



Text by Simon Pridmore
Photos by Andrey Bizyukin

Today, technical diving is well into its fourth decade. We now have better tools, technology and systems than we did in the past and we know far more about which methods, decompression strategies and gear configurations work well and which do not.

There are more people doing technical dives than ever before and there are more professional dive operations catering to technical divers. Far from being an outlier, as it was in the early days, technical diving is now just another branch of the mainstream scuba diving world.

However, despite these developments, divers are still coming to harm on technical dives in the same way they did a generation ago.

As in so many other fields of human experience, familiarity breeds complacency and this leads to overconfidence, negligence and carelessness.



Ten Commandments

for Technical Diving Ops – Part I

Operational thinking

An excellent strategy to guard against complacency and protect you and your dive team from becoming too casual about your diving is to establish set operational procedures for all your technical dives. View these procedures as unbreakable rules—commandments

written in stone.

Think of every technical dive as an operation—whether it is a training dive, an afternoon fun dive with friends, a dive into a cave you have already visited 50 times or the exploration of a deep shipwreck that nobody has ever seen before. If it is a technical dive, it is a technical

diving operation, and the commandments apply.

You and your dive team should set your own commandments, according to your collective backgrounds, aims and circumstances, but here are a few ideas that the teams I have dived with over the years have come up with.

First commandment: Prepare paperwork

In the United Kingdom, every scuba diving instructor is required to prepare and complete a number of forms before every teaching dive they do. The two primary documents are a project plan and a daily dive log. These cover details of





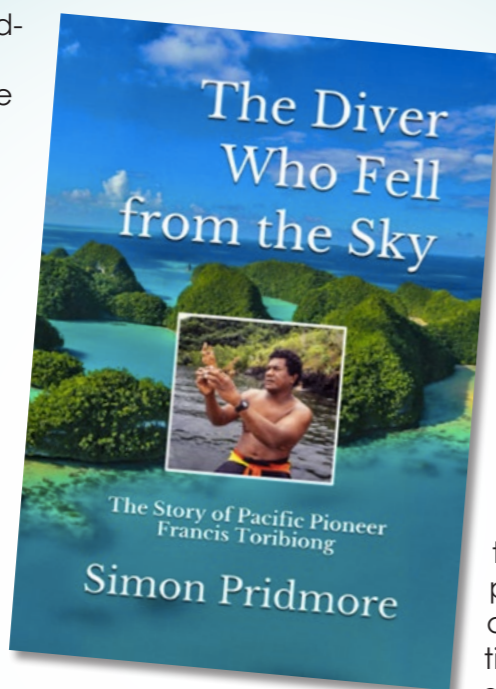
the personnel, plans, places and emergency procedures. The first is general and involves issues relating to standard operating practice. The second is specific and covers the people involved that day, the sites they are diving and the

prevailing weather conditions.

Samples of these can be easily found online via the Health and Safety Executive (HSE) and British Sub-Aqua Club (BSAC) websites.

A New Book from Simon Pridmore

When his country needed him most, Palauan Francis Toribiong came along and helped the Pacific island nation find its place in the world and become an independent, forward-looking 20th century state. And he achieved this, improbably, via the sport of scuba diving. This is the inspiring tale of an absolutely unique life, written by Simon Pridmore and illustrated with images of the beautiful islands of Palau, above and below the water.



him this title, people were speaking both literally and figuratively.

Toribiong was so completely different from all of his contemporaries in terms of his demeanor, his ambitions and his vision, that it was as if he had come from outer space. Palau had never seen anybody quite like him and there was no historical precedent for what he did. He had no operations manual to consult and no examples to follow. He wrote his own life.

Toribiong was born poor, had no academic leanings and no talent for diplomacy. Yet he was driven to succeed by a combination of duty, faith, a deep-seated determination to do the right thing and an absolute refusal ever to compromise his values. And, as well as all that, he was Palau's first ever parachutist—known by islanders as “the Palauan who fell from the sky.” In giving

Toribiong was the first Palauan ever to seek and seize the international narrative. No Palauan, in any context or field, had previously thought to go out into the world and say: “This is Palau—what we have is wonderful. Come and see!” This is his astonishing story.

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Why are documents like these useful for technical diving operations?

- They make sure that you have remembered all the essential things.
- They help you assess risk.
- You have procedures immediately on hand if you need to deal with an emergency, so you do not have to make up plans off the top of your head during the chaos and confusion that always accompanies an accident.
- They give you a full record of every dive you do.
- They mean that you have most of the dive plan and emergency plan already written for the next time you go to the site, so you do not have to rely on memory or keep “reinventing the wheel.”
- Finally, as all the divers sign off on the paperwork in advance, the team

can be confident that every member knows and accepts his or her role.

Second commandment: Nominate a supervisor

Shortly after I started technical diving, I made a pilgrimage to Florida, as everyone did in those days, and I dived with a guy named Jim Mims, who ran trips out of Pompano Beach to a number of deep gulfstream wrecks. Jim was a vastly experienced diver but, when we met, he told me he did not do much diving himself anymore. Over time, I found out why. He did not dive because he was too busy running the dives.

He set the shot lines onto the wrecks, supervised the gases, gave the briefings, helped the divers gear up and get in, watched for divers coming up early or missing the decompression station, supervised his safety divers, sorted out prob-

lems, debriefed the dives and collected the shot lines. If he had been on the dive himself, he could not have done any of these things and each of them was crucial for the safe completion of the dive.

Later in my career, I noticed how major technical diving expeditions adopted a similar strategy, appointing a highly qualified diver to run the dives. This, of course, is a procedure borrowed from the world of commercial diving, where the surface supervisors—the people in direct control of dive operations—are all veteran divers.

Obviously, if you have a dive team, it does not make sense to have the same person always in the role of dive supervisor, as that individual will never get to dive. The solution is to rotate the job among all members of the team so the team as a whole becomes more experienced and therefore stronger. Also, everyone gets to dive.





opinion



Third commandment: Deploy safety divers

As well as a supervisor, every technical dive operation needs to have at least one safety diver working in the decompression zone. Without in-water safety divers, there will be some gaping holes in your emergency response plan.

The most important part of any technical dive is the decompression phase and, however good a diver you are, there are situations that may arise during this phase that you and your fellow deep divers cannot resolve because you are trapped by your own decompression burden. You cannot descend without increasing your ascent time and reducing your gas supply, and you cannot ascend beyond your decompression ceiling without increasing your risk of DCS. Your movements and your options are strictly curtailed. The dive supervisor is unlikely to be able to help because normally they will be up on the boat.

This is where in-water safety divers come in very handy.

The safety divers need to be experi-

enced technical divers who are going to take the job seriously, not just fun divers recruited to make up the numbers with the promise of a free dive. The safety divers are in charge of setting up the decompression station and back-up decompression gas on the planned ascent route before the deep dive team arrives. They also have to watch and be ready to react in case the deep divers have been unable to ascend along the planned route and are coming up elsewhere.

Most importantly, the safety divers need to be in place and alert at the point where the divers plan to switch to their first decompression gas, a moment in the dive where mistakes are often made, and an extra pair of eyes is extremely valuable.

Divers often get task-loaded and make mistakes at this time. They need simultaneously to switch to the right gas, make sure they are neutrally buoyant and neither ascend beyond their stop depth nor drift down below their safe oxygen depth. Then, they have to record the gas switch on their dive

computers to keep their decompression schedule on track.

Throughout the decompression phase of the dive, the safety divers continue to watch over the divers and remain on the lookout for any problems. While the majority of the safety divers' attention will be focused on the deep dive team, they must also have the discipline to remain aware of

their own status and not go into decompression. This is because they have to be able at any time to surface, if necessary, to do things like communicate with

the boat or get more gas.

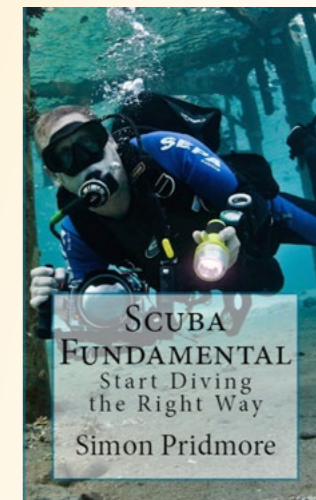
In the next part in this series, I will suggest a few more commandments for tech diving ops. ■

Simon Pridmore is the author of the international bestsellers Scuba Confidential: An Insider's Guide to Becoming a Better Diver, Scuba Professional: Insights into Sport Diver Training & Operations and Scuba Fundamental: Start Diving the Right Way. He is also the co-author of the Diving & Snorkeling Guide to Bali and the Diving & Snorkeling Guide to Raja Ampat & Northeast Indonesia. His recently published books include The Diver Who Fell From The Sky, Dive into Taiwan, Scuba Exceptional: Become the Best Diver You Can Be, Scuba Physiological: Think You Know All About Scuba Medicine? Think Again! and the Dining with Divers series of cookbooks. For more information, see his website at: SimonPridmore.com.

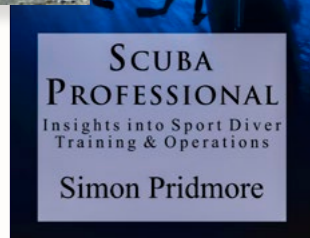


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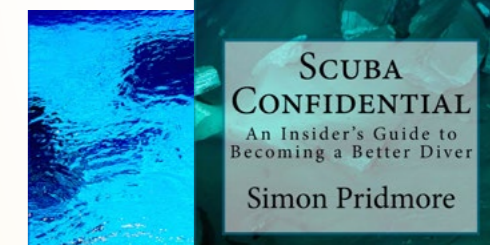
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