



ROBERT STÉNUIT

THE FIRST SATURATION DIVER

FEATURE **PATRICK VAN HOESERLANDE** PHOTOGRAPHY ©**ROBERT STÉNUIT/GRASP**

"I started doing underwater archaeology at a time when this science had yet to be invented. As a diver, I had a long way to go to become an experienced and responsible archaeologist."

COVER PHOTO: Second expedition to Vigo, 1958. With the support of John Potter's American diving team, Robert Sténuit is the second from the left.



LEFT: Robert cave diving at Han-sur-Lesse in 1952-54. **RIGHT:** The SPID 1964, the inflatable house designed by Edwin Link in which Robert spent 49 hours at 130 metres in the waters of the Bahamas. He became the “deepest diver”; Northern Ireland in 1967-1969. The Girona wreck, a galley ship of the Spanish armada of 1588, sunk on the north coast of Ulster. Robert with one of the many gold chains found on the Girona site, and some jewellery from the wreck.

TOP LEFT: Robert in 1971 at the Lastdrager wreck, sunk in 1653 on the Isle of Yell, Shetland, with a surgical bit, musket balls, a navigational compass, and various artefacts. **TOP RIGHT:** 1972, at the Amsterdam Admiralty escort ship Curaçao wreck, sunk in 1729 on the east coast of the island of Unst, Shetland, with some of the cannons. **BOTTOM ROW:** 1973, at the Royal Navy cutter Sprightly wreck, sunk in 1777 on the west coast of Guernsey, Channel Islands, with a musket and a Clarkson pistol found at the site.

When we look for diving pioneers, we tend to look abroad for scientists, inventors or people who explored at frontiers of diving. In doing so, we forget to look closer to home. This is also my mistake, because my nation, Belgium, is also home to some world-famous diving enthusiasts. Do you know any of them? Right. If I had used the title, ‘An Interview with Robert Sténuît’ for this article, you would probably have wondered who this man was and where he came from. You might not have even started reading this article. Fortunately, you did.

Saturation diving is a special form of professional diving where decompression is not performed at the end of each dive, but only after a long time. During this extended period, when not at depth in the water, the diver is kept “pressurised” in a compression chamber to prevent the gas dissolved in the body from forming bubbles.

Within offshore diving, which involves working at great depths, saturation diving is a common method. After all, there is no need to wait after each deep dive to collect the diver and sail to the next location. At depth, the diver steps into a pressurised dry diving bell and can be hoisted immediately to the safety of the ship deck. On board, the diver transfers

to a more comfortable habitat and can sail to another location. Once there, work can begin immediately. Besides increasing safety, it is also more economical and allows longer work at greater depths. This technology has therefore revolutionised the diving industry. So, the first saturation diver certainly wrote history.

I had heard about Sténuît and his first saturation dive. After a few weeks of searching, I was lucky to find and order a second-hand copy of the book, ‘The Deepest Days’. In no time, I had devoured the book and the thought of interviewing this Belgian diver took shape. But this person was hard to find. Every trail I followed led to nothing.

At a conference, by chance, I got a hold of his details and soon after, a contact through his daughter was made. The interview, however, promised to be challenging. Robert will turn 90 in 2023 and with this advanced age comes a few ailments. For instance, not unexpectedly for an avid diver, his hearing is poor and his memory is no longer optimal. The interview will be in French with me having to write down the questions. Fortunately, his daughter, Marie-Eve, promised me to mediate the interview.

When I arrive at the venue after a drive through

our capital, I find myself in front of a simple apartment building. Not the stately home I had mentally assigned him. As his daughter prepares tea, she explains my presence to her father. Driven by curiosity, I walk through the living room which looks more like a collection of piles of books and documents. When I visit people, I always check out their library – an observation that, since the introduction of e-books, yields little useful info – to get an idea of local resident’s interests. This room screams loudly an interest in underwater archaeology. It is a place I could spend days in without realising it. However, I will have to focus on the unique opportunity and time I have tonight.

The interview below is a poor reflection of the laborious conversation between a humble explorer, an enthusiastic journalist, and a patient mediator.

THE INTERVIEW

Patrick Van Hoerlande: I know you from the book ‘The Deepest Days’, but after reading your biography, I know that this is a limited view of your achievements. I fear that most sport divers have absolutely no idea of who you are. Can you tell us why they should know you?

Robert Sténuît: I have written almost twenty

books and some 150 articles. I have also collaborated on numerous TV programmes for the BBC, ARTE and/or several foreign television channels. Some of these reports dealt with my excavations, others with the history of diving.

Between 1977 and 87, I rebuilt a replica of the English inventor John Lethbridge’s 1715 “diving machine”. With this replica, I demonstrated the efficient operation of the barrel and Lethbridge’s tools in real diving conditions. I also dived with an authentic specimen of a Rouquayrol-Denayrouze diving apparatus from 1864-65, the first modern SCUBA equipment. This test proved that the regulator did work.

I am not surprised that few people know me, after all, I do not feel at home in the spotlight and so have put little effort into publicity. If I have any notoriety at all, that is thanks to other people’s efforts.

Patrick: What is the source of your passion for diving? Why did you start diving?

Robert: In 1953, as an adventurous young man, I started exploring the caves in the Han-sur-Lesse area, Belgium, with some friends. Soon we

were stopped by sections that were flooded. The only solution to overcome this obstacle was to dive. In the permanently flooded part of this huge cave complex, I made the very first dive of my life. This was with an Aqualung. At the time, I was part of a team that, after a succession of shafts, discovered a whole net of huge underground chambers. These chambers had been beautifully decorated by nature.

Later, in the period from 1957 to 1966, I returned to these caves for excavations in a prehistoric/historic site as part of a team led by Marc Jasinski and Professor M. Mariën of the Belgian ‘Musées Royaux d’Art et d’Histoire’.

In 1955, I started working as a professional diver for the Autonomous Diving Association in Antwerp. Several other inshore companies followed later.

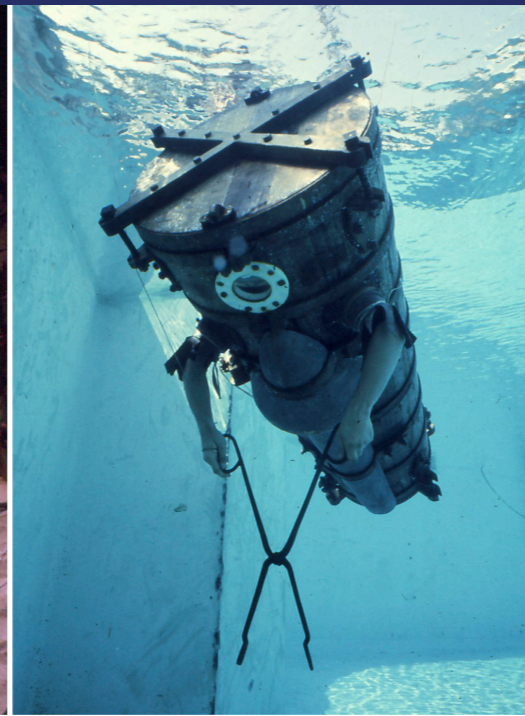
Patrick: How did you roll from cave diving into underwater archaeology?

Robert: Around this time, I realised that the subject that most appealed to me at university was history. Fortunately, I got many hours in this subject. The result was simple: diving plus history equals hunting for treasure and the history of old, sunken ships.

My hunt for wrecks got a boost by chance when I got my hands on the book, ‘I Dive for Treasure’ by the American author; the so-called “Lieutenant” Harry Reiseberg at a second-hand book stand. Even as a complete beginner, it was immediately clear to me that the book was pure fiction. But it was what I needed and I knew very well that over the centuries a large number of very richly-laden ships had sunk in the world’s seas.

The author Reiseberg had appended a list of four hundred and sixty-three fabulously rich, guaranteed sunken treasures to his book. Most of these wrecks, of course, had never existed. I knew that. But a few had. So, based on what I then considered “my research” as a novice and naive underwater archaeologist, I made the wrecks of galleons in Vigo Bay on this list my first expedition goal. The advantages of this place was its easy accessibility by road, and the cargoes of gold and silver on this Spanish flota.

In 1702, this flota returned to Spain escorted by French warships and was crushed in a naval battle with an Anglo-Dutch fleet. The entire cargo consisted of three years of the accumulated production of the Americas, of which only the gold and the silver belonged to his majesty.



TOP ROW: 1974, the Slot ter Hooge wreck of the Dutch East India Company lost in 1724 at Porto Santo Island, with some of the objects found on site. Much of the cargo was recovered in the years following the shipwreck by the famous "silver fisherman" John Lethbridge, using a diving barrel of his own invention. Robert Sténuit had this barrel reproduced exactly according to the plans of the time, and demonstrated its effectiveness after testing it at a depth of 10 metres seen above. **BOTTOM ROW:** 1976, at the Witte Leeuw wreck, sunk after an explosion at the anchorage of St. Helena in 1613. The expedition's compressor installed in Jamestown Bay; raising one of the bronze cannons; some of the Ming porcelain objects that survived the explosion.

TOP ROW: The expedition's support ship in 1984 at the Winterton wreck, an East India Company, sunk in 1792 on the west coast of Madagascar; Robert in 1995 seen with the collection of the Cham statues (8th-14th century) collected by Dr Morice from the "kalans" in the Bin Dinh region (now Vietnam), found in the wreck of the Mei-Kong lost on the Somali coast in 1887. **BOTTOM ROW:** 1999 at Vele Orjule, Croatia in collaboration with the Department of Underwater Archaeology and the Ministry of Culture of Zagreb at the site of the Apoxyomene, this statue was discovered under sponges and marine concretions by chance by Belgian diver René Wouters (life-size Greek bronze statue from the 4th century BC); After restoration; The Man-in-Sea project in 1962, recovering in the Edwin Link's cylinder for 26 hours at 60 metres depths.

So, in the summer of 1954, a small expedition – if you could call this an expedition – arrived in the bay off Galicia as two very inexperienced and young Belgian divers (my companion was Jacques Theodor) with three dive tanks that had to be filled daily at the local 'fabrica de oxígeno'. Our expedition ship was a folding kayak made of rubber fabric. To cut a long story short, we found four wrecks, but they were all buried in mud up to deck level.

I started doing underwater archaeology at a time when this science had yet to be invented. As a diver, I had a long way to go to become an experienced and responsible archaeologist.

Patrick: From novice underwater archaeologist to first-ever saturation diver. How did that happen?

Robert: Just as chance led me to dive for wrecks, it also led me to the beginning of saturation diving. During my two expeditions in Vigo, I was lucky to meet a friendly colleague on visit there: the American inventor, wreck hunter and oceanologist Edwin Link (note: Link was the inventor of, among other things, the Link trainer used in pilot training). I had the opportunity to work on some ancient wrecks in Sicily with Edwin, and he suggested that I

should join him in doing something completely different: an unprecedented experience. The idea was no longer to dive from the surface to the bottom and back again, but to dive, live and work in an underwater house on the bottom of the sea. This way, the body of the diver or aquanaut remains completely saturated with the inert gas.

As a result of this encounter, in 1962, as part of the Man in Sea project, I made the very first 26-hour saturation dive at 230 feet in Villefranche Bay, France, in and out of the 'Link Cylinder'. Two years later, off the Bahamas and with support from the US Navy, Jon Lindbergh and I spent 48 hours at 430 feet in a bottom-anchored 'Submersible, Portable, Inflatable Dwelling' or S.P.I.D.

Patrick: In your book 'The Deepest Days', you motivate your participation as a test diver by your vision of human exploitation of the oceans for the benefit of all humanity. In 2023, I do not think that much has been achieved towards that vision. Do you agree with that? Why not? What do you think about that? Could and should we still realise that vision?

Robert: I took part in this project as a test diver not only because it had never been

done before, but also because I was full of illusions that the techniques of saturation diving would open the doors to deep waters for underwater archaeology. I was wrong of course, firstly because the cost and technical difficulties of keeping people at the bottom of the sea are disproportionate to the budget for archaeology, and secondly because, as my first experiences in Vigo Bay had shown, excavating wrecks is not just a matter of being in the vicinity, but mainly a matter of moving and sifting through several thousand cubic metres of mud or sand.

That high cost of saturation diving also prevents sustainable, economic exploitation of the oceans. Unless we develop other techniques that allow people to spend time on the seabed in a affordable manner, exploitation of the deep for the benefit of all humanity is not for tomorrow.

When it was clear to me that saturation diving would not, as I had hoped, lead me to excavate very deep wrecks, I took a leave of absence from the Union Carbide company where I was then working. I began, with the financial support of the Marseille-based Comex company, the search for the galleon Girona off the north coast of Northern Ireland, one of

the 130 ships of the famous Spanish armada of 1588. From 1967 to 1969, we recovered more than twelve thousand artefacts, including thirteen hundred gold, silver and copper coins, a hundred or so of the mostly regal jewels, and bronze cannons, from the wreck of the Girona. Above all, this find was an important sample of everything the ship contained on the day it sank.

That first find of ours, which I still consider one of the most beautiful discoveries, caused a lot of controversies in the press and on television at the time. It was also the subject of one of my early books. It resulted in the filling of three specially converted rooms at the Ulster Museum in Belfast to house our discoveries.

It also gave rise to the birth of the "group for post-medieval, underwater archaeological research", in French 'Groupe de Recherche Archéologique Sous-marine Post-médiévale' (G.R.A.S.P). In English, the verb "to grasp" means two different things: to physically grasp an object and to intellectually understand the information it contains. So, it pretty well describes what we are trying to do, which is to recover tangible objects at the bottom of the sea to understand why they were on board at the time and to frame this historically.

The discovery of the Girona was followed by the discovery of dozens of wrecks.

Patrick: The water can be unforgiving. Were there any moments when you were scared?

Robert: There must certainly have been moments when I was scared, but I do not remember them. A sense of adventure sometimes puts you in precarious situations. However, my experiences with cave diving – we did very dangerous (irresponsible?) things – taught me to keep my composure in dangerous situations. Also, I feel comfortable in the water. Being scared is not a bad thing, if you do not panic.

Patrick: Do you sometimes go pleasure diving for fun?

Robert: For me, diving is a means of discovering things and doing archaeology. I do not go diving for fun, but once I have a goal, I can enjoy diving.

Separately, I am less interested in diving and history, but the combination of the two is a powerful mix. That combination is my passion.

Patrick: What message would you give to divers

or people just starting to dive?

Robert: Enjoy diving and follow your passion.

Patrick: Thank you very much for having this conversation.

AFTERTHOUGHTS

At the end of our talk, I ask him to sign my copy of his book, 'The Deepest Days'. Hesitantly, he accepts through modesty, not quite sure why I am asking this of him.

With a sense of melancholy, lots of written notes and questions in French clutched in my hands, and a load of extra information, I say goodbye to this Belgian diving pioneer.

The complex communication made this my most difficult interview to date, but every minute was worth it. Robert did not understand why I looked up to him, and I did not understand how he could remain so humble with having had such an adventurous life. I walk back to the car determined to write an article that pays tribute to this first saturation diver and important underwater archaeologist.

Hopefully, I can make good on my intentions.