

## Other Delivery Content, Tec 40-7

### Study assignment: Tec 40 Handout 7

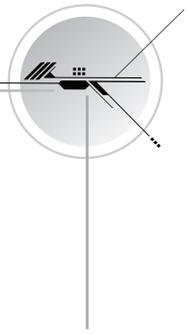
#### Learning Objectives

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

- 1. As a Tec 40 diver, what should you do if you exceed your planned depth and time?*
- 2. As a Tec 40 diver, what should you do if you have a delay during your ascent?*
- 3. As a Tec 40 diver, what should you do if you miss a decompression stop?*
- 4. As a Tec 40 diver, what should you do if you omit decompression?*
- 5. As a Tec 40 diver, what should you do if you run out of gas?*

- A. This section discusses handling some emergencies within the context of Tec 40 equipment requirements and limits.
- The same emergencies can be more serious and more complex to handle for longer, more complex technical dives.
  - This is another important reason to stay within the limits of your training and equipment.
- B. Exceeding your planned depth and time.
- This should be a rare situation caused by unusual circumstances (if you can't control your depth under normal circumstances, you're not ready to tec dive).
  - Immediately ascend and consult your computer. Your allowable dive time will likely be much shorter than you planned.
  - If you exceeded your depth significantly and/or for more than a minute, end the dive immediately.
- C. Delay in ascent
- At the Tec 40 level, a delay in your ascent is not usually a major issue.
  - Your dive computer will calculate the changes in your required decompression, if any.
  - If using a backup table (computer failed), it is not critical if the delay is short (2-3 min or less)
    - Don't count the delay as decompression time.
    - Extend your last stop as much as practicable, gas allowing.

- D. Missed decompression stop
1. At the Tec 40 level, this is most likely to be caused by failure to control buoyancy.
  2. If you can, redescend and complete the stop, plus one minute, then finish decompression according to your dive computer.
  3. If you can't redescend, stay at the next stop for the combined time of both stops. Extend your last two stops (if two or more) by 1.5 what your computer requires, and/or as long as you can with the gas you have.
  4. Some dive computers will lock up until you redescend to below the depth of a required stop. They provide no information in the event that you can't return to your deeper stop depth. If you have such a computer or computers, (see the manufacturer's instructions), you should have your planned decompression schedule with you (on a slate, backup tables, etc.) in case of this kind of emergency.
- E. Omitted decompression
1. Omitted decompression is similar to a missed stop, but involves missing all required stops and coming all the way to the surface.
  2. The risk of DCS is higher than normal, but at the Tec 40 level it should not be excessive if:
    - a. you're using an EANx blend with more oxygen than you've set your dive computers for.
    - b. you've completed most of your decompression using an EANx with an even higher oxygen content.
  3. If you omit decompression for 6 metres/20 feet or less (most likely within Tec 40 limits), have no symptoms and can return to stop depth in less than a minute, decompress according to your computer, then extend the last stop as much as possible.
  4. If you omit decompression for 6 metres/20 feet or less (most likely within Tec 40 limits), have no symptoms and return to stop depth in more than a minute, extend your 6 metre/20 foot stop by 1.5 times what the computer requires, and extend the last stop as much as possible.
  5. If you omit decompression from deeper than 6 metres/20 feet, return to the first stop depth. Complete that stop up to and including the 12 metre/40 foot stop, then extend all subsequent stops by 1.5 times the required decompression.



6. If you can't return to depth (no gas available, for instance), breathe oxygen, remain calm and monitor yourself for DCS symptoms.
  7. Some dive computers will lock up if you omit decompression. Others lock up after a given period (typically a minute), after which they provide no decompression information. If you have such a computer or computers, (see the manufacturer's instructions), you should have your planned decompression schedule with you (on a slate, backup tables, etc.) in case of this kind of emergency.
- F. The TecRec Emergency Procedures Slate summarizes the procedures for delayed ascents, missed decompression and omitted decompression. It is recommended that you carry this slate with you on tec dives.
- G. Running out of gas
1. Should be unlikely at the Tec 40 level if you plan your gas supplies correctly and follow the reserve rules.
    - a. Having a deco cylinder with more than ample gas makes this even less likely.
  2. Increased SAC rate due to exertion is not usually an issue, because you hit turn pressure sooner, which means a shorter dive time and less decompression.
  3. If you run low on gas in a deco cylinder, switch to your back gas. As a Tec 40 diver, all your decompression should be based on using that gas or ideally, on one with lower oxygen content.
  4. You can share gas with team mates and/or support divers.
  5. Generally, if gas termination interferes with your decompression, decompress as long as you can, as best as you can. The more you decompress, the lower your DCS risk. However, do not run out of gas. DCS is serious but has a high likelihood of successful treatment. Drowning does not.

**Exercise, Other Delivery Content, Tec 40-7**

1. If you exceed your planned depth and time, as a Tec 40 diver you should consult your computer and be prepared to end your dive sooner than planned.
  - True
  - False
2. If you have a delay during your ascent, as a Tec 40 diver (choose all that apply)
  - a. you should decompress for 1.5 times what your computer says.
  - b. you should decompress for 3 times what your computer says.
  - c. continue to decompress according to what your computer says.
  - d. None of the above.
3. If you miss a decompression stop, as a Tec 40 diver (choose all that apply)
  - a. you should redescend, complete the stop plus one minute, then finish decompression according to your dive computer.
  - b. surface and seek immediate recompression.
  - c. descend to 12 metres/40 feet and extend all stops by 1.5 times what your computer requires.
  - d. you may need to refer to your written decompression schedule if your computers would lock up.
4. If you omit decompression, what you do depends upon how deep your stops were when you had the omission, and how fast you can return to stop depth.
  - True
  - False
5. If you run out of gas, as a Tec 40 diver your options may include (choose all that apply)
  - a. switching back to back gas.
  - b. sharing with a team mate or support diver.
  - c. decompressing for as long as possible with what you have to minimize DCS risk.

How did you do?

1. True. 2. c. 3. a, d. 4. True. 5. a, b, c.