

"THE DEEPEST MAN ON EARTH" This prestigious title was given to Herbert Nitsch when he set the world record for freediving at an incredible depth of 214 m in 2007 in the No Limit discipline

# The Deepest Man on Earth

"Each time I think I've reached a limit ... there is a door ... it opens ... and the limit is gone," says Herbert Nitsch. The Austrian freediver, who holds 33 world records in all of the sport's various disciplines, including freediving to a record depth of 253 m, is an amazing and inspiring example of endurance, concentration, discipline, encouragement and a committed promoter of safety measures and their application. We invite you to take a deep breath and immerse yourself in what he loves doing best!

**PARTICULAR PERSONAGE** Unlike other elite freedivers Herbert Nitsch is self-taught and a pioneer in every way

## Have you always enjoyed being in the water?

Yes, I've always loved the water. As a kid I did a lot of sailing and windsurfing. In high school I was on the swim team. I also liked water skiing and scuba diving until I discovered freediving in 1998. At first I didn't even know it was a real sport!

## You are a professional pilot by training. What made you decide to quit your job and devote your time to exploring the depths of the ocean?

I stopped being an airline captain in 2010 to fully pursue the ultimate discipline called No Limit\* in freediving. I had been flying full-time during the preceding decade, and treated freediving as a hobby, competing on the side. My motives were to push my boundaries and explore the limits of my body and mind. It is amazing how freediving can motivate you, because you are able to see big improvements in a very short time.

## How would you describe the feeling of being underwater?

During a competition, I am completely focused on the task at hand. When I descend, I usually have my eyes closed, as it is pitch-black down there anyway. When I'm freediving for fun, it is magical and feels like a dream to interact with large marine creatures. Scuba divers are not as mobile due to their equipment and make a lot of noise, so they miss out on a lot. I can hear them from far away, and so can most marine life, which therefore shies away from them. When I explore caves, shipwrecks, etc. it can feel eerie or spooky at times. And, when freediving over a beautiful coral formation or swimming in the midst of a tuna vortex, I feel like a kid in a candy store.

## How do you prepare for a dive?

It depends whether I'm competing or diving for fun. In competitions there are distance and depth disciplines, each requiring a different kind of preparation. But for any freedive there is always the Golden Rule: Never dive alone. Another



good practice is to not eat for several hours before a dive, but to be well hydrated. Freediving is not an extreme sport in the sense that it sends adrenaline pumping through your veins. On the contrary, it is of utmost importance to be as relaxed as possible. So preparing for a dive includes simple relaxation techniques to reach a super relaxed state, as if just waking up on a lazy Sunday morning. Another aim is to conserve oxygen, so it is better to take your time underwater, and not rush as this will almost certainly reduce your dive time. And to achieve greater depths, there are ways to reduce the blood pressure prior to a descent, and to trigger the mammalian dive reflex before leaving the surface.

**AGAINST ALL ODDS**  
After a severe No Limit  
dive accident Herbert  
Nitsch is training and  
freediving again



marine mammals,  
and combined with  
the EQUEX allows me  
to reach deeper  
depths.

### How many people assist you during a dive, and what are their tasks?

In No Limit freediving, there is a team of approximately ten persons who provide assistance: technicians, an oceanographer, mechanics, safety freedivers, and a film team. In other disciplines, I have nobody assisting me (other than the competition's assigned safety divers). I have no coach or trainer, because I prefer to train on my own, on my own time, and in my own way. Sometimes colleagues will help out as a "buddy" or "temporary coach" on a competition day, something we all do for each other.

### What kind of diving technique do you use to take in more air?

All top freedivers use packing during competitions. It is also called "buccal pumping," and involves using the epiglottis\*\* as a piston to pump more air into the lungs. In my case I expand my 10 l lung capacity to 15 l. Two-thirds of this air (yes, 66 percent!) is used for equalization on the way down during depth disciplines. I invented and use an EQUEX (equalization extension tool), which I used on my 253 m No Limit dive. I breathe all air into this device (a coke bottle!) at 20 m depth before diving deeper, and then use it to equalize the pressure in my ears and sinuses. Deep diving on empty lungs mimics the technique used by



**STUNNING Herbert Nitsch can pump 15 l of air into his lungs and hold his breath for more than nine minutes**

### What measures do you take to ensure a safe dive?

In competition, the safety measures depend on the discipline\*\*\*. During static apnea and distance disciplines it is easy to monitor the freedivers, as they are on or near the surface. In depth disciplines, all kinds of safety measures are taken, such as a lanyard attached to the freediver and the descent rope, cameras at the bottom plate, sonar at the surface, safety freedivers, safety scuba divers, doctors on the platform, and so forth. In No Limit diving, the safety systems are incredibly complex and there are many of them because of the great depths reached. In addition, there are various safety and emergency plans for different scenarios, all well-rehearsed. When I first started with the No Limit discipline in 2005, I was astonished by the incredible lack of safety measures. So I made my own safety adjustments, e. g. I subsequently designed all of my own No Limit sleds and affiliated systems. The last one cost a whopping Euro 250,000, with most of the money invested in safety and security systems. Everything on my sleds has one or more back-up-plans that have to work both mechanically and manually.

### You hold 33 World Records and barely survived a freediving accident. What pushed/pushes you to go further?

It's the drive to explore the unknown, cross physiological boundaries and achieve goals that seem beyond the limits. That's how I set world records in all of the eight freediving disciplines\*\*\* (no one else has achieved this), and an additional one in the traditional Greek sponge-dive discipline called Skandalopetra. The human body is amazing, and I am intrigued by exploring how far (or deep!) I can go.

After my deepest dive in June 2012, I had severe decompression sickness. In my case this resulted in multiple brain strokes. The initial diagnosis was that I would be wheelchair-bound for life. I did not accept this and discharged myself from a long-term care facility, and stopped taking all medicine. Taking my health and fitness routines back into my own hands was the best decision of my life. By using the same approach I had always taken with freediving, and by believing that our bodies are indeed amazing, I quickly discarded the wheelchair. Now, two years later, I'm fit and freediving again.

### What are your goals for the future?

You can't really make a living from competitive freediving as it costs more than the prize money you can win. I was lucky to have had my job as an airline pilot to pay for it. Nowadays I give lectures around the world and write – among other things I am writing my autobiography – to support my favorite pastime. And, a few good sponsors help too, of course! One of my future goals is to build the ocean-going eco boat I'm designing, and live on it for six months a year. Another one is to build a submarine. I also hope to help protect oceanic wildlife and environments through my function as a member of the Ocean Advocacy Advisory Board of the Sea Shepherd Conservation Society.

\* In No Limit freediving, the freediver uses a non-propelled, non-electronic sled construction that slides into the depths with a ballast weight. A lifting device is used to get it back to the surface.

\*\* Tissue at the end of the tongue that flops over the windpipe when one swallows to keep food from getting into the lungs.

\*\*\* There are eight recognized disciplines in freediving: two for distance (dynamic apnea with fins and without); one for static (the freediver is head-down in the water for as long as he can hold his breath); three for depth without and two for depth with sled.



**HIGH STANDARD** Being  
keen about every  
technical detail he designs  
his own equipment