### Want to be better and safer rebreather diver?

### What is DIRrebreather?

Since its implementation a few years ago, the Doing It Right (DIR) philosophy has gained in popularity not only in the cave diving community and amongst technical divers, but it has also spread to the recreational diving community across the world.

Until recently, it was only open circuit scuba divers and a handful of semiclosed circuit rebreather divers who could apply these good principles to their equipment configuration and dive procedures. In this context Closed-Circuit Rebreather divers have been the black sheep of the family, as their units were dangerous and their procedures dodgy.

However, almost clandestinely, some CCR divers and Instructors decided to found what is now called DIRrebreather and to set up logical and simple rules, so we could apply the DIR principles to CCR diving. We just dreamt about bringing together the best of both worlds!

The DIRrebreather team is made of experienced and active rebreather explorers and instructors who share the

> same goal: implementing the DIR Philosophy into rebreather diving. But why use DIR with a rebreather? Well, ask yourself the following: How many times have you seen rebreather divers with poor diving skills,

bad propulsion techniques and inefficient buoyancy control? How many times have you seen rebreather divers with gear configurations that could easily be improved? How many times did you observe rebreather divers following complex procedures that were dif-

ferent for each diver even within the same team?

We strongly believe that with proper training, thorough planning, team procedures, equipment selection and adaptation, the rebreather diver can also be a DIR diver. Standardization should make for simpler and safer dives, avoid confusion and improve team work and communication, especially when problems occur.

Why another Training Agency?

DIRrebreather is not a training agency. We don't sell certification cards. We inform rebreather divers about what we do and how we do it. All DIRrebreather members and instructors work on CCR gear and procedures

standardization. Based on some extensive cave and wreck explorations, and physiological studies, we try to adapt the most current thoughts in decompression into rebreather diving.

and the same

We also have the goal to help rebreather divers to improve their personal skills and techniques through articles, DVDs, manuals and specific workshops. To that end, we have set up a forum to discuss how to improve the standards and the equipment.

We also have a newsletter to keep our members informed about current expeditions and how to participate. We set up

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### What does DIR mean anyway?

DIR, "Doing It Right", is a holistic approach to scuba diving originally developed by members of the Woodville Karst Plain Project, who also gained fame for their explorations of the extensive underwater cave systems in Florida and elsewhere.

One of the tenets of the DIR approach is to improve safety by standardizing equipment configuration and procedures for preventing and dealing with emergencies, in particular handling out-of-air scenarios. This is achieved by placing emphasis on fundamental skills, teamwork, environmental awareness, and the use of highly optimized and streamlined, yet simple and versatile, equipment configuration. DIR is often perceived as being an equipment system, but it also encompasses a general philosophy or attitude of how to approach scuba diving including aspects of diving procedures and techniques as well as diver fitness and preparedness.

DIR has often been the source of heated debates in the diving community. Many feel that the name itself "Doing it Right" implies that if they are not utilizing DIR, then they are "doing it wrong". One of the rules of DIR diving is to not dive with anyone with a poor or unsafe attitude, sometimes referred to by overly enthusiastic DIR proponents with the derogatory term "strokes", which has been perceived by others as an antagonizing elitist attitude.

While many people see the advantages of the DIR philosophy others have in particular challenged the requirement that divers must go all-DIR and cannot use other equipment.

Proponents counter that the whole point of standardisation is to allow DIR divers to very easily dive with alternative buddies, swap damaged equipment and have less equipment stress. Those who disagree argue that the lack of choice and customization means being forced to use equipment that might not be optimal for some environments.

These days DIR diving is less controversial and many of the ideas suggested by DIR have become mainstream and adopted by various other training agencies.

# 10 Q & A's About DIR Rebreather By Cedric Verdier Chairman, DIRrebreather





workshops and seminars to educate already certified rebreather divers.

### What about the name?

DIRrebreather is exactly what it means: DIR diving with a rebreather. Some people already found the name a bit provocative. It is as some people don't see the irony if combining of DIR and rebreathers!

We could have chosen to name it "Association for the Promotion of Safe Rebreather Practices in the DIR Way". But how clumsy and unsexy does that sound?

### Are DIRrebreather and GUE\*) related?

No. DIR is not a trademark or a diving group. It's a mindset. Many people want to dive DIR worldwide. They try to learn new techniques and improve their equipment through articles, discussions with friends or on Internet forums.

The most efficient way to become a DIR diver is obviously to participate in a GUE-sanctioned course. They benefit

from the experience of members of the WKPP or other DIR-related projects in Mexico, Europe, etc.

Unfortunately, such an opportunity has not been possible for CCR divers. Consequently, we are not in competition with GUE. As a matter of fact, some of the DIRrebreather team members have also done GUE courses for OC or SCR divers. From our viewpoint, we just adapt the techniques and the concept to CCRs and develop procedures specifically for Closed Circuits.

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Why become a member?

DIRrebreather is a private group. Most of our members have spent a lot of time discussing the standards, trying out dif-

ferent techniques and procedures, and adapting the skills to most of the commercially available rebreathers. Some of our members are extremely experienced instructors who teach rebreathers diving on a daily basis, encountering all kind of problems, including stupid procedures and poor techniques. We just try to change that, but it's a big job.

So, only people who are really motivated to improve the way they dive a rebreather become members. And we don't waste time to convince the others.

If I could learn techniques that make my dives safer and more efficient, I would not hesitate to spend the equivalent of the price of a taxi ride in London or a standard hotel room in Manhattan. That's the price of our membership. For the same membership fees, I can also participate in expeditions, seminars and

> In case of emergency, if everyone uses similar equipment, you will know their gear as well as your own

workshops, buy some goodies and get some discount on specific products.

## What are the standards regarding the equipment?

Most of the ideas are a direct application of the Hogarthian configuration "). They have just been adapted to CCR diving in a formal way. We expect the equipment to be safe, simple, logical, robust and streamlined. We also need a rig that is adaptable and modular. But more importantly, we want to use a consistent system within the team. It gives us the ability to interchange/swap equipment.

For instance, having the same fitting on all your low pressure hoses allows you to deal with an empty tank or to help another diver in case of emergency. In case of emergency, if everyone uses similar equipment, you will know their

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gear as well as your own. It also makes the transition from open circuit to closed circuit rebreathers, or the integration of CCR divers in a team of OC divers easier.

### Are you affiliated with a diving equipment manufacturer?

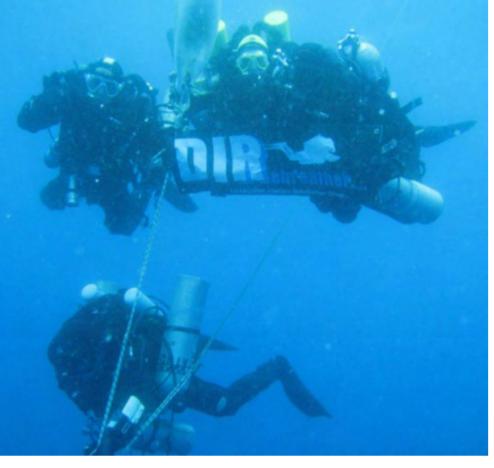
Not at all. We don't work exclusively with any rebreather manufacturer. As a matter of fact, a lot of the rebreathers on the market can be adapted (more or less easily) to the DIR configuration. Some pieces of equipment are more adaptable than others, and some others are not adapted at all. The principles apply to any piece of equipment, from the fins to the rebreather.

### What are the standards regarding procedures?

Effective dive planning means reducing the variables. The most important part of that is the equipment, mixes and procedures. When divers use standard equipment and mixes, and follow the same procedures (deco tables, emergency procedures, etc), they become team members who actually add to each other's safety. Remember that having the right equipment won't make anyone a great diver unless they also apply the right procedures in the right team and have the right skills and experience in the water.

So, we set up standards on normal diving procedures (separated in three different parts depending on when they are followed: before, during or after the dive) and about Emergency Procedures. All these procedures are extensively taught

KEY: \*) The Hogarthian configuration is named after Bill 'Hogarth' Main where two sets of regulators are connected to both valves of a twin-set's manifold. It is based on cutting equipment to a minimum streamlined configuration that nevertheless includes sufficient redundancy for extended decompression dives



in the DIRrebreather Fundamentals workshops, discussed in details on our forum and applied during expeditions.

Local groups of rebreather divers (in Australia, in the UK, etc) have also successfully set up some standards for their exploration. We try to have standards that can be applied in any kind of diving environment. Now we have members in Asia, Australia, Scandinavian countries, Europe and the US. It will help us to fully understand all the diving practices and how to adapt our procedures.

What are the DIRrebreather workshops? Training is definitely one of the most important aspects of what we do. DIRrebreather is here to help all the

rebreather divers to improve their skills, techniques, knowledge and equipment. DIRrebreather Instructors propose highly specialized workshops to rebreather divers around the world. These workshops are focused mainly on areas specific to rebreather diving, and their goal is to

help any rebreather diver acquire the skills and knowledge required to safely dive according to DIRrebreather diving procedures and standards.

#### **Fundamentals workshop**

All the basics that rebreather courses don't teach: how to properly configure a streamlined and easy to use rebreather, how to work on your trim and buoyancy control, how to improve your environmental and team awareness, etc. This workshop normally lasts at least three days and is open to any certified rebreather diver.

#### **Expedition / Mixed-Gas workshop**

Fine-tuning the skills and team/individual procedures for safe decompression, and giving the tools to participate in expeditions in remote locations are the goal of this workshop. It's very intensive and only for experienced rebreather divers who have already successfully completed the DIRrebreather Fundamentals workshop and who have an in-depth knowledge of their rebreather. This workshop normally lasts three to four days.

#### DPV / Scooter workshop

Depending on the participant's previous experience and qualifica-

tions, this very specialized workshop teaches all the necessary skills to properly use a Diver Propulsion Vehicle (scooter) for Team cave, wreck or reef diving with a rebreather. This workshop usually lasts one or two days.

#### Rescue worshop

No one can expect to be an efficient team member without having the proper training in case of emergency. This unique workshop is directly aimed at the rebreather divers who wish to learn all the advanced techniques for self-assistance, assistance and rescue you can't find anywhere else. This workshop usually lasts two days.

### Overhead Environment workshop

Wrecks and Caves are very specific environments. Even if divers have been trained to safely do these types of dives on Open Circuit, it doesn't mean they are able to do that on a rebreather. This workshop is designed to give them all the specific techniques for safe team rebreather diving in wrecks or caves. This workshop usually lasts three and a half days depending on the environment where it's been taught.

To better train the participants, all these workshops have a companion workbook and some slide presentations. We are also working on videos and DVDs

### What is a DIRrebreathersponsored expedition?

A DIRrebreather-sponsored expedition is simply a project launched by some of our members in which other members can also participate. They know that we will all follow the same procedures to make the exploration, either in caves or wrecks, as safe as possible.

In 2008 for example, we have wreck expeditions in Cyprus, Lebanon, Spain, Malaysia and Norway. We also have some deep cave expeditions in Greece and Thailand.

#### Does it work?

- How to safely dive with a rebreather?
- · Could we be a DIR diver and a rebreather diver at the same time?
- How to improve CCR diving techniques?
- How to effectively mix rebreather divers and open circuit divers in the same team?

Rebreather divers ask these questions every day, all over the world, in virtually all kind of environments. Even if the rebreather principle is quite old, proper units were not commercially available until the last few years. The technology

Check out the DIRebreather books by Cedric Verdier

CEDRIC VERDIER (electronics, O<sub>a</sub> sensors, etc) was simply not available So it is not surprising that closed-circuit

**J**ebreather

have been safely achieved using the basic concept designed and tested by the DIRrebreather Team. Impressive shallow and deep cave diving surveys and deep wreck explorations were based on these guidelines.

So yes, it works!

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explorations

For any in-depth question, don't hesitate to contact DIRrebreather at DIRrebreather@yahoo.com and visit us at www.DIRrebreather.com





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