

The Villages Scuba Club

Never Run out of Air

Diver's Guide 04/22/2023

Estimated presentation duration: 35 minutes

I. INTRODUCTION:

1. Divers will never run out of air when they comply with this guide. Buddy Teams that have the equipment, are prepared to use it, and have an executable plan for low-air situations can safely resolve them. For this presentation, the term "air" includes Nitrox. This sheet provides the resources for divers to learn the material through home study. Follow the **critical** actions described below and you will never run out of air.

2. Consider this as a pretest. Think how you could avoid running out of air like the diver in this video.

https://www.youtube.com/watch?v=30Dh0W_cPpg

II. ENSURE YOU HAVE THE EQUIPMENT:

1. Divers should have property buoyancy and and to conserve air. Too much weight and they must add air to the BCD as they go down and vent as they ascend.

2. Divers should conduct a self check, then a buddy check to ensure their air supply. Conducting a PADI type buddy check is critical to ensuring divers air supply.

(review it at <https://www.youtube.com/watch?v=cyNXsEzTBws>)

3. The key air issues are:

- a. **Start with full tanks.**
- b. **Ensure air is turned full on.**
- c. **Ensure all regulators work.**

III. BE PREPARED TO USE IT:

1. **Always be close enough to share air.**
2. **Know everything necessary to share air with your buddy.** The two different techniques to share air are:
 - a. Give the primary regulator to the out-of-air diver.
 - b. Give the octopus regulator to the out-of-air diver.
 - c. **Be prepared to donate your primary regulator.**
 - d. Take advantage of computer alarms and air/time remaining functions.

IV. PLAN FOR LOW-AIR SITUATIONS. Buddy teams must know how to manage and share air before they get wet. This includes.

1. Understand air-related hand signals, such as:

- | | |
|------------------------------|---------------------------|
| a. How much air do you have? | e. Come here. |
| b. I have _____ PSI. | f. I am surfacing. |
| c. I am low on air. | l. Are you Ok? I'm Ok. |
| d. I am out of air. | m. Go to the safety stop. |

2. Complying with dive master's directions regarding communications, expected dive time, minimum pressure and specifics of what to do when low on air.

3. Plan the dive to comply with the dive master's briefing and:

- a. **Frequently check air pressure.**
- b. Be aware of group air status and dive time remaining.

e. When relatively low on air:

- (1) **Close up to buddy and prepare to share air.**
- (2) Inform buddy and dive master if applicable.
- (3) Attempt to limit movement, relax, put away camera, move slowly, stay arms, and use only fins.
- (4) Position yourself higher in water column and stay with group **or**
- (5) Make a normal ascent with safety stop.

4. **Ascend immediately when low on air, 500 psi or as the dive master directed.** With a Surface Air Consumption rate of .67 cubic feet/minute, a diver has 9.5 minutes of air at 33 ft, more than enough for a normal ascent.

- a. **Ascend** at a safe slow rate following the dive master, to 15-foot safety stop depth.
 - b. **Ascend** at a safe slow rate directly to the surface pausing for the 15-foot safety stop.
5. Exercise: Discuss how your actions could have prevented the out of air emergency in the video.

https://www.youtube.com/watch?v=30Dh0W_cPpg

V. REFERENCES:

1. DAN's on line (downloadable PDF) Smart Guide, *13 Ways to Run Out of Air & How Not To*, is the primary reference. Download from <https://dan.org/health-medicine/health-resource/smart-guides/13-ways-to-run-out-of-air-how-not-to/> .

2. The out of air video is at - https://www.youtube.com/watch?v=30Dh0W_cPpg

3. Calculating Air Consumption Rates for Scuba Diving explains the procedure , but some diving computers automatically do this. <https://www.tripsavvy.com/air-consumption-rates-for-scuba-diving-2962942>

Don't touch the coral