamber Operator:
- Recompression Chamber Inside Tender:
- Boat Coxswain (if required):
- Stage Tenders:

b. Are all divers properly dressed?

Remarks: _____.

c. Have the mission parameters been clearly defined and presented to all hands on dive station (for example, mission scenario planner, dive depth/duration, and goals)?

Remarks: _____.

d. Have general emergency procedures been addressed by the diving supervisor?

Remarks: _____.

3. DIVER DEPLOYMENT

a. Has the diving supervisor ascertained that the divers are ready, mentally and physically, to enter the water?

Remarks: _____.

b. Have the tank/bank/over-bottom pressures been checked prior to deployment?

Remarks: _____.

c. Have the pneumofathometers been operationally checked and properly labeled?

Remarks: _____.

d. Has the diving supervisor addressed and briefed the side? Does he or she have total control and the attention of all hands? Does the diving supervisor maintain control throughout the dive?

Remarks: _____.

e. Is proper diving phraseology stressed by the diving supervisor and used throughout the dive?

Remarks: _____.

f. When divers are deployed, are watches started to measure bottom time when the divers leave the surface?

Remarks: _____.

g. Are the divers ventilated as required?

Remarks: _____.

h. Are the divers properly tended? Do they announce changes in bubble rates on the surface?

Remarks: _____.

i. If scuba is employed under a floating hull, are the

divers tended? Is a buddy line and/or surface tend used by the dive team in poor visibility?

Remarks: _____.

j. Are proper descent and ascent rates maintained? Are rate variations handled properly?

Remarks: _____.

k. Is the dive aborted by the diving supervisor if emergencies or substantial changes to the diving plan arise?

Remarks: _____.

l. Is maximum depth of the dive properly determined and monitored throughout the dive?

Remarks: _____.

m. When ready to leave the bottom, is the proper decompression schedule determined and pneumofathometers purged?

Remarks: _____.

4. POST-DIVE

a. Is there positive control of the stage and the divers during the up and over phases.

Remarks: _____.

b. Are the divers closely tended while being undressed? Are their physical conditions determined?

Remarks: _____.

c. Are equipment deficiencies identified and properly reported?

Remarks: _____.

d. Is the side properly debriefed, equipment broken down, and given proper routine or corrective maintenance?

Remarks: _____.

**REQUIRED READING LIST FOR
DIVING SURVEY TEAM MEMBERS**

<u>NOMENCLATURE</u>	<u>TITLE</u>
COMDTINST M3150.1	Coast Guard Diving Policy and Procedures
COMNAVSAFECENINST 5101.3 series	Diving Safety Survey Program
MAN MED 6200.15	Manual of the Medical Department
MCO 3500.20B series	Marine Corps Parachuting and Diving Policy and Program Administration
NAVSEA S6560-AG-OMP-010	MK21 Technical Manual
NAVSEA SS521-AG-PRO-010	U.S. Navy Diving Manual Revision 5
NAVSEA S0300-BB-MAN-010	USN U/W Cutting & Welding Manual
NAVSEA SS521-AA-MAN-010	USN Diving & Manned Hyperbaric Systems Safety certification Manual
NAVSEA SS600-AH-MMA-010	MK 16 UBA Technical Manual
NAVSEA SS600-A3-MMA-010/53833	LAR V Technical Manual Rev 1
NAVSEA SS600-AQ-MMO-010	MK 16 MOD 1 UBA Technical Manual
NAVSEA SS600-AK-MMO-010/	MK 20 MOD 0 Technical Manual Rev 3
NAVSEAINST 3150.1	Navy Diving Program
NAVSEAINST 3151.1	Diving & Manned Hyperbaric Systems Certification Program
OPNAVINST 5100.19 series	Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat

OPNAVINST 5100.23 series	Navy Occupational Safety and Health (NAVOSH) Program Manual
NAVSEA letter Ser 00C32/3062	10560 Diving Equipment Authorized for Navy Use
NSTM Ch 550	Industrial Gases Generating, Handling and Storage
NSTM CH 551	Compressed Air Systems
OPNAVINST 3120.32 series	Standard Organization and Regulations of the U.S. Navy
OPNAVINST 3150.27 series	Navy Diving Program
OPNAVINST 3500.34 series	Personnel Qualifications Standards (PQS)
NAVSEAINST 4790.8 series	Ship's Maintenance Program Material Management (3M) Manual
Scuba Equipment	Applicable manufacturers technical manuals for scuba equipment listed on the ANU
USASOC Reg 350-20 (c1)	USASOC Diving Program
NAVSEAINST 4790.8 series	Ships Maintenance Program Manual
OPNAV 5102.1 series	Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual