NOAA RESERVE AIR SUPPLY SYSTEMS

1. PURPOSE
1.1 This provides policy on the required use, mounting and configuration, and distribution of the National Oceanic and Atmospheric Administration (NOAA) Reserve Air Supply Systems (RASS).

1.2 This version is the triennial review with no content changes.

2. SCOPE
2.1 This policy applies to all NOAA Divers and Unit Diving Supervisors (UDS).

3. POLICY
3.1 Required Use

3.1.1 A RASS is required to be worn on all NOAA “working” SCUBA dives.

3.1.2 Unless approved by the NOAA Diving Control and Safety Board (NDCSB), a RASS must be worn for all NOAA “scientific” SCUBA dives conducted:

A. outside the no-decompression limits;

B. in overhead environments where direct ascent to the surface is prevented by a natural or man-made obstruction;

C. in conditions of low visibility where the diver cannot read his cylinder pressure gauge;

D. in enclosed or physically confined spaces;

E. deeper than 100 feet;

F. by solo divers being line tended; and

G. when deemed appropriate by the Divemaster or Lead Diver in charge of the dive after on-site hazards have been identified through a risk assessment.

3.2 Mounting Location and Configuration

3.2.1 The RASS must be mounted and configured per the NOAA Scientific Diving Standards and Safety Manual, Appendix 7.
3.2.2 Requests for alternate mounting locations and configurations must be forwarded to the appropriate Line/Staff Office Diving Officer (LODO/SODO) for consideration. Alternate mounting locations and configurations must comply with the following standards:

A. The tank valve must be easily accessible and not be blocked by any other diver-worn equipment.

B. The high-pressure hose must be of sufficient length to allow the diver to easily read the high pressure gauge.

C. The second-stage hose must be of sufficient length to easily reach the mouth and to allow for head movement (rotation) from shoulder to shoulder.

D. If a longer hose is used for the second stage, it must be either:
   1. stored where it can be accessed easily,
   2. worn on a necklace (Tech style), or
   3. the second stage must be fastened with a proven quick release mechanism (octo-holder etc.) to the Buoyancy Compensator Device (BCD).

E. The RASS cylinder must be securely mounted in a manner allowing for easy removal underwater.

F. The RASS cylinder must remain in the ‘Off’ position during the dive unless the second-stage regulator hose is equipped with an in-line shutoff valve.

G. If BCD cam-bands are used for securing RASS cylinder bracket assemblies, the mounting must not interfere with the intended purpose of the cam-bands.

H. The RASS cylinder on/off valve must be uniquely identified/configured so it is easily distinguished, visually or tactually, from the cylinder yoke screw.

I. Unless otherwise authorized by the LODO, RASS cylinders must be mounted either on the diver’s right side (e.g., BCD or cylinder) or in front at belt level.

3.3 Issuance of RASS

3.3.1 The NOAA Diving Center will not issue RASS to NOAA Science Divers as a standard piece of dive equipment under the Standardized Equipment Program (SEP).

3.3.2 Each UDS will determine the minimum number of RASS required for their unit in order for the unit to remain operational.

3.3.3 RASS are to be available for divers to checkout during scientific, working, training, or proficiency dives, or as needed.

3.3.4 Excess RASS must be returned to the NOAA Diving Center to eliminate the need for yearly servicing of unused equipment and avoid being assessed additional Standard Equipment Program fees.

4. GUIDANCE

Associated procedures, if required, will provide guidance.
5. RESPONSIBILITIES

5.1 The NOAA Divemaster (or an individual assigned by the UDS) is responsible for RASS retained at a unit.

5.2 The LODO/SODO must approve alternate RASS mounting locations and configurations.

5.3 The NDCSB will determine conditions and situations that do not warrant the wearing of RASS.

6. DEFINITIONS

**NOAA Reserve Air Supply System**
A diver-carried auxiliary supply of air, nitrox, or mixed gas (as appropriate) sufficient under standard operating conditions to allow the diver to reach the surface, or another source of breathing gas, or to be reached by a standby diver.

**NOAA Divers**
Individuals certified by the NOAA Diving Program Manager to dive and perform work in a hyperbaric environment in support of NOAA’s mission. These include NOAA employees (federal full-time and contract employees), reciprocity, and volunteer divers.

**NOAA Unit Diving Supervisors**
NOAA divers appointed by a NOAA LODO/SODO Diving Officer to oversee, direct, and approve diving activities conducted within their respective LO/SO unit and to administer to the needs of assigned divers.

**NOAA Line/Staff Office Diving Officer**
Individuals appointed to oversee and direct diving activities within specific NOAA Line/Staff Offices LODO/SODO and to serve on the NDCSB.

**NOAA Diving Control and Safety Board**
An appointed board of representatives from NOAA’s Line and Staff Offices who report jointly to the Director, Office of Marine and Aviation Operations, and NOAA Chief Administrative Officer (CAO) and have autonomous and absolute authority over and promote the safe and effective operations of the NOAA Diving Program.

**NOAA Divemaster**
NOAA divers assigned by the NOAA Line or Staff Office Unit Diving Supervisor to oversee and direct all aspects of a dive operation affecting the safety and health of the dive team members at the dive site.

**Lead Diver**
Divers designated by the UDS to properly plan and safely execute dive operations in the absence of a qualified Divemaster.

**NOAA Diving Center**
Headquarters for the NOAA Diving Program located at the NOAA Western Regional Center, Seattle, WA.

**NOAA Science Divers**
Individuals certified to dive by the NOAA Diving Program Manager in support of NOAA’s scientific, research, and educational activities. A science diver is an observer and data gatherer who uses scientific expertise to study the underwater environment, its organisms and its dynamic processes.
Standardized Equipment Program

The formalized system used by the NOAA Dive Program for the maintenance and distribution of diver-worn equipment issued to NOAA divers.

Scientific Dives

Dives performed solely as a necessary part of a scientific, research, or education activity by individuals whose sole purpose for diving is to perform scientific or research tasks for the advancement of science.

Working Dives

Underwater tasks that fall outside the Occupational Safety and Health Administration scientific exemption that do not require scientific expertise, may not lead to the advancement of science and involve tools and techniques beyond those required to perform science dives.

Training Dives

Dives performed solely for the purpose of acquiring new, or relearning previously acquired, diving skills.

Proficiency Dives

Dives performed solely for the purpose of maintaining previously acquired diving skills.

7. REFERENCES

Code of Federal Regulations (29 CFR § 1910 subpart T)
http://frwebgate.access.gpo.gov/cgi-bin/get-cfr.cgi?TITLE=29&PART=1910&SUBPART=T&TYPE=PDF

NOAA Scientific Diving Standards and Safety Manual

8. AUTHORITY

OMAO 0301, Category 0300

9. NOTES


Distribution: All NOAA divers and their supervisors.

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<thead>
<tr>
<th>Version</th>
<th>Description of Change</th>
<th>Effective Date</th>
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<tr>
<td>3.0</td>
<td>Tri-annual review, no content changes</td>
<td>3/12/2014</td>
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<tr>
<td>2.0</td>
<td>Information provided in Section 3, Policy, has been completely rewritten; and additional definitions, Section 6, have been added</td>
<td>11/24/2010</td>
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<tr>
<td>1.0</td>
<td>Initial Document.</td>
<td>2/24/2010</td>
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