BEYOND THE POSSIBLE

HERBERT NITSCH IS THE BEST FREEDIVER THE WORLD HAS EVER SEEN. A MAN WHO COULD HOLD HIS BREATH FOR 10 MINUTES AND DIVE DOWN MORE THAN 200M INTO THE OCEAN. IN DEFIANCE OF MEDICAL SCIENCE, HE ATTEMPTED TO BREAK HIS OWN WORLD RECORD. WHAT HAPPENED WAS UNPRECEDENTED

Words: Ron Mueller and Arek Piątek

PHOTOGRAPHY: PHIL SIMHA

Santorini, June 6, 2012, 2.34pm:
Herbert Nitsch with auxiliary divers
during his world record attempt

Nitsch goes through safety checks before the world record attempt

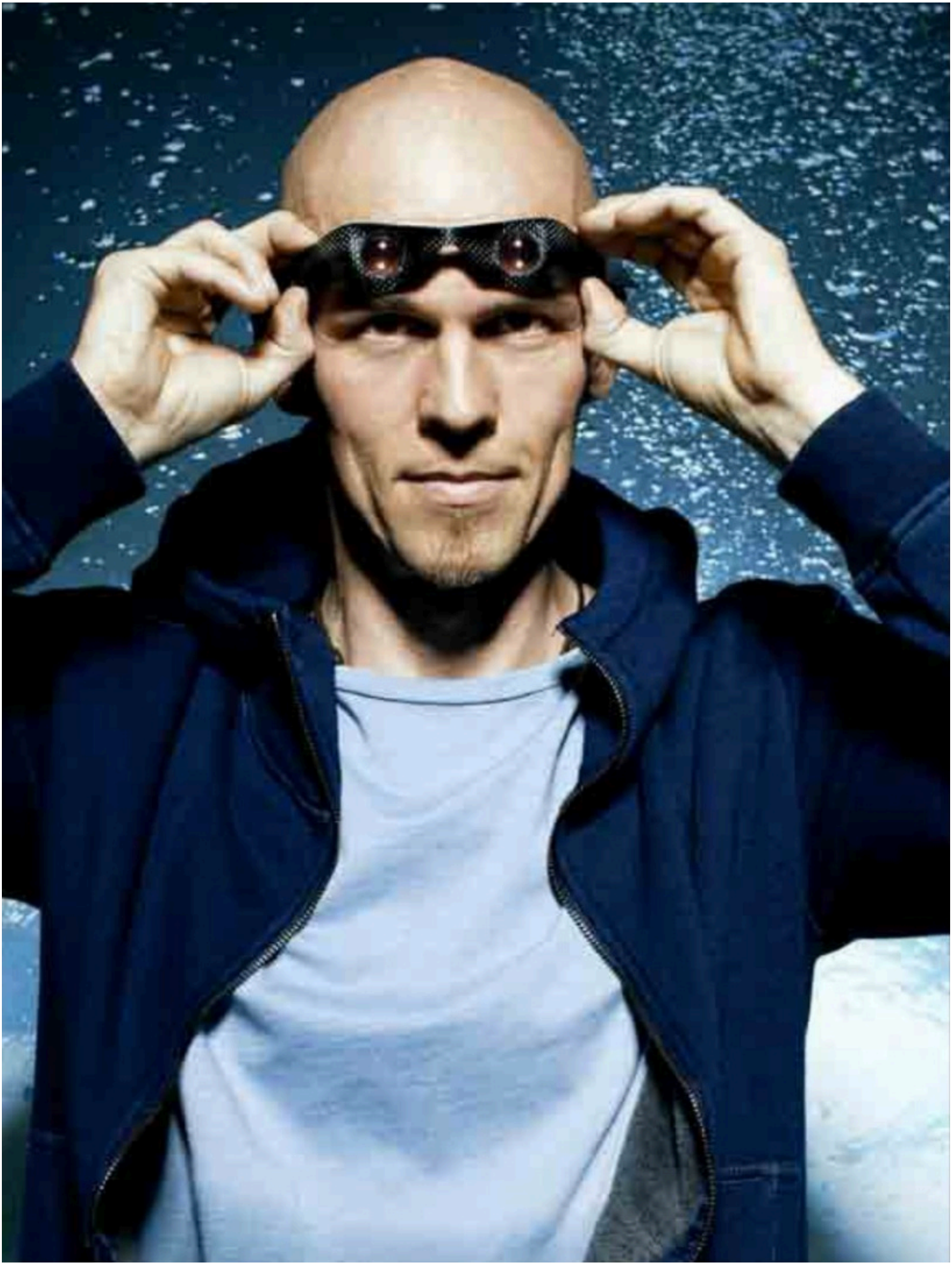
Herbert Nitsch, a 42-year-old former pilot from Austria, has broken 31 records in a broad range of freediving disciplines. He is the current record-holder in the toughest and most dangerous discipline of all, No Limits, in which the freediver goes as deep as possible into the ocean on one breath, with the help of a powered sled on both the descent and ascent. In 2006, Nitsch set the No Limits mark at 183m; a year later, he improved his record to 214m. On June 6 last year, he planned to improve his record to 244m, diving off the coast of the Greek island of Santorini. Doctors advised him that it would be impossible to dive so deep. Here, in his first full interview since the attempt, he recalls a day of triumph and tragedy.

"WHAT HAPPENS TO CHAMPAGNE WHEN YOU POP THE CORK IS WHAT HAPPENS TO THE BLOOD"

THE RED BULLETIN: What's the last thing you remember about the dive?

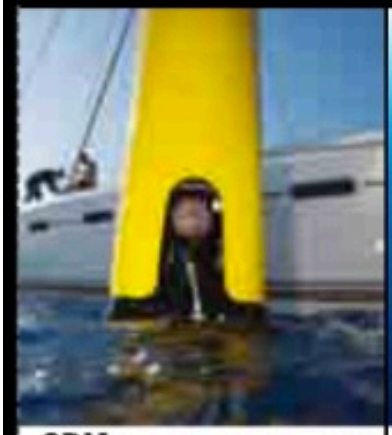
HERBERT NITSCH: I can't say. We've gone over the video material from Santorini dozens of times since then and my memories get mixed up with what I see there. But the important thing is that we can say with some certainty how the accident happened. And that nothing like it had ever happened before.

PHOTOGRAPHY: PHIL SIMBA, MAREA ZEGELBÖCK



TIMETABLE OF DISASTER

June 6 2012, Santorini, Greece: when it all went wrong



2PM

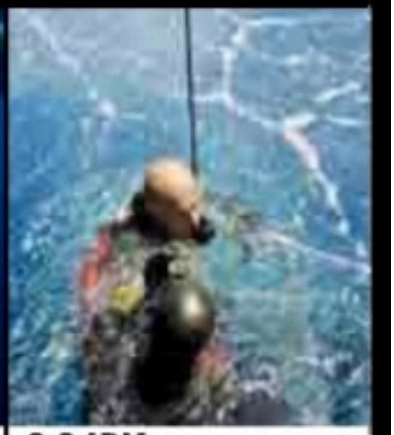
Final preparations: Nitsch hopes to reach a depth of 244m with a single breath, strapped to a diving sled and return to the surface unscathed. That would break the freediving depth record of 214m, which he set in 2007. The dive was scheduled to last 4m 30s.

2.30PM

Nitsch descends at a speed of 3mps. After about 1m 30s, at a depth of 244m, he opens two compressed air cylinders to propel him to the surface. At a depth of 80m, Nitsch should have left the sled, carried on ascending and then made a one-minute decompression stop at 10m.

2.33PM

The unmanned sled emerges. Rescue divers go down for Nitsch.



2.34PM

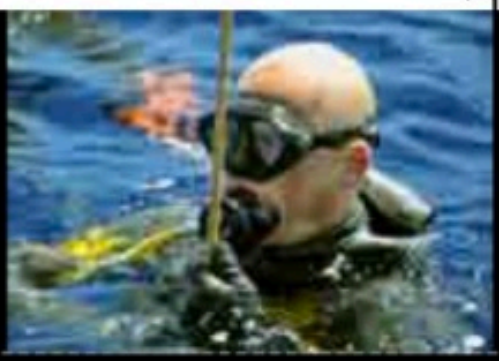
Nitsch is brought to the surface, having come round from his underwater blackout. This is 30 seconds earlier than planned. His nose is bleeding, he seems dizzy, and tries to rip the diving goggles off a bemused rescue diver's face.

2.35PM

Nitsch goes back under with an oxygen cylinder and the auxiliary divers.

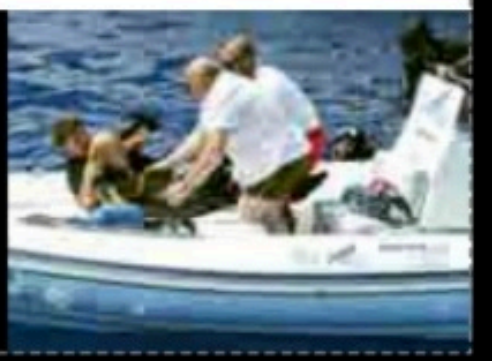
2:55PM

Nitsch resurfaces again. His face is contorted with pain. He is clearly not responsive.



2:56PM

Rescuers heave a writhing Nitsch onto a speedboat, which then heads ashore. He is then flown to a military hospital in Athens. The decompression chamber there is set to the value shown on the bathometer on Nitsch's wrist: 249.5m.



RETURN TO THE SURFACE

How fainting underwater led to the accident

	WHAT SHOULD HAVE HAPPENED	WHAT ACTUALLY HAPPENED
5	Depth: 0m Time: 4:30 Nitsch resurfaces, is responsive and gives the OK sign	0m 4:00 Auxiliary divers bring Nitsch to the surface
4	10m 3:00 Decompression stop for about 90 seconds	10m 2:44 Auxiliary divers begin the rescue operation
3	80m 2:22 Nitsch leaves the diving sled and heads for the surface alone	
2		100m 2:15 Nitsch faints suddenly
1		249.5m 1:25 Nitsch breaks depth record

PHOTOGRAPHY: PHIL SIMHA (4), PETER DE HUEBER (2), ZWEIPD

What exactly happened during the course of the four minutes you were underwater?
I got down to 244m as planned. I passed out at a depth of about 100m when I was coming back up. What I'd actually planned to do was get off the sled, come to the surface slowly by myself and then wait at a depth of 10m for a further minute. In that case, nothing would have happened. But I blacked out through nitrogen narcosis [increased nitrogen content of blood and tissue, due to variation of pressure], even if doctors think it was the bends [increased nitrogen coming out of solution in the blood, forming bubbles] that caused me to faint. In any case, the sled and an unconscious Herbert Nitsch ascended to 10m too quickly. The sled stopped automatically and because I had blacked out, the safety divers rescued me so I didn't drown, because I was strapped to the sled.

From the video, we can see that you came round once you were on the surface, and dived down again straight away. Why was that?
I grabbed some pure oxygen and went back down to 10m to counteract the bends. That you must go back down if something happens is so deeply embedded in you as a diver that you do it unconsciously. I can't remember anything about those few minutes.

From a medical point of view, you probably had a stroke, didn't you?
Multiple strokes. To cut a long story short, air is 20 per cent oxygen and 80 per cent nitrogen. During the dive, the oxygen in the blood gets used up and the nitrogen is compressed. If you resurface too quickly, the nitrogen re-expands, almost explosively, and what happens to champagne when you pop the cork is what happens to the blood, which is no good for you at all. The small bubbles of nitrogen that formed when I resurfaced set off a series of strokes.

Where did those small nitrogen bubbles cause the most damage?
Several parts of my brain were affected, luckily mostly in the lower, rear part of the head and not behind the forehead, as that's where the personality traits are located. So even if I'm a long way from being the person I once was, when it comes to my personality and character, I'm still the same person. I only come across differently on the outside.

Neurological disorders, difficulty finding words and memory loss are all typical stroke symptoms. Have any of these, or other problems, manifested themselves?

"IN GOOD MOMENTS, HUMOUR HELPS. IN BAD, IT'S ENOUGH TO DRIVE YOU MAD"

I am familiar with those problems and suffer from them. But I've become pretty good now at finding another way of saying things when I notice that a word isn't coming to me. If you ask me a two-part question, I'll probably answer the first part of it and forget the second. I only just remembered the password for my computer recently, by chance. And names: I'd forgotten almost everyone's names. I'd be in a fix if it wasn't for the fact that I'd typed the company people work for next to their names in my phone.

How about your movement?
I'm back to walking on my own two feet. I don't use a wheelchair, walking sticks or a Zimmer frame. That's all great progress, but it still looks awkward, as if I'm made of wood. And if I don't concentrate, my right leg wobbles as if it is dangling off my hip. If I try to run, it looks even funnier, like a cross between goose-stepping and the Lambada.

Your speech only very occasionally betrays a shakiness.
If I try to speak fast or there are more complicated words, it's too fast for my tongue, or rather, too fast for the nerve conduction between my brain and my tongue. It ends up sounding slurred, like I'm a bit drunk. Oddly, English comes to me much more easily than my native German. I have no idea why. Yes, and in general the right side of my body is still very restricted in what it can do.

Are you right-handed?
Yes, I am. It would be a complete mess if I tried to pour tea into a cup with my right hand, for example. I've had to learn to write with my left hand, even if just for the sake of having a signature again. If I use my right hand, my handwriting looks

scrawly, like a primary school kid trying to impersonate an adult, writing every letter differently. I always start brushing my teeth with my right hand to give it practise; I only switch to my left hand when my shoulder gets too tired.

So you are fully aware of all your physical impediments?

Fully aware – and not forgetting the loss of memory! I can see, hear and feel all that with complete clarity. I notice it when I can't recall the name of someone I've actually known for years. It can be embarrassing, too. I once asked a girl I used to go out with if we knew each other. In good moments, humour and self-deprecation help. In bad, it's enough to drive you mad.

How does someone who has only known success in life, deal with this?

Sometimes I'm sad that I am so aware of it all. Sometimes I'm grateful. Sad because sometimes it's very depressing, and grateful because only then can I commit to working to improve things.

It's been over nine months since the accident. Has your situation improved much in that time?

I'm getting better all the time, but still a long way from being well.

How is your rehab going?

I do a lot of things myself, such as balance exercises like standing on one leg or reading a book to myself out loud at home to improve my pronunciation. For a while I underwent rehab at the Meidling Hospital in Vienna, but they're not set up for cases like mine. How could they be? Basically, the clinical outpatient rehab was the same for me as it was for a 75-year-old stroke victim who weighed 100kg and had never done any sport in his life. You build little towers out of coloured wooden blocks, or you don't because you're not dexterous enough, and the blocks fall off the table. Things that are so easy to do, making it all the worse when you can't do them. It's humiliating. Sometimes, you think the patients whose brains are affected are better off. They don't understand the state they're in.

Have you experienced any feelings of despair, fear or anger?

No anger. Some fear. Mostly despair. As much despair as you can imagine. It was really bad at the beginning, after I'd stayed at a clinic in Greece followed by rehab in Germany. There were tubes coming out of my body in places where there weren't meant to be holes. You can hear the doctors and nurses whispering about you. You don't really want to hear it, but then you can't be deaf to it, either.

"EVEN IF I'M A LONG WAY FROM BEING THE PERSON I ONCE WAS, WHEN IT COMES TO MY PERSONALITY, I'M STILL THE SAME PERSON"

The snippets that you pick up sound so awful that you think nothing will come of it all. I was incredibly scared that I'd remain in need of total care. I thought if that's the case, it's better to just end the whole thing now.

Can you be specific about what you were thinking about?

I sat in my wheelchair on the balcony in the rehab centre, looked down and thought: it's a two-storey drop. That might hurt. It was earth down below, not tarmac, which meant the chances of survival were unfavourably high. I have a good friend who's a trauma surgeon. She once told me about people who'd tried but hadn't succeeded and what they ended up looking like. So I wanted to play it safe, and decided to postpone that until I was back in Vienna. I live on the 26th floor, there, after all.

How did you stop thinking like that?

A lot of things improved. And I promised my father.

So lust for life was actually a matter of discipline and how much self-pity you allowed yourself?

Yes, it was. My daily life is now a training camp. If I'm on the telephone, I pace up and down, to practise walking. I go shopping to face people. I've started going out again in the evening, too: whereas that used to be a pleasure, it's now part of my training programme. I had to prove to myself that I could do it.

Are there things doctors have told you you'll never be able to do again?

The doctors? Forget them. If their initial prognoses are anything to go by, it's a miracle I'm where I am today. I've decided, for the time being, that someone who doesn't know anything about the accident can't recognise the consequences.

Despite almost killing him, the ocean is in Nitsch's future plans: he wants to live on it

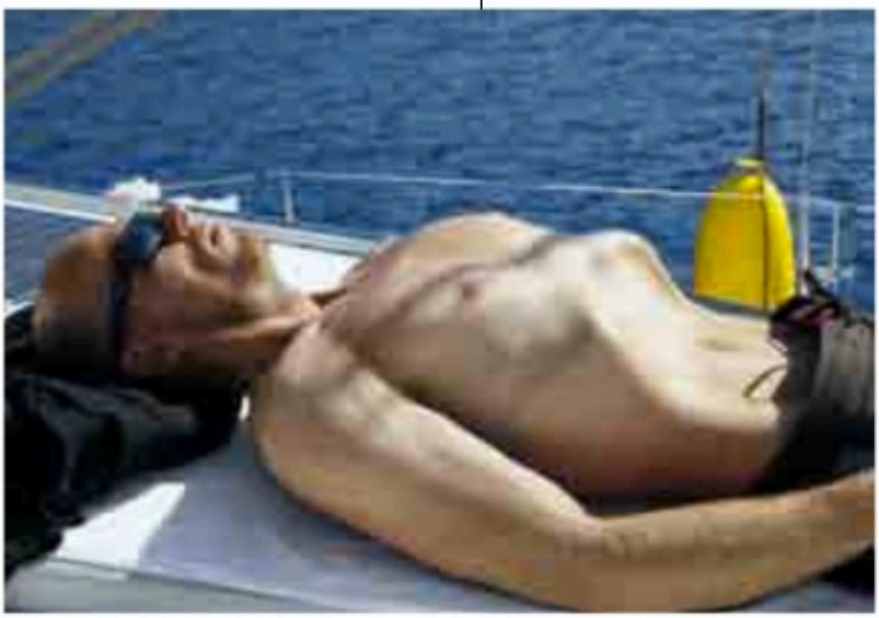
Will you ever dive again?
I already have – on one of the last nice autumn days at the end of September in Neufelder See, a lake near Vienna. Only to a depth of 3m, but it was nice. Nothing can happen to you in the water there: you can't fall over, you can't hurt yourself. But I really enjoyed swimming. It went a lot better than I thought it would, from a technical point of view. I didn't know if I might end up splashing about like a dog. My right arm and leg might have been unco-ordinated, but I still swam faster than some of the other swimmers.

You took freediving to places that were deemed impossible, experiencing things no one had before you. Was it worth it?
Do the highs justify the lows, you mean? My highs were the lows, after all.

But do your career and success justify the consequences of the accident?
No. If I'd known that this is how it would turn out, I wouldn't have done it. Ever.

"IF I'D KNOWN THAT THIS IS HOW IT WOULD TURN OUT, I WOULDN'T HAVE DONE IT. EVER"

Below: meditational breathing exercises are part of Nitsch's routine. At one time, he could hold his breath for 10 minutes at rest. Bottom: the diving sled



Did you simply go beyond a point humans aren't supposed to pass?
Yes and no. No, because I was always much more cautious and always more aware of the dangers than everyone else. I wasn't an adventurer. I was a long way from being a risk taker. I've given a lot to the sport, especially when it comes to safety. If nothing else it's what made me so good. You won't get any better at freediving if you behave more stupidly. You get better the cleverer you are.

So how did you end up overdoing it?
I went through with the world record attempt in Santorini even though there were bad signs. I shouldn't have done it. It was a chain of unfortunate circumstances there, Murphy's Law in its purest form. There was bad weather; the boat broke free because it wasn't anchored properly; a fishing boat caught our anchor and dragged our boat away; we didn't have a pressure chamber on site both for financial reasons and because partners backed out. There were a lot of organisational things in the run-up, unexpected problems with authorities, disagreements with sponsors. For example, at 2am on the night before the incident, I was up signing a contract. I think I can say if just one of those things hadn't happened, everything would have been OK. Regular bad luck wouldn't have been a problem.

Why did you have to organise all of the paperwork yourself?
The organisational side of things in Santorini was meant to be taken care of by the main sponsor, but after preliminary negotiations, the agreement fell apart and so I had to do it all myself. Some people helped out, like my father, who organised the whole rescue process.

With respect, isn't spending your time on admin instead of dive preparation entirely unprofessional?
I rarely slept more than four hours a night in the weeks running up to the attempt, as there was so much to organise. On the one hand, I'd planned a completely different set-up for Santorini, but then the sponsor left me in the lurch at the last minute because they suddenly had very different ideas to the ones we'd agreed to. On the other, things had developed in such a way over the years that I looked after my own affairs myself. For me, diving has never been about money. It has always been my hobby. The paperwork developed alongside it and it was never actually that complicated. Sponsors came

to me; it wasn't me going to them.

Is it true that the representative from AIDA, the world body for freediving, was with you in Santorini but left before the record attempt?

Oh, that didn't matter. I didn't even know that someone had come. AIDA was being sponsored by a competitor of my sponsors and effectively wanted to sell my record as their sponsor's achievement. We reached an agreement at first, but then they backpedalled at the last minute. It wasn't AIDA rejecting me. It was me uninviting AIDA.

But any world record wouldn't have been officially recognised?

I couldn't care less about that. Firstly, there are other organisations and, secondly, I had almost a dozen measuring computers down there with me. Recognition from some association or other makes no difference.

With the preparation on Santorini far from ideal, you could have just said, "Sorry guys, we've got to wait a few days." Why didn't you?

There were a couple of dozen journalists from all over the world there, as well as the sponsors and, of course, they wanted us to make it into the press before the silly season began. So there was pressure in that respect, and also financially, because I had invested €100,000 of my own money in the event. Delaying it would have meant a great loss of money and media interest. I often thought about putting it off.

What finally made you decide to go through with it?

My ultimate goal wasn't the 800ft I was going to descend to in Santorini. It was 1,000ft [244m is 800.5ft; 1,000ft is 304.8m], which I knew was possible, too – 800ft was just a staging post, a good practice run. We weren't even close to the limit. It's the same as asking Usain Bolt to run the 100m in under 10 seconds. You don't need perfect conditions for that. I thought my eardrums would burst, and that I'd have a couple of weeks of pain, tops. It didn't seem important whether I had a couple of hours' more or less sleep at night. That was probably my mistake.

What are your plans for the future?

First, I need to keep working on myself, physically and mentally. But what most people don't know is that even before Santorini, competitive freediving was perhaps only five per cent of what I did. I gave quite a lot of lectures. My experience as a professional pilot and freediver covers a lot: organisational optimisation, risk management, crisis management. So that should be one mainstay. And, because one sled-maker left me in the lurch, a friend and I built my sled together. We did things that were considered impossible and I learned how to work with carbon and fibreglass in the process. I'd like to use this skill and build a boat I can live on and travel overseas and give lectures. A 50ft boat – sporty, economical, environmentally sound – that can survive for months on solar panels alone. And there are plans for a new type of submarine. There have already been a dozen men who've stepped foot on the moon, but only three have been to the depths of the ocean. So that's a great challenge.

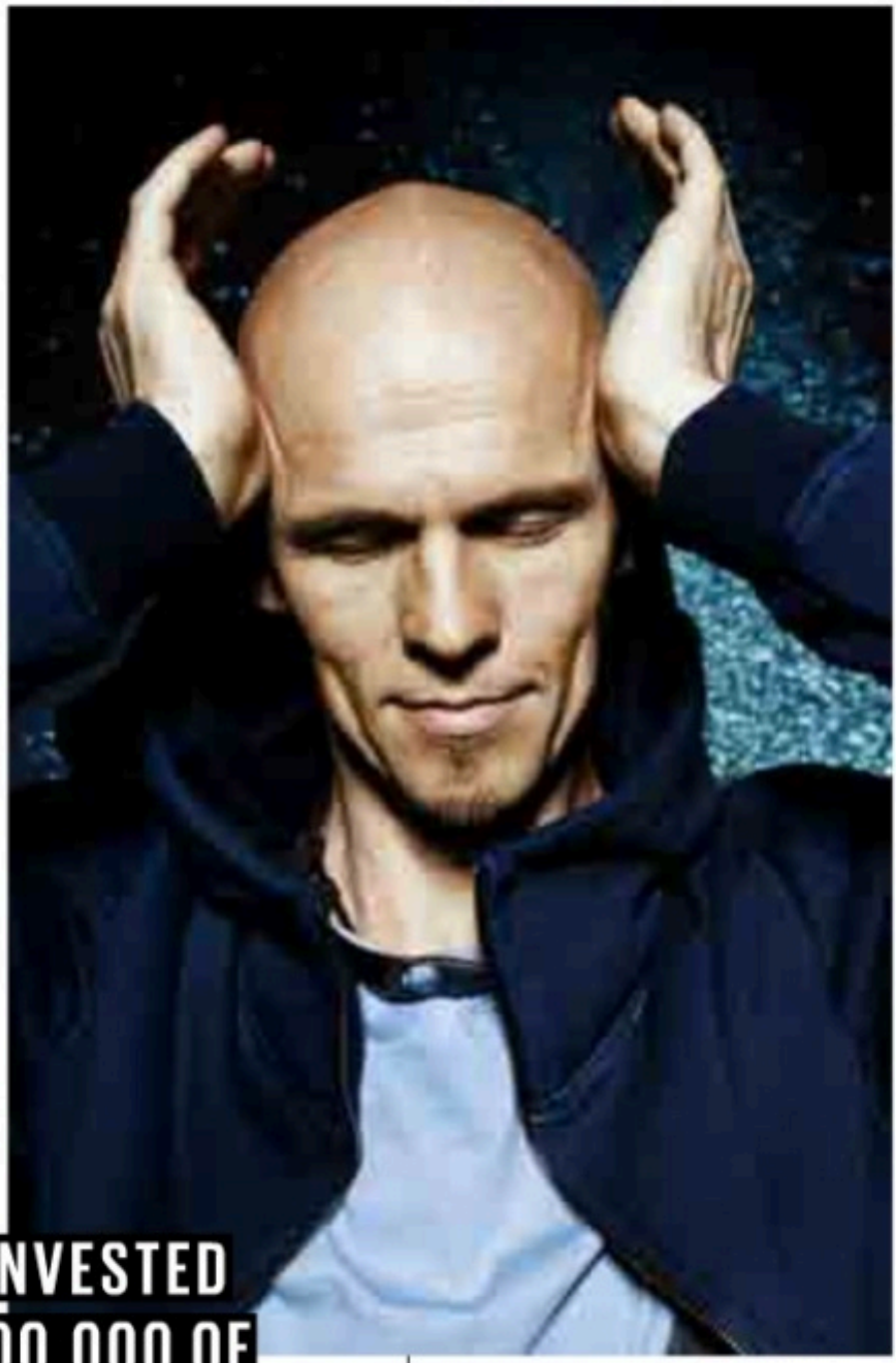
How deep did you actually go that day off the coast of Santorini?

The computers show that I went down to 250m, and some other measurements say 249.5m. But I don't want to boast about that. From my point of view, I failed.

What's the record now, in your view?

Intuitively, I'm more likely to say 214m. But to tell the truth, I don't care now.

www.herbertnitsch.com



"I INVESTED €100,000 OF MY OWN MONEY, AND THE MEDIA WAS WATCHING, SO THERE WAS PRESSURE ON ME TO DO IT"