

# Highlights from the first day of Rebreather Forum 4

After many months of intense preparation, Rebreather Forum 4 in Malta is finally here. The event has gathered hundreds of stakeholders in the rebreather industry from a variety of backgrounds, including manufacturers of equipment and accessories, training agencies, scientific researchers, and users from the civilian, military and public safety sectors. DAN Europe's headquarters are in Malta, and we are proud to be among the main sponsors of this important event.



After five days of preliminary activities, including historical shipwreck diving and try-dives with equipment from manufacturers like Divesoft, Fathom, iQsub, rEvo, Mares Horizon and Garmin in Malta's National Pool Complex, April 20 marked the first day of the three-day official event featuring a long list of renowned speakers.



Main organizer **Michael Menduno** gave the commencement address, highlighting the progress that has been made since the first rebreather forum in 1994. Back then, explorers wanted rebreathers, but there weren't any available. With an estimated 25,000 and 35,000 rebreathers out in the world today — as revealed for the first time during the 2023 conference — and a number of manufacturers in the high 20s, a lot has changed since then.





The second speaker was hyperbaric medical researcher and explorer **Dr. Neal Pollock** whose presentation centered on the hazards of rebreather diving and their agents, impacts, solutions, and gaps within the dive industry with regard to knowledge, best practices, and equipment. Dr. Pollock's presentation integrated with those of the two subsequent speakers, DAN World head of research **Dr. Frauke Tillmanns** — who revealed exclusive research including the estimated number of rebreather units sold — and **Gareth Lock** of The Human Diver.



The afternoon program kicked off with a very interesting lecture by **Vince Ferris** (USA) and **Oskar Franberg** (Sweden) about the use of rebreathers in various types of military diving, ranging from combat diving to applications that are more akin to commercial diving. This was followed by a presentation on equipment options to improve diver safety, such as mouthpiece retainers, bailout valves and CO2 detectors, as well as the importance of checklists even by experienced divers, by **Pete Mesley**, owner of the Lust for Rust wreck diving company.



The final two presentations of the day were given by anesthesiologist and cave explorer **Dr. Andrew Pitkin** and **Mauritius Bell**, head of diving safety at the California Academy of Sciences. Andy presented his work on the use of [bailout rebreathers in long-range cave diving](#), offering interesting insights into what is going on among the very elite of cave diving.

Mauritius Bell explained practices for diving in mixed teams of open-circuit and rebreather divers – what do open-circuit divers need to know if they want to dive together with rebreather divers, and how can rebreather divers prepare their open-circuit buddies to make the dive as safe as possible – as well as teams of rebreather divers using different models of rebreather.





Every single one of the presentations was in front of a full auditorium in the Aula Magna of the historic University of Malta. Rebreather Forum 4 is off to a very strong start. We will keep you updated on matters going on over the next couple of days, and you may look forward to future *Alert Diver* articles about some of the matters discussed here

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## About the author

[Tim Blömeke](#) teaches technical and recreational diving in Taiwan and the Philippines. He is also a freelance writer and translator, as well as a member of the editorial team of *Alert Diver*. For questions, comments, and inquiries, you can contact him via his [blog page](#) or on [Instagram](#).

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  - [Insights and Breakthroughs: A Recap of Day Three at Rebreather Forum 4](#)
  - [We can be Heroes: inside the Rebreather Forum 4 imagery](#)