Other Delivery Content, Tec 40-4

Study assignment: Tec 40 Handout 4

Learning Objectives

By the end of this section, you should be able to answer these questions:

1. What is a "bounce" dive?

2. Why is it recommended that you switch to a higher oxygen EANx for decompression without accelerating your decompression, and/or set your dive computer for an EANx with less gas than actual, if making a "bounce" technical dive?

E.   "Bounce" dives

    1.   A short dive to any depth is called a "bounce" dive.

        a.   The definition is imprecise – what one person calls a bounce dive another may not.

        b.   It is possible to make dives within the scope of Tec 40 qualifications that some would be consider bounce dives.

    2.   There are some anecdotal concerns about bounce decompression dives

        a.   Some people think DCS data indicate that short, deep dives with short decompression requirements have a higher DCS risk than would be expected based on decompression models

        b.   Again, definitions of "short" and "deep" and "risk" are subjective in this context.

        c.   The concerns are hypothetical and not quantified, but they exist nonetheless.

    3.   To minimize bounce dive concerns (at all levels):

        a.   Plan your dive with your computer set for air or an EANx with less oxygen than you actually use.

        b.   Use a single gas computer, or if using a multigas computer, leave it set for your bottom gas, but decompress with an EANx blend with more oxygen.

c.   Either of these (or both) will make your decompression more conservative.

- The required decompression time for a short, deep dives is correspondingly short. Deco is so short there is no meaningful benefit to accelerating decompression. Instead, you use EANx to make your decompression more conservative instead of shorter.

- It is common to extend the last deco stop two or three minutes as well.

Example: You dive to 40 metres/130 feet. You leave your dive computer set for air, but you actually dive using EANx25 as your bottom gas. You decompress with EANx40, but you leave your dive computer (if it is a multigas model) set for air during decompression.

d.   You will plan your dives as a Tec 40 diver based on decompressing as if using your bottom gas, but using EANx to make your decompression more conservative.

Exercise, Other Delivery Content, Tec 40-4

1. A "bounce" dive isn't defined precisely, but means a short dive to any depth.
- ❏   True
- ❏   False

2. To minimize bounce dive concerns (choose all that apply):
- ❏   a. set your dive computer for air or EANx with less oxygen than the gas you actually use.
- ❏   b. accelerate your decompression.
- ❏   c. decompress with a gas that has more oxygen than you set your computer for.
- ❏   d. ascend rapidly to minimize your time at depth.

How did you do?
1. True. 2. a, c.