NOAA ADMINISTRATIVE ORDER 209-123 NOAA DIVING PROGRAM

(Effective 5/2/03 – Issued 5/14/03)

SECTION 1. PURPOSE.

This Order prescribes the administration and safety rules for the National Oceanic and Atmospheric Administration (NOAA) Diving Program.

SECTION 2. SCOPE.

- .01 This Order, which is commonly referred to within the diving community as the "NOAA diving regulations," applies to all NOAA employees engaged in official diving duties using compressed gas as the breathing medium and to non-NOAA personnel using NOAA diving equipment and/or diving from NOAA-owned vessels, unless otherwise authorized by the NOAA Diving Program. This Order also applies to anyone diving as an observer diver under the provisions of this Order.
- .02 For the work-related use of skin diving equipment, an individual shall demonstrate to the Unit Diving Supervisor (UDS), or designee, fitness, good watermanship, and competence in the use of equipment for the job to be undertaken.
- .03 Basic responsibilities, while diving, rest with the individual diver. NOAA Line Offices (LOs) and the NOAA Marine and Aviation Operations (NMAO) shall provide adequate resources and be responsible for conducting a safe, efficient diving program.

SECTION 3. BACKGROUND/GENERAL.

- .01 NOAA programs frequently involve underwater operations. The purpose of the NOAA Diving Program is to train, certify, and equip scientists, engineers, and technicians to perform a variety of underwater tasks in support of NOAA=s mission and to ensure that all diving operations within the scope of this Order are conducted safely, efficiently, and economically.
- .02 The strategic vision, goals, and objectives of the NOAA Diving Program are:
 - a. to establish standards and implement procedures for conducting safe diving operations;
 - b. to train and certify scientists, engineers, and technicians in diving and medical-related subjects;
 - c. to provide safe, state-of-the-art, and well maintained dive equipment;
 - d. to provide guidance and expertise to the diving community;
 - e. to investigate and implement new diving technologies and techniques;

- f. to foster cooperative working relationships with other diving programs;
- g. to promote NOAA and the NOAA Diving Program through educational outreach; and
- h. to provide equipment, personnel, and expertise to NOAA field operations, as needed.

SECTION 4. STRUCTURE AND RESPONSIBILITIES.

.01 The Director of NMAO shall broadly administer NOAA=s diving activities through the Director, NOAA Diving Program (DNDP). The Director of NMAO also serves as the individual who will consider appeals involving termination of diver certifications.

.02 The DNDP shall:

- a. serve as the principal NOAA authority for diving policy, operations, safety, and training;
- b. fulfill the requirements for NOAA Master Diver and possess a wide variety of diving expertise;
- c. chair and serve as a voting member of the NOAA Diving Safety Board (NDSB);
- d. consider recommendations of the NDSB concerning diving policy, operations, safety, and training;
- e. recommend candidates for LO Diving Officers (LODOs) and the NMAO Fleet Diving Officer (FDO) to Assistant Administrators and the Director, NMAO;
- f. conduct an annual review of all NOAA diving operations during the preceding fiscal year and submit an annual report to the Director, NMAO, by December 31;
- g. issue Letters of Certification to qualified divers;
- h. delegate appropriate training responsibilities to other qualified individuals;
- i. investigate all reported NOAA diving accidents and other potentially dangerous incidents and institute appropriate measures to foster safe diving;
- j. approve specialized diving operations, techniques, gas mixtures, and diving apparatus, and ensure diver proficiency with new diving techniques/innovations prior to use;
- k. investigate new diving technologies and techniques for possible implementation;
- 1. review divers' physical examination forms for completeness and evaluate the test results for compliance with NOAA Diving Program medical evaluation criteria;

- m. forward, if necessary, divers=physical examination forms with questionable test results to the Chairperson of the Diving Medical Review Board (NDMRB) for dissemination to the other Board members for individual assessment and recommendations; and
- n. approve or disapprove the divers' physical examination, and if intending to approve an examination contrary to the majority of individual recommendations of NDMRB members, provide written notification to the Chairperson stating the basis for the decision and that, barring an appeal by the NDMRB to the Director, NMAO, the approval will be effective in 30 days.
- .03 <u>The NDSB</u> comprises the DNDP, LODOs, and the FDO, who serve as its voting members. The NDSB shall:
 - a. recommend to the DNDP NOAA policy, operations, and training that will promote program safety, efficiency, and expertise;
 - b. when appropriate, seek pertinent expertise on diving matters before the NDSB;
 - c. serve as an appeals board when divers=certifications are suspended;
 - d. recommend to the DNDP appropriate workshops, seminars, and other activities for maintaining diver expertise;
 - e. review all reported NOAA diving accidents and potentially dangerous incidents, and recommend preventative measures to the DNDP;
 - f. review applications of candidates for the position of DNDP and provide recommendations to the Director, NMAO;
 - g. review all proposals involving specialized diving operations, techniques, etc., that are not currently authorized in this Order and make appropriate recommendations to the DNDP; and
 - h. advise the Under Secretary of Commerce for Oceans and Atmosphere of circumstances adversely impacting safety and/or efficiency of the NOAA Diving Program.
- .04 <u>The NOAA Diving Medical Review Board (NDMRB)</u> comprises five qualified physicians appointed by the Director, NMAO. All members shall serve five-year renewable terms.
 - a. The Director, NMAO, will designate an individual to serve as NDMRB Chairperson.
 - 1. The Chairperson shall receive overall policy guidance, except for medical policy, from the DNDP.

- 2. When requested or otherwise deemed necessary, the Chairperson will coordinate invitations to consultants to provide essential expertise on medical-related issues for consideration by the NDMRB.
- 3. The Chairperson will receive input from the NDMRB membership, summarize the findings and opinions, and then report those results individually to either the NDSB or the DNDP, as appropriate.
- b. The NDMRB shall not provide advice as a group. Rather, all advice will be forwarded by individual members to the NDMRB Chairperson. The members of the NDMRB shall:
 - 1. recommend medical policy and changes in medical operating procedures that will foster a safe and efficient diving program;
 - 2. review divers=medical qualifications forwarded for review to assess application of the NOAA Diving Program=s medical evaluation criteria or other issues raised by the DNDP;
 - 3. review appeals from divers who were disqualified from certification because of their medical qualifications and provide medical opinion and recommendations to the Chairperson; and
 - 4. provide medical review of diving incidents as requested by the DNDP.
- .05 <u>LO Diving Officers/NMAO Fleet Diving Officer</u> shall represent LO/NMAO on the NDSB. Assistant Administrators of LOs that conduct diving operations shall, upon request of the DNDP, appoint LO Diving Officers (LODOs). The Director, NMAO, shall, upon request of the DNDP, appoint the NMAO Fleet Diving Officer (FDO). The LODOs/FDO shall:
 - a. be currently-certified NOAA Advanced Working Diver or higher;
 - b. maintain familiarity with all diving activities within their respective organization;
 - c. assist in planning and reviewing their organization=s diving activities and in ensuring compliance with this Order;
 - d. conduct annual on-site diving unit safety inspections, or appoint qualified designees to conduct inspections, and forward inspection reports to the DNDP by January 31 of each year for the calendar year completed;
 - e. recommend qualified applicants for training and/or NOAA certification to the DNDP;
 - f. advise and assist the DNDP in planning and coordinating diver certification training programs to meet NOAA=s research and technical diving requirements;

- g. recommend to the DNDP requalification programs for LO/NMAO divers whose diving certifications have lapsed;
- h. review diving accidents and incidents that occur within their organization, and report findings, recommendations, and/or proposed changes to NOAA diving policies and procedures to the DNDP; and
- i. submit annual reports of all diving activities under their jurisdiction to the DNDP by October 31 of each year for the fiscal year completed.
- .06 <u>Unit Diving Supervisors</u> (UDSs) shall be appointed for various NOAA installations, ships, and parties that conduct diving operations. The LODOs/FDO shall appoint UDSs with the approval of the DNDP and the concurrence of the units=directors. UDSs shall be currently-certified NOAA Advanced Working Divers who have successfully completed UDS orientation programs, or equivalent. UDSs shall:
 - a. ensure that all diving gear and accessory equipment are maintained in a safe operating condition;
 - b. ensure equipment files are maintained at the unit or other appropriate level -- files to include information on the type, brand name, serial number, and repairs completed on air compressors, scuba cylinders, regulators, and depth and pressure gauges (see the Appendix to this Order);
 - c. ensure that competent Divemasters are in charge of diving operations;
 - d. submit reports of unit diving activities for the preceding fiscal year to LODOs/FDO by October 15th of each year;
 - e. report immediately all diving-related accidents/incidents that occur within their unit as prescribed in Section 5.02 of this Order;
 - f. maintain files on divers in their units, or delegate the responsibility to ship/party Divemasters, with each divers files to include, but not be limited to, Letters of Certification and training records; and
 - g. conduct annual dive locker inspections as directed by LODOs/FDO and submit inspection reports to LODOs/FDO by January 15th of each year.
- .07 <u>Divemasters</u> shall be assigned by UDS for all diving operations of each ship/party. In the UDS=s absence, LODOs/FDO shall assign Divemasters. Divemasters shall be currently-certified NOAA divers who are experienced in the type of diving conducted within their organization. Divemasters should have successfully completed Divemaster training or have equivalent prior experience. Divemasters, or their designees, shall be in complete charge of all diving operations conducted by their ship/party, and shall:

- a. ensure that all diving is conducted in accordance with prescribed NOAA diving regulations;
- b. ensure that all divers are certified, properly trained, and physically fit to perform the required diving, and that the prescribed files are maintained if those responsibilities have been delegated by their UDSs;
- c. ensure that all equipment is in safe operating condition, and that the required maintenance records are maintained as delegated by their UDSs;
- d. ensure that emergency procedures are understood by all personnel before diving begins;
- e. ensure that all divers are monitored after each dive for signs or symptoms of decompression sickness or other diving-related illnesses; and
- f. report immediately all diving-related accidents and incidents as prescribed in Section 5.02 of this Order.
- .08 <u>Divers</u> shall be certified by the DNDP and shall be sufficiently trained to undertake assigned diving tasks. Divers shall be accountable for NOAA-issued equipment and shall:
 - a. maintain good physical condition and a high level of diving proficiency;
 - b. report any changes in health that may impact their fitness to dive (see Section 7.02 of this Order);
 - c. ensure diving equipment used is maintained in a safe operating condition;
 - d. ensure diving conditions are safe and within personal abilities; and
 - e. ensure provisions of this Order are not violated.
- .09 <u>NOAA Diving Instructors</u> shall be designated by the DNDP as required for program needs. NOAA Diving Instructors shall be experienced in their instructional areas and shall carry out duties as directed by the DNDP or designee.

SECTION 5. POLICY AND PROCEDURES.

.01 Operations. All NOAA diving projects will be conducted in accordance with the NOAA diving regulations. The NOAA Diving Program is conducted in accordance with regulations for Commercial Diving Operations as codified by the Occupational Safety and Health Administration (OSHA) in subpart T to part 1910 of title 29 of the Code of Federal Regulations (29 CFR 1910 Subpart T).

- a. <u>Use of non-standard diving equipment and techniques</u>. Proposed diving projects involving non-standard open-circuit scuba diving equipment and techniques, other than those covered elsewhere in this Order, must be approved by the DNDP before diving activities begin. The DNDP will consider recommendations of the NDSB and shall evaluate:
 - 1. divers-qualifications, certifications, and physical condition;
 - 2. the availability of equipment, personnel, and staffing required to complete projects; and
 - 3. specific standard operating procedures regarding safety, methodology, and emergency procedures.
- b. Refusal to dive. Divers have the responsibility and the privilege to refuse to dive:
 - 1. if diving conditions are unsafe or unfavorable;
 - 2. if, at any specific time, the divers feel that they are not in good physical or mental condition for diving; or
 - 3. if, by diving, divers believe they would violate the dictates of training or the NOAA diving regulations.
- c. <u>Buddy system.</u> Except under emergency conditions, the buddy system of at least two divers shall be required. When conditions are such that the probability of separation of divers is high, such as low visibility, some form of direct contact between divers shall be maintained. If diving is within a shallow, restricted area and with water conditions of low velocity and low turbidity, the buddy diver may remain at the surface fully equipped while maintaining visual contact with the working diver at all times. A surface attendant shall be present in the immediate area any time diving conditions warrant it.
- d. <u>Equipment safety</u>. The NOAA Diving Program requires all diving equipment to be safe and fully functional. Any equipment in questionable condition must be removed from service immediately and clearly identified in order to preclude its use. Divers in active status may use NOAA diving equipment during non-duty hours to maintain diving proficiency, but they must adhere to the NOAA Diving Safety Rules as found in the Appendix to this Order.
- e. <u>Participation in non-NOAA diving projects.</u> NOAA-certified divers may participate in an official capacity in non-NOAA diving operations, provided NOAA divers comply with the NOAA diving regulations and that the divers have obtained prior approval from their UDS.

- f. Reciprocity agreements. Non-NOAA divers possessing current diving certifications from agencies with established scientific or working diver reciprocity agreements may participate in NOAA-sponsored projects and diving operations. These agreements must be current, are only applicable to personnel not directly employed by NOAA, and are not transferable to other agencies or institutions with which the agency has reciprocity. In order to participate, divers under reciprocity shall:
 - 1. present to the UDSs or Divernasters current authorization letters signed by the diving supervisors/safety officers of the organizations under reciprocity and copies of the current reciprocity agreements;
 - 2. provide to the UDSs or Divemasters evidence that the diver has completed a minimum of one (1) dive within six (6) weeks of project startup; and
 - 3. comply with the NOAA Diving Safety Rules (see the Appendix to this Order) when diving on NOAA projects.
- g. <u>Personnel not under established reciprocity agreements</u>. Non-NOAA divers not under established reciprocity agreements must complete the requirements outlined in Section 5.03 or in Section 6.02 of this Order before they may participate in diving activities covered under the scope of this Order.
- h. <u>NOAA Diving Safety Rules</u>. The NOAA Diving Safety Rules, included as the Appendix to this Order, shall be followed on all diving operations unless otherwise authorized by the DNDP. An exception exists for emergency situations (see Section 6.01a. of this Order).
- i. <u>Logging of dives.</u> Divers are required to log all official dives and are encouraged to log all non-duty dives. Dives are to be logged either electronically (internet) or via hard copy (NOAA Form 64-4), by the fifth day of each month for the preceding month and provided to the NOAA Diving Center (NDC). Non-duty dives performed to fulfill diving proficiency requirements shall also be logged. A dive includes the time spent in a hyperbaric environment, either underwater or within a pressurized chamber, while breathing compressed gas. A dive is completed when the individual returns to surface pressure and remains for a minimum of 10 minutes. No more than one dive shall be credited for each scuba cylinder used during training.
- j. <u>Dive pay.</u> Diving pay is authorized by Section 5545 of title 5 of the United States Code (5 U.S.C. 5545) (Federal Personnel Manual (FPM) 9s, Subchapter 9 and Subchapter S) for General Schedule employees; by 5 U.S.C. 5348 (Personnel Handbook and Schedule of Special Rates for Vessel Employees, Chapter 5, Section 04; FPM Supplement 532-1, Appendix V, Paragraph F for Wage Grade employees and NOAA Wage Marine Pay Schedules for Wage Marine Employees); and by 37 U.S.C. 304, and NMAO Regulations Chapter 02, Section 02202, for NOAA Commissioned Officers.

.02 Reporting, Investigating, and Reviewing Diving Incidents and Accidents.

- a. Reportable diving injuries.
 - 1. All work-related injuries are to be promptly reported in compliance with Department of Commerce (DOC) and NOAA policies. Whether such injuries are the direct or indirect result of diving, they must be reported in accordance with procedures outlined below. Examples of reportable diving injuries include:
 - (a) fatalities;
 - (b) injuries requiring recompression therapy (e.g., decompression sickness and lung overexpansion injuries); and
 - (c) injuries, whether occupational or non-occupational, requiring hospitalization or that otherwise may affect an individual=s fitness to dive (questions concerning the requirement for reporting of an injury should be referred to the NDC).
 - 2. <u>Documentation requirements.</u> The following describes requirements for reporting, investigating, and reviewing reportable diving injuries.
 - (a) On-site Divemasters or lead divers shall make the initial reports on all reportable diving injuries.
 - (b) Fatal diving injuries shall be reported immediately to the DNDP, as well as to the appropriate NOAA Regional Safety Manager and LO/NMAO representative. Non-fatal injuries listed in Section 5.02a.1. of this Order shall be reported within 24 hours to the UDSs, LODOs/FDO, and DNDP.
 - (c) All reportable injuries shall be processed in accordance with the following procedures.
 - (1) <u>Divers</u> shall immediately notify their respective Divemasters at the first sign or symptom of any injuries sustained during diving operations. The diver then has 24 hours to complete the appropriate section of the Form CD-137 and forward it to his/her supervisor. (Supervisors will then complete and forward the form to the appropriate NOAA Regional Safety Manager within five (5) working days.)
 - (2) <u>Divemasters</u> shall immediately notify their respective UDSs of the reportable injury and then submit a written report within seven (7) days.

- (3) <u>UDSs</u> shall ensure that on-site Divemasters or lead divers have prepared and forwarded the initial injury reports. In addition, and unless directed otherwise, UDSs shall prepare detailed analyses and written reports within 10 days after the date of the reportable injury. The reports should include: the nature of the operations, existing environmental conditions, dive profiles, dive plans, personnel involved, type of equipment used, nature of any equipment failures, causal analyses, and recommendations for prevention of future injuries. The UDSs shall submit their reports to their respective LODO/FDO.
- (4) <u>LODOs/FDO</u> shall report injuries to the DNDP by telephone or by other rapid means. The LODO/FDO will monitor completion of the reports, analyze the documents for completeness, coordinate any additional fact-finding deemed appropriate, and forward the documents, along with his/her recommendation, within 30 days to the DNDP. When directed by the DNDP, the LODOs/FDO shall conduct the fact-finding investigation.
- (d) The Chairperson of the NDMRB and members of the NDSB shall review all diving injury reports. The parties may recommend changes in operating policies and procedures for consideration by the DNDP. If circumstances warrant, the DNDP may initiate special investigations into the injury.

b. Reportable diving incidents not involving injuries.

- 1. Occasionally, incidents occur that do not result in a reportable injury, but that nevertheless may warrant awareness by the NOAA Diving Program officials.
 - (a) An example of an incident or situation that must be reported is any involving diving equipment malfunction or failure, in which case the matter shall be reported to the UDS.
 - (b) ANear miss@ or Aclose call@ incidents that could have resulted in a fatality or serious injury to a diver or topside support personnel, or any action that jeopardized a divers safety or that of his/her dive buddy (e.g., omitted decompression, out-of-air emergency requiring buddy breathing or air sharing, uncontrolled ascent, etc.), are the types of incidents that should be reported to the Divemaster or the UDS, who will determine whether the matter warrants awareness by the NOAA Diving Program officials.

(c) Evidence of poor judgment by a NOAA diver shall be reported to a higher-level NOAA Diving Program official. Examples of Apoor judgment@include diving while under the influence of alcohol or drugs or failing to be properly outfitted for anticipated diving conditions.

2. Documentation requirements.

In some cases, responsibilities for the initial notification and/or followup investigation and reporting are already established (see responsibilities for the various NOAA Diving Program officials listed in Section 4. of this Order). NOAA Diving Program officials may assign (or reassign) responsibilities for investigating the incidents.

.03 <u>Training</u>, <u>Certification</u>, and <u>Authorization to Dive</u>.

- a. <u>Dive training requirements.</u> For NOAA employees, all applicants for diving training and certification must be volunteers and:
 - 1. satisfy NOAA requirements for physical examinations as covered in Sections 7.01 and 7.04 of this Order; and
 - 2. demonstrate to UDSs, or their designees, the following swimming exercises showing a reasonable degree of confidence and good water skills:
 - (a) swim 550 yards (500 meters), without aid, using two or more of the following strokes -- crawl, sidestroke, and breaststroke;
 - (b) swim, without aid, a distance of 25 yards (22 meters) underwater without surfacing; and
 - (c) stay afloat, without aid, for 30 minutes.
- b. <u>Authorized training programs.</u> Initial diver training for approved applicants shall be accomplished through official NOAA Diving Program courses and/or other diver training programs approved by the DNDP.
- c. <u>Prior diving experience and training.</u> Both NOAA and non-NOAA personnel may submit evidence of prior dive training and experience to a UDS for consideration for NOAA diver certification.

1. UDSs shall:

(a) obtain proof of the applicant=s diving certification, current CPR, First Aid, and oxygen administration training, and review the applicant=s diving resume and/or dive log;

- (b) administer a NOAA Diving Program written examination;
- (c) review the applicant-s medical documents for completeness; and
- (d) forward the applicant-s documentation to the DNDP for evaluation.
- 2. Upon approval of the applicant-s diving physical by the DNDP, the UDS or designee shall:
 - (a) conduct an evaluation of water skills and observe a checkout dive of the applicant consistent with the standards for NOAA diver certifications; and
 - (b) forward a recommendation for NOAA certification or training level to the appropriate LODO/FDO for review.
- 3. If determined that the applicant requires additional training, such training will be specified by the LODO/FDO with concurrence of the DNDP.
- d. <u>Dive certification requirements and categories.</u>
 - 1. Individuals must successfully complete a NOAA-sponsored or approved training program to receive certifications. NOAA employees receive NOAA certifications; non-NOAA employees receive NOAA-equivalent certifications.
 - 2. Applicants for NOAA diving certifications must pass the appropriate NOAA written examination. Passing scores for each part shall be 80 percent. Failure to pass all sections of the examination after three attempts may be grounds for termination of further certification efforts.
 - 3. Upon satisfactory completion and approval of medical examinations, training requirements, written examinations, and appropriate skills evaluations, NOAA employees and non-NOAA personnel shall be considered by the DNDP for NOAA (or NOAA-equivalent) dive authorization/ certification in accordance with the criteria prescribed for each of the five following categories.
 - (a) Trainee Diver Certification -
 - (1) completed a minimum of 15 logged dives, at least one (1) of which has been conducted within the previous three (3) months; and

(2) approved by the DNDP as being capable of diving safely (note: trainee divers are not authorized to perform task-oriented dives, and the trainee divers must be accompanied by a certified NOAA diver who, also, is not performing work).

(b) Scientific Diver Certification - -

- (1) certified above the basic entry level by a recognized scuba diving agency, or able to provide adequate evidence of substantial diving experience, as determined by the UDS and LODOs/FDO;
- (2) completed a minimum of 25 logged dives, at least eight (8) of which were within the previous twelve months and one (1) of which was within the previous six (6) weeks;
- (3) completed one or more dives with NOAA diving instructors, UDSs, or their designees; and
- (4) approved by the DNDP or designees as being capable of safely and effectively carrying out assigned underwater tasks.

(c) Working Diver Certification - -

- (1) satisfactorily completed the NOAA Working Diver training course, or equivalent, as determined by the DNDP;
- (2) completed a minimum of 25 logged dives;
- (3) completed one or more dives with NOAA diving instructors, NOAA UDSs, or designees;
- (4) demonstrated proficiencies to carry out assigned underwater scientific and/or operational tasks as determined by the DNDP or designee; and
- (5) approved by the DNDP or designee as being capable of safely and effectively carrying out assigned underwater tasks.

(d) Advanced Working Diver Certification - -

- (1) employed by, or under contract to, NOAA and certified as a Working Diver;
- (2) completed a minimum of 150 logged dives as a Working Diver:

- (3) satisfactorily completed a NOAA Divemaster course, or equivalent, as determined by the DNDP;
- (4) completed two or more dives with UDSs;
- (5) obtained experience in a variety of diving conditions and demonstrated competent supervision of a range of diving operations; and
- (6) receives certification based upon review of the candidate=s dive resume by the diver=s UDS, LODO/FDO, and the DNDP.
- (e) Master Diver Certification -
 - (1) employed by NOAA and certified as an Advanced Working Diver;
 - (2) completed a minimum of 150 logged dives as an Advanced Working Diver;
 - (3) possesses a broad range of diving-related experience and supervision;
 - (4) possesses special expertise in several areas of diving; and
 - (5) receives certification based upon review of the candidate=s dive resume by the diver=s UDS and LODO/FDO as well as one other LODO/FDO, and by the DNDP.
- e. <u>Temporary certification</u>. Temporary certification to dive may be granted to individuals meeting certification requirements as determined by the LODO/FDO and DNDP. The certification is valid for six (6) months and may be extended for one additional six-month period. Requests for extensions are submitted by UDSs through the respective LODO/FDO to the DNDP for approval.
- f. <u>Issuance of certification</u>. NOAA diver certification and authorization to dive shall be issued by the DNDP. The DNDP shall issue Divers=Identification Cards and Letters of Certification to divers with copies provided to the LODO/FDO, the UDSs, and the NDC.
- g. <u>Maintenance of certification</u>. NOAA-certified divers are encouraged to complete two (2) dives a month. Divers must complete a minimum of one dive every six (6) weeks in order to maintain active diving certification. Supervisors should authorize the necessary time and payment for maintaining diving certification.
- h. Suspension and revocation of dive certification.

- 1. Listed below are representative examples of situations that may lead to a temporary suspension of diving certification.
 - (a) Failure of a diver to maintain minimum diving proficiency shall automatically result in the temporary suspension of his/her diving certification pending the completion of a recertification program. Barring extenuating circumstances, the following apply:
 - (1) if six (6) weeks to six (6) months pass without dives, the diver must complete checkout dives and any other requirements prescribed by the UDS;
 - (2) when 6 12 months transpire without dives, the diver must complete a LODO/FDO-approved refresher training program; and
 - (3) if a period of 12 months or longer has passed without dives, the diver must complete a NOAA Diving Program-approved refresher training program.
 - (b) Failure of a diver to pass a NOAA diving physical examination within the prescribed, age-based interval (see Section 7.03 of this Order) shall result in temporary suspension of his/her certification pending completion of the examination and its review and approval by the DNDP or designee.
 - (c) Evidence of an inexplicable medical condition (e.g., dizziness or unexplained fatigue) may result in temporary suspension of diving certification pending review by the NDMRB.
 - (d) An injury that requires recompression therapy or hospitalization will automatically result in temporary suspension of diving certification pending review by the NDMRB.
 - (e) Failure of a diver to properly use or maintain NOAA-provided diving gear or support equipment may result in temporary suspension of his/her certification pending review by the NDSB.
 - (f) Any other potentially serious incidents may result in the temporary suspension of a diver=s certification pending review by the NDSB.
- 2. When a diver-s certification has been temporarily suspended pending investigation and/or review, the DNDP will initiate a fact-finding investigation. The DNDP or his/her designee will notify appropriate parties, including the diver, of the temporary suspension. The diver will be advised of the opportunity to provide input for consideration by the reviewing party and that he/she may review and respond to the fact-finding report when it is available.

- (a) Upon receipt of the fact-finding report, the DNDP will review it to determine if any additional information may be needed. The diver will be apprized of the contents of the report and offered the opportunity to review and prepare a response.
- (b) Once all information and responses have been received, the DNDP will forward copies to the NDSB or the NDMRB, as appropriate, for review and recommendation(s).
- (c) The DNDP will consider all information and recommendations and will render a decision.
 - (1) If the decision of the DNDP is to continue suspension of the individual-s certification to dive, the DNDP will specify the conditions under which the diver-s certification may be restored. The diver may appeal the decision to the NDSB within 30 days of notification.
 - (2) If the decision of the DNDP is to terminate an individual-s certification to dive, he/she may appeal the decision to the Director, NMAO, within 30 days of notification. The DNDP will specify the conditions, if any exist, under which the individual may reapply for NOAA diving certification. If an employee-s diver certification is permanently revoked and diving is an essential part of the employee-s duties, the servicing Office of Human Resources Management must be notified.
- 3. If an investigation and/or review that has been conducted without temporary suspension of diving certification results in a suspension of certification by the DNDP, the diver may appeal the decision to the NDSB within 30 days of notification.
- 4. If an investigation and/or review that has been conducted without temporary suspension of diving certification results in a termination of certification by the DNDP, the diver may appeal the decision to the Director, NMAO, within 30 days of notification.
- 5. The DNDP may restore a suspended diving certification while an investigation and/or review is underway. The DNDP will advise appropriate parties.
- i. <u>Recertification</u>. The DNDP may recertify divers whose certifications have been temporarily suspended after the divers have completed the requirements for recertification.

- j. <u>Annual training requirements.</u> NOAA-certified divers shall undergo yearly refresher training in oxygen administration, recognition and treatment of diving accidents and injuries, dive rescue, decompression tables, and in-water diving emergency skills.
- k. <u>Maintaining CPR and First Aid certification</u>. NOAA divers must maintain certification in CPR and First Aid from one of the nationally recognized agencies (e.g., American Red Cross, National Safety Council, etc.).

SECTION 6. SPECIAL PROVISIONS.

.01 Exceptions.

- a. Emergency conditions may warrant actions contrary to the dictates of this Order. Emergency conditions consist of situations where death, serious physical harm, total loss of property, or major environmental damage is likely, but only to the extent that the action is immediately necessary in order to prevent or minimize harm. Any deviations from this Order due to emergency conditions must be reported to the DNDP, through LODOs/FDO, within 24 hours.
- b. Deviations from any operational standards, policy, or procedures, other than those in Section 6.01a. of this Order, must be approved beforehand by the DNDP or his/her designee.

.02 Observer Divers.

- a. NOAA program sites are frequently visited by representatives of other agencies, the media, and other officials for the purpose of familiarization, evaluation, or reporting on NOAA programs. Such visits often involve diving activities that are equivalent to recreational diving in water conditions generally consisting of high visibility, low current, and manageable sea conditions. Such diving can be safely accomplished by persons holding recreational diving credentials. The policy and standards in Section 6.02 of this Order allow NOAA programs to safely accommodate participation by observing divers who are not NOAA certified. This policy applies to NOAA employees and non-NOAA personnel who have been invited to observe underwater activities of NOAA while using open-circuit scuba. This policy does not apply to NOAA employees who are required to dive as part of their regular duties.
- b. Observer divers must be accompanied by a UDS-approved, fully certified NOAA diver whose sole responsibility is to monitor the observer in order to ensure his/her safety.
- c. Tasks of observer divers are limited to observation and photography. Observer divers may not participate in any work being performed during the dive. At all times, participation of observer divers shall be solely at the discretion of NOAA diving officials.

- d. The ratio of NOAA certified divers to observer divers shall not exceed two (2) observer divers for every one (1) NOAA certified diver assigned as an escort.
- e. Observer divers may participate in a single dive or in a series of dives on a single trip, not to exceed six (6) dives a year.
- f. Persons seeking authority to participate as an observer diver must provide the following documents to UDSs beforehand:
 - 1. evidence of diving certifications at the basic scuba level or higher issued by recognized diver certifying organizations such as NAUI, PADI, YMCA, or the U.S. Armed Forces, etc.;
 - 2. evidence of 10 logged dives, one (1) of which has been conducted within the previous three (3) months, indicating the appropriate proficiencies required for the diving conditions likely to be encountered; and
 - 3. evidence of fitness to dive as indicated on a NOAA AObserver Diver Medical History Report® form that is signed by a health care provider (i.e., physician, physician=s assistant, nurse practitioner, or osteopath) within 12 months of the date of the planned dive(s).
- g. NOAA UDSs or their designees shall:
 - 1. inspect the credentials of observer divers and determine whether they have presented evidence establishing certifications by approved organizations and have had physical examinations within 12 months before the dates of the planned dives;
 - 2. conduct in-water evaluations of observer candidates to determine if the observer divers= overall and current experience levels, fitness, and diving proficiencies are adequate for the conditions likely to be encountered on the dives;
 - 3. inspect the observer divers=personally-supplied diving gear for current maintenance and proper operating condition and replace items not considered serviceable with other equipment provided by the diver or with NOAA equipment;
 - 4. obtain from observer divers a signed NOAA Form 56-62 indicating their understanding of, and agreement to abide by, the NOAA Diving Safety Rules - the countersigned original to be forwarded to the NDC upon conclusion of the diving activity in which the observer diver is involved; and
 - 5. retain the authority to suspend diving operations based on their judgment regarding the ability of the observing divers, the adequacy of the diversegar, or the conditions at dive sites.

SECTION 7. PHYSICAL EXAMINATIONS.

- .01 Divers are required to undergo diving physical examinations before acceptance for initial divers=training or certification. Physical examinations also are required at specified age intervals (see Section 7.03 of this Order) and following a major illness or injury. Divers shall provide their examining physicians with the following for use in recording results:
 - a. NOAA Form 56-57, NOAA Diving Program B Medical Evaluation Checklist;
 - b. SF-88, Report of Medical Examination, or NOAA Form 56-60, NOAA Diving Medical Evaluation Report;
 - c. SF-93, Report of Medical History, or NOAA Form 56-58, NOAA Diving Medical History Report; and
 - d. Body Composition Screening Form.
- .02 Divers are responsible for immediately reporting information concerning changes to their medical qualifications for diving duty. Any new medical condition since the date of the divers last history and/or physical must be reported by rapid means to the UDS and then followed up in narrative form submitted to the NDC. Any evidence of either nondisclosure or falsification of medical information will result in suspension of diving certification pending investigation. If the investigation reveals that the diver withheld or falsified information, his/her diving certification will be terminated.
- .03 After initial diving physical examinations, subsequent examinations will be completed at the following intervals unless otherwise specified by the NDC:
 - a. once every 5 years to age 49;
 - b. once every 2 years from age 50 to 59; and
 - c. annually at age 60 and older.
- .04 Divers are responsible for providing the completed forms to the UDS, who will make an initial review for completeness and then forward the package to the NDC for review. The NDC reviews the items to ensure that all materials have been properly completed and that the results of the physical examination satisfy NOAA Diving Program medical evaluation criteria for diving certification (the criteria may be obtained from the NDC). Once NDC has verified that all requirements have been satisfied, it will approve the results of the examination and will notify both the diver and the UDS. It is important to note that the results of the physical examination are not approved until such time as verified by the NDC. If there are any questions or issues raised during the NDC review, they will be conveyed promptly to the diver and his/her UDS (note: divers should keep copies of their most recent physical exam forms).

.05 Divers who are under the age of 60 must complete an Annual Medical History Form (NOAA Form 56-59) and submit it to NDC no later than March 1. Failure to submit this form by the due date may result in suspension of diving privileges.

.06 In any instances where the DNDP or designee denies certification to dive for medical reasons, the DNDP may consider requests for waivers based on a review of these cases by the NDMRB, which shall render its medical opinions and recommendations promptly.

- a. The DNDP will consider opinions or recommendations of the NDMRB. The DNDP will either approve or disapprove the waivers. If approved, the DNDP may approve with restrictions.
- b. Waivers shall only be approved for conditions that are not significantly disabling and do not constitute significant threats to the individuals or fellow divers.
- c. If the DNDP decides to grant a waiver that conflicts with the majority opinions or recommendations of the NDMRB members, the Chairperson shall be notified in writing 30 days before commencement of the waiver, stating the reasons for the override.

.07 The DNDP has unilateral authority to immediately suspend a diver-s current certification to dive. The diver will be notified by the DNDP of the reason(s) for the suspension and of actions that must occur or evidence that must be provided in order for the DNDP to consider restoration of diving certification.

SECTION 8. EFFECT ON OTHER ISSUANCES.

This Order supersedes NOAA Administrative Order 209-123, NOAA Diving Program, dated March 29, 1991, as amended August 13, 1992.

NOAA Chief Financial Officer and Chief Administrative Officer

Appendix: NOAA Diving Safety Rules

Office of Primary Interest:

NOAA Marine and Aviation Operations (NMAO)

APPENDIX

NOAA DIVING SAFETY RULES

- .01 <u>Certification.</u> Each diver must have a current valid NOAA certification or NOAA-approved equivalent.
- .02 Solo Diving. No one may dive unattended.
- .03 <u>Topside Support.</u> A topside support person, capable and ready to render immediate assistance, should be on site during scuba diving activities, as determined by the on-site dive supervisor.
- .04 <u>Non-Scientific Dives.</u> Dives conducted outside the Occupational Safety and Health Administration (OSHA) scientific diving exemptions must follow standards outlined in 29 CFR 1910 Subpart T.
- .05 <u>Depth Limits.</u> Dives exceeding 130 feet require written approval of the NDSB before diving begins.
- .06 <u>Decompression Dives.</u> A detailed dive plan must be submitted to, and approved by, the NDSB for all planned diving activities that exceed the limits of no decompression.
- .07 <u>Diving at High Altitudes</u>. Procedures for diving at altitude above sea level shall be in accordance with the current NOAA Diving Manual.
- .08 <u>Flying After Diving.</u> Minimum surface intervals required before flying after diving shall be in accordance with the current NOAA Diving Manual.
- .09 <u>Over-Bottom Dives.</u> Dives in waters where a diver could lose orientation or descend below safe diving depths are to be considered over-bottom dives. No over-bottom dives shall be made unless some direct reference with the surface is maintained.
- .10 <u>Boat Tending.</u> During dives beyond a comfortable swimming distance from shore, or in areas of strong currents and/or arduous egress, a small boat will be available on site to support dive operations.
- .11 <u>Water Entry and Exit.</u> A means capable of supporting a dressed diver shall be provided for entering and exiting the water and shall be readily available to assist in removing a diver from the water.
- .12 <u>Ship Activities.</u> When appropriate during ship-related diving activities, the "Dive Safe Ship Operations Checklist" (NOAA Form 64-3) will be used.

- .13 <u>Recompression Chamber</u>. The locations, means of accessibility, and telephone numbers of all accessible and operable recompression chambers shall be available to all participating divers and support personnel before each diving operation.
- .14 <u>Emergency Procedures</u>. The UDSs or their designees will prescribe emergency procedures to be used in handling diving-related accidents in the operational area. All divers and support personnel shall be familiar with these procedures.
- .15 <u>Emergency Oxygen Resuscitators</u>. An oxygen resuscitator that is capable of ventilating a non-breathing person shall be immediately available at the dive site during official duty dives. Divers performing non-duty dives should ensure an oxygen resuscitator is available at the dive site. Divers and diver support personnel shall be trained in the use of this equipment.

.16 Equipment.

- a. <u>Exceptions.</u> Use of equipment other than open-circuit scuba, or of breathing mixtures other than air or nitrox, must be approved beforehand by the NDSB.
- b. <u>Alternate Air Source.</u> Each scuba diver shall carry a NOAA Diving Program-approved alternate air source (AAS) for the purpose of air-sharing during an out-of-air emergency. The AAS is to be worn in addition to the diver's primary, second-stage scuba regulator, and must be fully functional and secured to the diver in a manner to preclude the device from dangling free and becoming fouled.
- c. <u>Harness and Weight Belt.</u> All harnesses and weight belts must have an appropriate quick release that is accessible by the diver.
- d. <u>Flotation Device</u>. Each scuba diver shall wear an adequate buoyancy flotation device (e.g., a buoyancy compensator or a power-inflated dry suit) that has a means of inflation other than oral. <u>Caution</u>: Buoyancy compensating devices or weight belt harness webbing that might obstruct drysuit inflation or exhaust valves shall NOT be worn.
- e. <u>Drysuits</u>. The use of drysuits for diving requires certification by the DNDP. Divers seeking authority to use drysuits must provide the DNDP with proof of appropriate training and/or documented evidence of prior experience in the use of drysuits.
- f. <u>Compass</u>. An underwater compass shall be carried by each diver when, in the opinion of the Divemaster, lack of underwater orientation is likely to occur.
- g. <u>Depth Gauge</u>. An underwater depth gauge shall be carried by each scuba or hookah diver.
- h. Pressure Gauge. A submersible pressure gauge shall be carried by each scuba diver.

- i. <u>Diving Computer.</u> Only those makes and models of dive computers approved by the NOAA Diving Program shall be used. Use of dive computers requires certification by the DNDP.
- j. <u>Diving Timer.</u> A diving watch or other suitable timing device shall be worn by each diver.
- k. Knife. A knife or other suitable cutting device shall be worn by each diver.
- l. <u>Diving Flag.</u> Appropriate diving flag(s), day shapes, and lights shall be visibly displayed at all times while actively diving.
- m. <u>Air Compressor.</u> No person shall operate a scuba air compressor without first having received appropriate training and assisted an operator experienced in its operation. An operational log shall be maintained for all NOAA scuba air compressors. Compressed air from all active compressors shall be tested every six (6) months by an approved method.
- .17 <u>Equipment Maintenance</u>. All diving gear and support equipment shall be maintained in safe operating condition. Manufacturers' recommended servicing policies shall be followed. All regulators, depth gauges, and submersible pressure gauges must be examined, checked for accuracy, and calibrated annually in accordance with NDC guidance. A record of the inspection and maintenance/repair will be filed at the NDC. If the maintenance/repair is performed at a unit site, a record will be kept by the UDS and a copy provided to NDC.
- .18 <u>Equipment Storage</u>. All diving equipment should be stored in a clean, secure, properly-ventilated space that is free of noxious fumes and corrosive elements. Sufficient space should exist to allow for proper care and storage of dive and emergency equipment.
- .19 <u>Scuba Cylinder Inspection and Testing.</u> All scuba cylinders must be visually inspected annually by a certified NOAA Visual Cylinder Inspector (VCI), or equivalent, who will attach a dated visual inspection sticker to the cylinder. Cylinders must be hydrostatically tested at least every five (5) years. The date of the last hydrostatic test must be stamped on the cylinder.
- .20 <u>Air.</u> When air is used as the breathing medium, it must meet the air purity standards outlined in the current edition of the NOAA Diving Manual.
- .21 <u>Cylinder Identification of Breathing Gases Other Than Air.</u> All cylinders and tanks containing breathing gases other than air must be properly marked indicating contents and shall be used exclusively for the identified gas.
- .22 Oxygen Service. Any equipment used for 100 percent oxygen or an oxygen level above 40 percent at high pressure must be formally cleaned in accordance with oxygen service requirements listed in the current edition of the NOAA Diving Manual.

.23 <u>Emergency Communication Capability.</u> Two-way communication (e.g., telephone or radio) adequate to contact emergency assistance shall be available at the dive site during official duty dives.