

Interviewing  
**Wreckers**  
 — Four Pioneering Wreck Divers

Author's note: Though for the most part, the cave diving community was the first to pioneer mixed gas sport diving, beginning with Dale Sweet's successful 1980 Heliox dive to 110m (360ft) at Diepolder II in Hernando County, Florida, USA, leading shipwreck divers were not far behind. By 1995, numerous groups of wreck divers in the United States, United Kingdom and Europe were using Trimix to improve the safety and performance of their dives. That year I interviewed some of the vanguard to get their perspectives on mix and how it was impacting exploration. Here are the original interviews as they appeared in aquaCORPS Journal #9: Wreckers, August 1995.

— Michael Menduno

Text by Michael Menduno  
 Photos courtesy of aquaCORPS,  
 Leigh Bishop, John Chatterton,  
 Joe Pass and Joel Silverstein

**August 1995—Today, shipwrecks are at the heart of a technological revolution that is redefining the limits of what is possible. Within the last year, a leading team of tekkies mounted the first mix expedition on the *Lusitania* to 90m (300ft), long thought out of the practical reach of scuba aficionados, and racked up over 120 dives. Other tech divers opted for the safety of a hose and commercial cutting tools to liberate the artifacts of their dreams.**

And to further stir the soup, grand daddy wrecker, Oceaneering International, the global commercial diving contractor whose crews dived the *Lusitania* over a decade ago, recently completed salvaging treasure—five tons of silver and gold coins from the Spanish Brig of War, *El Cazador*, sunk in 1784 in the Gulf of Mexico—using their WASP Atmospheric Diving Systems (ADS) fleet to limit their ambient exposure. This after the technical diving team led by Captain Billy Deans were found in violation of the Occupational Safety and Health Administration (OSHA) standards prohibiting deep self-contained diving the prior year and was thrown off the job. "It's a mental barrier, not a technological one," explained commercial diving supervisor and wrecker John Chatterton.

Although underwater limits are being redefined, the painfully learned maxim of diving still applies, maybe more than ever:

**SAFETY COMES FIRST.** Though the rewards of shipwreck diving are great, a diver can easily end up paying the ultimate price if all the parameters of the dive (and diver) are not taken fully into account. And when this happens, the entire community suffers. Training and experience are critical. Particularly today, when competition for new wrecks has driven the cutting edge ever deeper and more remote, increasing the operational and safety requirements for the dives, as well as the costs.

What is it about shipwrecks that inspire us to invest time and ingenuity and put our human frailties on the line? Is it simply the knowledge that these failed human outposts may yield up potent treasures, or is it some complex piece of genetic code that compels us to seek out our remaining remnants in the vastness of the sea?

Better go and ask a wrecker, if she'll tell you. Or better yet, go ask two of three.

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JOEL SILVERSTEIN

## Captain Billy Deans

Owner of Key West Diver Technical Training Center and Deep Sea Technologies, 38-year-old Captain Billy Deans is recognized as one of the pioneers of technical diving.

*MM: Billy you've been involved in technical diving since the beginning. What would you say are the differences with recreational diving?*

BD: We still do a lot of recreational diving. It's fun and it's easy. You put your equipment in a bag, sniff your air, throw your equipment on, jump in, and swim around in 25m (80ft) of water. Technical diving is totally different. It's a philosophy, a mindset. Everything you do is based on making that dive absolutely perfect because if you don't account for all of the param-

eters of the dive you could get killed. It's a constant vigilance that wears on a human being. To do it well you have to live, eat and breathe technical diving.

That's the negative side—it's so demanding. It has put bags under my eyes, gray hair on my head and led to fights with my girlfriend. But I won't compromise on safety because once you do, you become complacent and you get killed. That's the thing that bothers me; it's like a black cloud on the horizon. The technical diving market expanding and I have an uneasy feeling that we're going to have an increase in fatalities. That's what we're trying to avoid.

*MM: Because of the new people coming in?*

BD: New people coming in who do not have the proper training. That's one of the reasons we're so adamant

about having tiered levels of training and broad base of experience. Experience is critical.

In the early days, there was a small cadre of technical divers. These people were highly trained, and committed to diver safety. I

remember when Parker [Turner] got killed. It sent a shiver up my back, because they were doing everything right, right down to the last minute, and he still died.

People need to understand this. They can still have fun but they need to approach technical diving with the idea that it is very dangerous. You learn to be very, very cautious in this type of diving. The positive rewards are great but on the negative side you can end up paying the ultimate price. And when divers die, we all pay.

*MM: What are the limits of open circuit gas diving?*

BD: Sport diving has become much more reliable and safer. The technology and equipment that we have today has essentially doubled our working depth from 40m (130ft) to about 80m (250ft). That's our playground and I consider it to be a reliable working range. Outside of those limits, it's a little more dangerous. It can be done, but it's not for the people that are just getting into technical diving.

*MM: I understand that your focus has shifted over the last two years from technical training to the commercial aspects of diving.*

BD: It's an aspect of the diving that has been a natural evolution for us. Karl Shreeves (PADI's Technical Diving Liaison) once said that he was so excited to be in on the next evolution in sport diving. And I guess that I'm excited to be involved in one offshoot of technical diving and that is, work for pay. There are definite, viable opportunities there. The commercial market sees it. And with closed circuit equip-



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ment coming on stream, I believe there are going to be a lot of opportunities opening up.

*MM: For self-contained diving in a commercial setting?*

BD: That's correct.

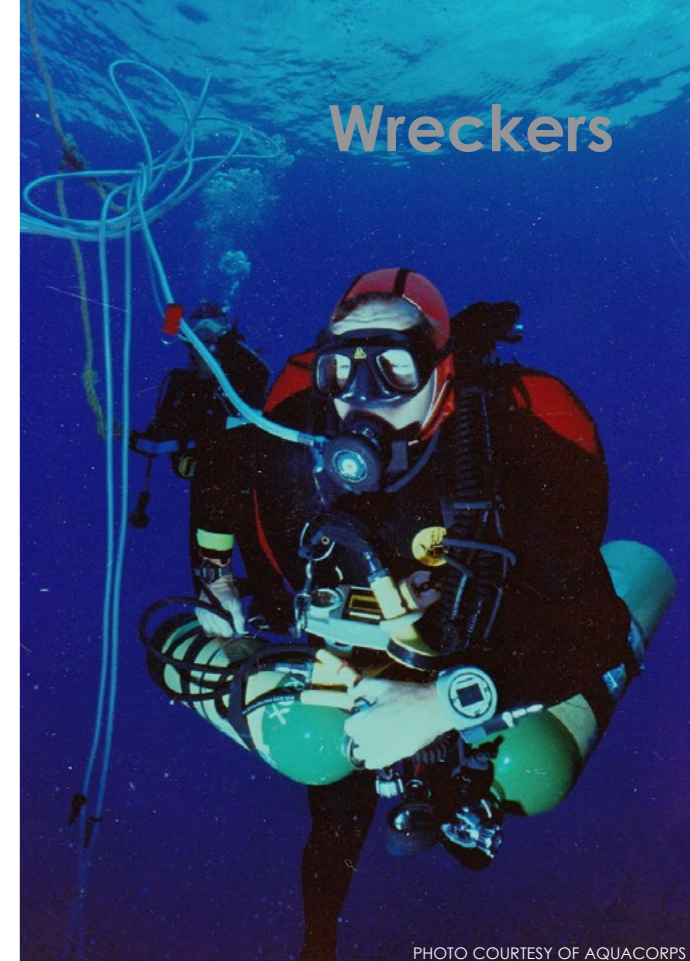
*MM: Commercial diving today is based around surface supplied technology. What kind of tasks can better be accomplished with self-contained equipment?*

BD: Reconnaissance. You can put a team of self-contained divers on site with a minimal amount of equipment. They can survey an area, a wreck site, you name it, come back and look at the data. And it's actually very, very cost effective to do that. We're talking a 1 to 5 ratio. Then if there's work to do, you can bring in a surface-supplied gear.

*MM: How about just sending down a ROV?*

BD: Our experience is that the two go hand in hand. On the Cazador project we called it "hunter-gatherer" mode. An ROV was sent down to sniff out a possible target site, in this case, to find coins. Then the diver would navigate out the ROV cable and survey and work the area.

Of course, putting a diver in the water is very, very inefficient; I don't care if it's on a hose, closed circuit, or open-circuit. The advantage is that diver on site can make rational decisions. It's easier to mobilize an open-circuit team then it is to bring in an ROV. But I think that the best combination is to use them both.



## Wreckers

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*MM: The Cazador was such an interesting project. Your team found the booty and then Oceaneering came in with their fleet of WASPs and...*

BD: ...and picked up five tons of silver. Yeah, it was great @#?#!

*MM: It would take a team of open-circuit divers a long time to pick up five tons of silver.*

BD: I agree with you, particularly at the 90m (295ft) depths we were working. My only regret was that I wish we could have had another five manned dives. It would have been nice to see what our capability was, but if you look at it, putting a guy down for four to six hours in a WASP is really the way to go. But you also have to look at the cost. We fulfilled our contractual obligation. We went down. We found the coins and we were able to bring a few up. That is the limitation of open-circuit diving.

*MM: Do you think that commercial regulations are going to evolve to the point of allowing self-contained equipment for*

Captain Billy Deans in action (left and below)

Polly Tapson all kitted up



JOEL SILVERSTEIN

certain types of activities?

BD: I truly hope so. The guys in the commercial industry are smart. They see what's going on and a number of them are turned on by it. They'll take advantage of the technology and eventually there will be changes in the Code of Federal Regulations (CFR). That would be the smart thing to do.

MM: What do you see today as the frontiers of wreck diving?

BD: Discovering new wrecks. When we first started planning to diver the *Doria* ten years ago the *Lusitania* seemed unreachable—nobody thought it was possible. Now you can charter a boat to it. Even diving the *Doria* has changed. In the early days the big thing was going down on the outside of the wreck and getting windows. Now everyone is making penetration dives and looking for artifacts.

MM: And the dives are getting longer.

BD: Fifteen minutes used to be a long dive. Now people are doing 25, 30, and 35 minute dives at 61-77m (220-250ft). That's what I see happening in wreck diving.

MM: What are your personal goals for the next 18 months?

BD: What I'm trying to do, is stay focused. We're one of the very few dive centers that are trying to make a living at technical diving. It's very difficult to make a living in the dive industry. You can drop your safety standards and make a lot of money and kill somebody. But we won't do that. We're trying to make a comparable living at our type of diving through qualified teaching, keeping our standards up, and doing these projects. But we also want to have fun at it.

We get a lot of neat offers to dive wrecks and we could spend the whole year traveling and doing all these dives. There just isn't enough time. That's why I'm targeting the wrecks here locally. There is a tremendous amount of history from in the Florida Keys. We have a number of targets off the Tortugas including a

German U-boat.

We're also looking at wrecks from the perspective of coming in as a professional team and helping people get set up, for a fee. It has consistently been shown that it's better to pay a profession to come in and set it up right as opposed to making all the mistakes and possibly hurt someone. In the long run, it's more cost effective to pay professionals. So that's what we're targeting, wrecks that could possibly turn some revenue for us.

We have three real interesting projects coming up in 1995 that will probably take us away for a month or two. We're talking 17th century shipwrecks that are well into the technical diving range outside the U.S.

## Polly Tapson

Thirty-one-year old filmmaker and British wrecker, Polly Tapson, led the first technical diving expedition to the *Lusitania* in June 1994.

MM: How long did it take to plan and train for the expedition?

PT: I began to ask people if they would

commit to the training and the cost of the expedition about 18 months to two years before we dived. That was more than enough lead-time to actually set up the expedition. One factor was that the U.K. members of the team were not trained in the use of Trimix and had very little knowledge of gas mixing and the implication of this kind of technical diving at that time. Four months out, I knew exactly what we were going to do and what contingencies were available. We were meeting on a regular basis to discuss how to improve what had been planned.

MM: How many dives did you do in preparation for the dive?

PT: We scheduled 49 dives in preparation for the *Lusitania*. We were going out every other weekend last winter. We conducted a lot of the deep training in a close controlled environmental quarry in North Wales. The U.K. team trained in excess of 90m (293ft) because we didn't want the *Lusitania* to be the team's deepest dive when we arrived in Ireland. We needed to test everything.

MM: How important was diver safety in your planning?

PT: A great deal of thought went into our 'what ifs' and 'what thens.' I would stay up until 3:00 in the morning contemplating what could happen and how we would deal with it. We agreed as a team to ban any form of competitiveness and encourage discussion. As a result our post dive briefings became incredibly honest.

MM: Did the expedition come out as you had planned?

PT: Yes, in every way. It was a perfect



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execution of our plan, right down to the number of vegetarian meals in the packed lunches. We could have spent more money to hire assistants to help with the gas mixing or to help with unloading the boat, but we decided not to. It was hard work. We got up early. We worked through the morning setting everything up. Everyone had a designated task. We worked very well as a team. Of course, I didn't really have a great sense of relief until after the last day's diving when I knew that it had been an incident-free trip.

MM: Technical diving appears to be predominantly a male bastion. Did you find that being a woman was ever an issue?

PT: I don't have anything to say on that subject. The answer is no. It was never an issue. I have encountered sexist attitudes from some men along the way but



JOEL SILVERSTEIN





LEIGH BISHOP

nothing I couldn't handle. Most of the Lusitania team was intelligent enough to be above it.

**MM:** It seems that technical diving has a lot fewer women than recreational diving as a whole (about 37% female according to PADI statistics). Our surveys suggest it's 5% or less. Can you offer any insights as to why that is?

**PT:** It has more to do with perception more than reality. Men probably find the sport easier than women because of the equipment and intensive nature of technical diving. However, having said that, I've seen men who are not particularly strong who are able to wheel some heavy equipment. I believe that women can overcome what might be perceived to be a physical lack of strength if it's something that they really want to do.

**MM:** I understand that you got "bent" on a practice run a week prior to the expedition. That must have been a very difficult personal decision for you to decide

to carry on anyway. Are you comfortable talking about it?

**PT:** I don't like talking about it or discussing it in much detail for a very obvious reason. People are going to read this and there is no guarantee of how they're going to interpret what I have to say. What I don't want to do is to be an example of someone who acted irresponsibly and got away with it. And then have someone else do the same thing and subsequently ends up in a wheelchair for life. It is very difficult for me to talk about it for that reason.

**MM:** It was obviously a very personal decision on your part. You had worked on the project for two years.

**PT:** Yes, of course it was a personal decision. I believed that my recovery was totally satisfactory in so much that I was not going to cancel that trip. That's not to say that I intended to dive. I reserved that decision for the trip. However, I definitely was not going to let it stop the

wheels that were in motion, the imminent arrival of the American divers and everything that had been planned.

**MM:** Cave divers have a saying, "Take only pictures, leave only bubbles." I know that doesn't really apply to a lot of shipwreck diving, but your team decided not to take artifacts off the Lusitania. What was your motivation?

**PT:** It's very simple really. There is a man who claims he owns the Lusitania and told us that we weren't allowed to visit the shipwreck. His claim has yet to be proven. But the maritime and merchant marine laws were such that I felt that no laws were being broken in visiting the shipwreck, which is why we were able to proceed unhindered. In addition, we were visited by the Irish Customs and Excise people and informed that if we recovered anything the Lusitania, we would have to hand it over to Customs. As a result, we felt that there was a certain risk in recovering anything from the ship and so we decided not to take that risk.

**MM:** What would you say are the frontiers today in shipwreck diving?

**PT:** I don't think there are really any frontiers.

**MM:** What do you mean by that?

**PT:** The limits are more a matter of economics than anything else. Unless there is a promise of great gain, progress will be relatively slow. I see the most potential for progress being made in commercial and scientific diving. Recreational divers will hang onto their coat tails as far as they can go. It's an expensive sport.

**MM:** How much did it cost to mount the expedition, the training, planning the whole thing?

**PT:** By the time I had finished pulling in

"deals", the financial costs were viable for everyone who I wanted to be involved, but the indirect costs of our time and relationships were higher than anticipated. Everyone agrees that their contribution in man-hours was excessive and cannot be adequately quantified. This was largely due to the learning curve we had to climb as a team and taking the "what if/what then" approach to planning. One of our team reckoned it personally cost him in the range of GB£10,000 (about US\$15,000 in 1994) hard cash to prepare and participate in the expedition.

**MM:** What are your personal exploration goals over the next 18 months?

**PT:** My goals are to identify several virgin wrecks beyond the 70m (228ft) off the

southwest coast of England. We have the coordinates and we'll be diving on mix. Another member of the team is handling the organizational side of the expedition because of the time involved. I have professional commitments and other affairs, which are my priority for the time being.

### John Chatterton

Hardhat wrecker, John Chatterton, 42, is an avid deep wreck explorer and works as a commercial diving supervisor. He and Richie Kohler identified the "U-Who" as the U-869, later heralded in the New York Times best seller, *Shadow Divers*.

**MM:** You're a commercial dive supervisor as well as a wreck diver. Why do you dive scuba?

**JC:** I started wreck diving the same time I got involved in commercial diving. To me, scuba is just another technology. Philosophically, surface supplied diving is a group project. The diver is just a cog in a big machine. Scuba is freedom. Independence. It's the difference between the guy driving down the road in his Lincoln Continental with a house, mortgage payments, and responsibilities which can be really good compared to the guy hitchhiking down the road who's totally free. That can be a good thing too. Remember, in commercial diving, nobody pays you to dive. They pay you to do something that happens to be under water and the way to get there is to dive.

**MM:** There seems to be considerable fear and trepidation about scuba in commercial circles.



PHOTO COURTESY OF JOHN CHATTERTON

John Chatterton



PHOTO COURTESY OF JOHN CHATTERTON

John Chatterton diving the *Britannic* (left); near the wreck site of the *Lusitania* (right) 18km (11mi) south of Kinsale lighthouse in Ireland; and kitted up for a dive (below)



PHOTO COURTESY OF JOHN CHATTERTON

limits are. There are still a lot of things to be done with open circuit and it seems like there's always a new formula, a new recipe being cooked up in somebody's kitchen.

*MM: Do you feel a lot safer when you're diving a surface supplied system?*

JC: No. It's different. I don't feel a greater degree of safety. There are assets and liabilities to using either technology on a particular site. If I'm diving scuba, I'm diving solo. I'm not in direct contact with the surface. That's a disadvantage, and I have to take into consideration important aspects of my dive, like navigation, gas management, things like that. When I'm on surface-supplies, those issues are

much less important, but I've got to deal with other aspects, my umbilical, for instance. The umbilical could actually end up tethering me to the wreck. Generally, I prefer to rely on myself over a machine top-side. Maybe that's why I like scuba as much as I do.

interested in the wrecks in my area that have been beyond sport diving until now.

JC: Most of the people in commercial circles view scuba as a toy that's good to about 9m (30ft). I find scuba a very interesting technology and technical diving has added another dimension.

*MM: How has technical diving changed shipwreck diving over the last five years?*

JC: Two major things have happened. Number one, the surface area of the ocean floor that we're able to claim has been dramatically increased. You could draw a line and say, here's our 40m (130ft) limit, but today, more and more guys are going out and diving 60m (200ft) and 60m (200ft) plus. 'We're down to where?' Technical diving has come along and nobody's sure where the line is. And with things like rebreathers on the horizon, if you draw a line, you better draw it in pencil. It's probably not going to stay there long.

The second thing is productivity. The technically-oriented diver is a more productive diver. He's much more goal oriented and in a better position to accomplish the goals he sets. Setting up goals for each particular dive is the way to make progress. That's the way to be productive. We used to do a lot of 60m (200ft), 60m (200ft) plus dives, scare the

shit out of ourselves, and be glad to get up alive. That wouldn't wash anymore.

*MM: When you say tech diving in that context, are you really referring to mix?*

JC: It's a little more subtle. Not everyone is using mix or taking full advantage of the technology. But even air divers using an accelerated decompression on oxygen or nitrox are seeing an advantage in terms of increased bottom time. Increased bottom time is going to give the diver increased productivity.

*MM: What are the practical working limits of open circuit wreck diving?*

JC: For a while, I was really into asking people, 'Where is this going to stop?' I went to Billy Deans, I went to this guy and that guy, and just about everybody said, "The limits are right about where my feet are." We're limited by the technology to some degree, but I also think we are limited by our vision...

*MM: Of what's possible?*

JC: Yeah. And looking at the limits of technology, I don't think we have enough insight to say where the absolute

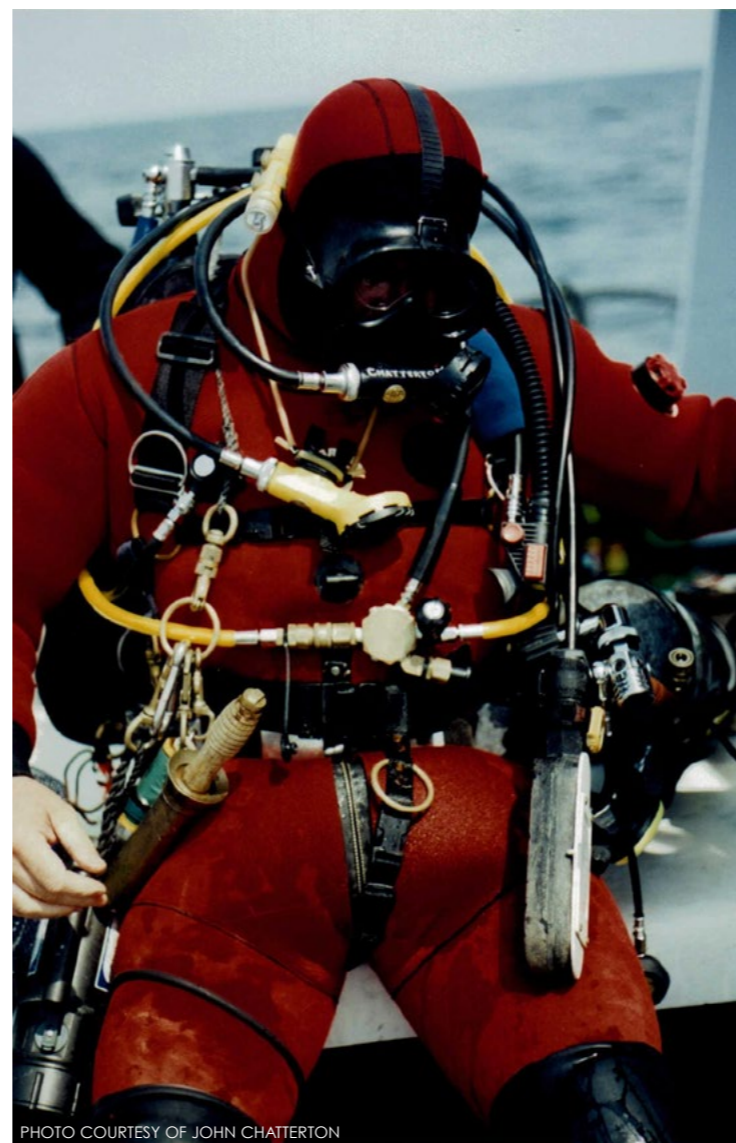


PHOTO COURTESY OF JOHN CHATTERTON

*MM: What would you say are today's frontiers in self-contained ship wreck diving?*

JC: Shipwreck diving is becoming a more global activity. The oceans are getting smaller. When I first thought about the *Lusitania*, my reaction was "Wow. The *Lusitania*. It's a shame that it's too deep." Well, depth is subjective. The *Lusitania* was a lot deeper on my first dive than it was on my last dive. People are beginning to look at wreck that they haven't considered diving before and saying, "Hey, wait a minute. We can go there. We can do that. We can make it happen." It's a mental barrier; it's not a technology barrier.

*MM: What are your personal exploration goals over the next year?*

JC: I want to focus on locating some specific wrecks. One is the U-550. Another is a liner called the *Carolina* that's off the New Jersey coast. I'm very

*MM: Are both in deep water?*

JC: The U-550 is probably going to be about 100m (325ft) and it's 125 miles (201km) offshore. I'm not certain about the *Carolina*. The problem is that it has been reported in several areas, but I believe it's going to be as deep as 80m (260ft), something like that.

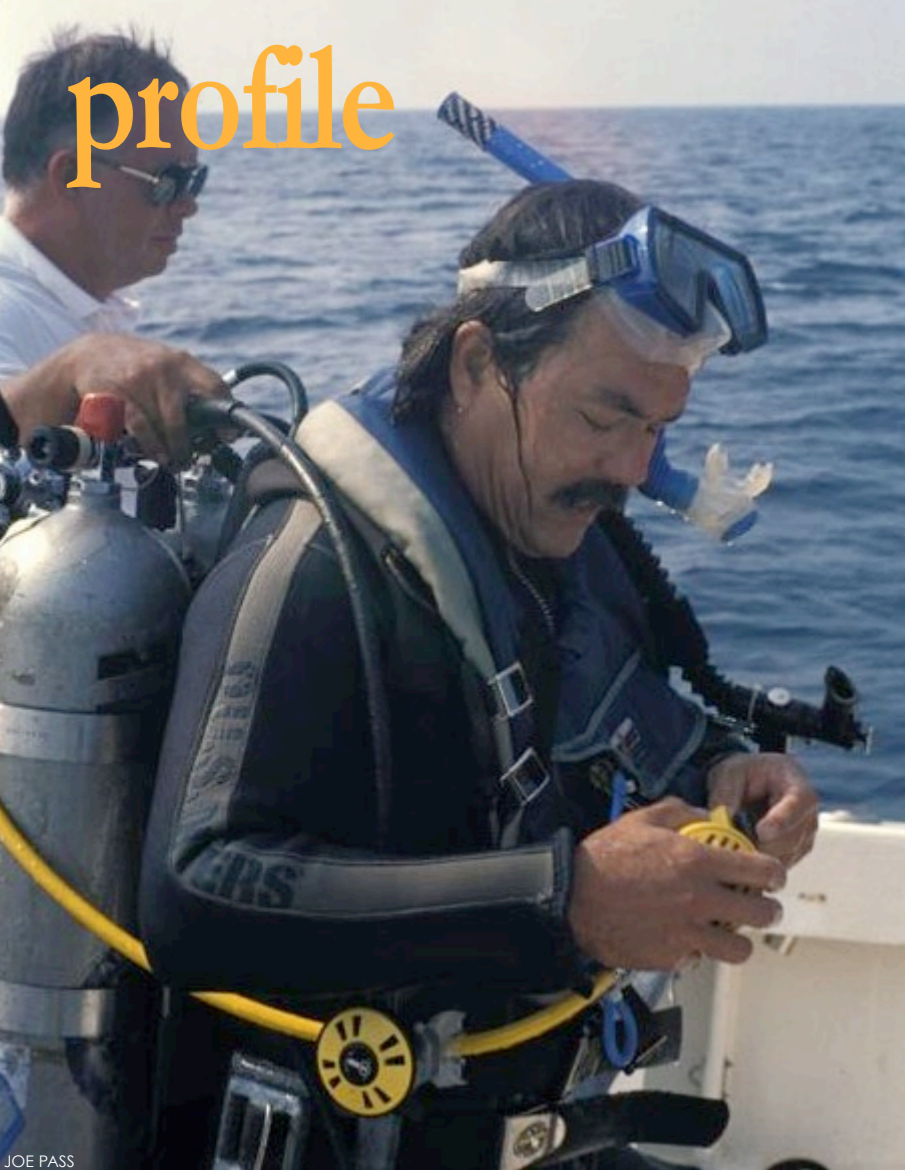
*MM: I understand you recently made a positive I.D. on the U-Who? That sounds exciting.*

JC: I believe we have positively identified the wreck as the U-869, but I'm more interested in finding out exactly how it got off the coast of New Jersey. The sub was not supposed to be there.

*MM: Wasn't it supposedly lost off the coast of Africa?*

JC: Right. I've been to London, to the Ministry of Defense and worked in their foreign documents section, and I have been to Germany and talked with a bunch of the U-boaters and examined their archives. It's amazing how much of history is just somebody's reasonable guess. We have this boat that was supposed to be in Gibraltar, but it seems to





Roderick "Rod" Farb in action (left and below)

Historical painting of CSS *Alabama*



US NAVY'S NAVAL HISTORICAL CENTER / WIKIMEDIA COMMONS

MM: *Why's that?*

JC: It's going to take time before the people who are doing deep wreck exploration are comfortable with rebreathers. It's going to go the same way the air-closed circuit diving went, starting off in shallow water. "I went a little deeper today than yesterday. Maybe I will go a little deeper tomorrow."

### Roderick Farb

Photographer and filmmaker Roderick ("Rod") Farb, 43, recently filmed the CSS *Alabama* off the coast of France for *National Geographic*. Farb's team was the first group of sport divers to get permission to dive the USS *Monitor* in 1991.

MM: *How has shipwreck diving changed over the last five years?*

RF: Judging from the divers I see, and the questions posted on the Internet, I'd say that the big changes are the volume of gas that divers are carrying. They're going to bigger systems. Twin 80's used to be the standard. Then there were twin 100's. And now twin pumped-up 120's from Europe, and the big titanium tanks that have been imported from Russia. There has also been a blossoming of support equipment for wreck diving, like up-lines, reels, lights.

MM: *Has it made wreck diving safer?*

RF: I believe it has, but it also has opened access to areas that were inaccessible, for example, the degree of penetrations divers are attempting, which of course

increases the risk. So I think it works both ways.

MM: *What are the practical working limits of open circuit scuba these days as far as wreck diving is concerned?*

RF: A practical limit that most people use is 74m (240ft). You could probably go deeper. I worked in Europe and divers there routinely dive 61m (200ft) with open circuit on air. There is also an active technical diving community that uses mixed gas at those depths and beyond, but quite frankly, from my experience 72m (240ft) is about the deepest most wreck divers regularly go. And most of it is still being done on air.

MM: *What impact has mix had?*

RF: The impact has been rather limited to a small group. It's obviously growing, but locating sources of gas, or getting the equipment to mix it yourself is still a problem. It's still beyond the average wreck diver. In Europe, for example, I've been involved with a club on the coast of France with several hundred avid deep-water wreck divers, and none of them dive mix at all because it is too expensive. They don't have equipment. They all



JOE PASS

dive on air, and they do very well. If you look at the overall number of shipwreck divers here in the States, the percentage using mix gas is relatively low.

MM: *I understand you were recently in Europe filming the CSS Alabama?*

RF: Right, I was on assignment for *Geographic* for six weeks during the summer. It was one of the most difficult projects I've ever done diving-wise. The *Alabama* lies at 61m (200ft) 61m in the English Channel in extremely dark 9°C (49°F) water. And though the wreck's not extraordinarily deep, there is a narrow window of time when you can actually make the dive because of very strong currents. It's only about a one-hour window twice a day, and that's decompression, bottom time the whole nine yards. It is an extremely, technically difficult dive.

MM: *Is it a closed site?*

RF: The site is not opened to sport diving. The Ministry of Culture and the United States government regulate it by treaty. The ship belongs to the U.S., but the French have the authority to do archeo-

logical excavations. There's a Franco-American committee that oversees the work on the site, and a group of volunteers screened from a local wreck diving club are participating.

MM: *What are today's frontiers in shipwreck diving?*

RF: Most technical divers want to reach deeper wrecks because they have been out of the reach of most divers and have a lot of artifacts. But as the wrecks get deeper and deeper the technology required gets more sophisticated. The result is a point of diminishing return. The cost, the expense to go and collect ordinary artifacts from a shipwreck is going to far outweigh the value, unless they have some monetary value. The ordinary tech diver will have a limit on what they're willing to spend to mount an expedition. Of course there will always be a very small group of people out there looking for the rare wrecks that haven't been visited or found. Their work will continue, limited by their imagination and the equipment available to them to reach those sites.

MM: *You recently purchased a Biomarine*

be lying off the New Jersey coast. WWII wrecks are really fascinating because the first hand history, the people who were there, are disappearing. A lot of what wreck diving is about is understanding the historical aspect of the wrecks. That kind of information tells us who we all are.

MM: *It puts our culture in context?*

JC: History isn't always what you've been told.

MM: *There's a huge interest in rebreathers right now. What will the impact of rebreather technology be on wreck diving?*

JC: We are going to see nitrox rebreathers moving in to the recreational area but deeper exploration is not going to benefit for that for a while.



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Historical painting of USS *Monitor* in action against CSS *Virginia* by Julian Oliver Davidson (1853-1894)

A shipwreck is a unique thing; it's not like a car or train wreck on land that gets cleaned up. It's a time capsule and historically important wrecks should be preserved. Unfortunately, bureaucrats tend to get carried away with being proprietary over their sites. I see that increasing. I'm fighting to get my foot in the door, establish trust that I'm not going to pillage and rape the wreck. I'm going to be doing something useful and valuable to the agency. It takes a long time.

*MM: You mentioned the Internet. How important is it to your work?*

RF: The Internet might be an old part of the information super highway, but in terms of technical diving it's very young. I use Mosaic, a user friendly graphical based internet interface as a vehicle to get into the literature, the libraries, the journals. It provides a lot of information for my research. It's invaluable from that point of view. In terms of getting information from fellow divers, I haven't found it to be that valuable thus far.

*MM: Do you have a favorite online hang out?*

RF: I use the Techdiver list, but I am becoming increasingly unhappy with the amount of useless information that's posted.

## Where they are today?

Billy Deans is retired from diving and is a registered nurse and helicopter medic with LifeNet Key West, Key West, Florida. John Chatterton remains an active wreck diver and resides in Ft. Lauderdale, Florida. He is a partner with Underwater Archaeology & Exploration Corp, an underwater survey and salvage company, and continues as the owner of Last Breath Productions, which develops underwater projects for television. Polly Tapson and Rod Farb both passed away from non-diving related causes in 2000 and 2003 respectively. □

*Writer and technologist Michael Menduno published and edited aquaCorps: The Journal for Technical Diving (1990-1996), which helped usher tech diving into the mainstream of sports diving, and coined the term "technical diving." He also organized the first Tek, EuroTek and AsiaTek conferences, and Rebreather Forums 1.0 and 2.0. Menduno, who is based in California, USA, remains an avid diver.*

*155 rebreather. Are rebreathers the enabling technology to allow wreck divers to explore more?*

RF: Absolutely. Rebreathers are going to be extraordinarily useful for a limited number of people. They aren't going to have a high appeal for recreational divers because of all the equipment and support required. They are going to be useful only to people with a specific need that could bring a return on a financial investment. The ordinary technical diver is not going to go out and get a rebreather. But for a small group of explorers, it's going to be a very useful piece of equipment.

*MM: What are your personal exploration goals over the next 18 months?*

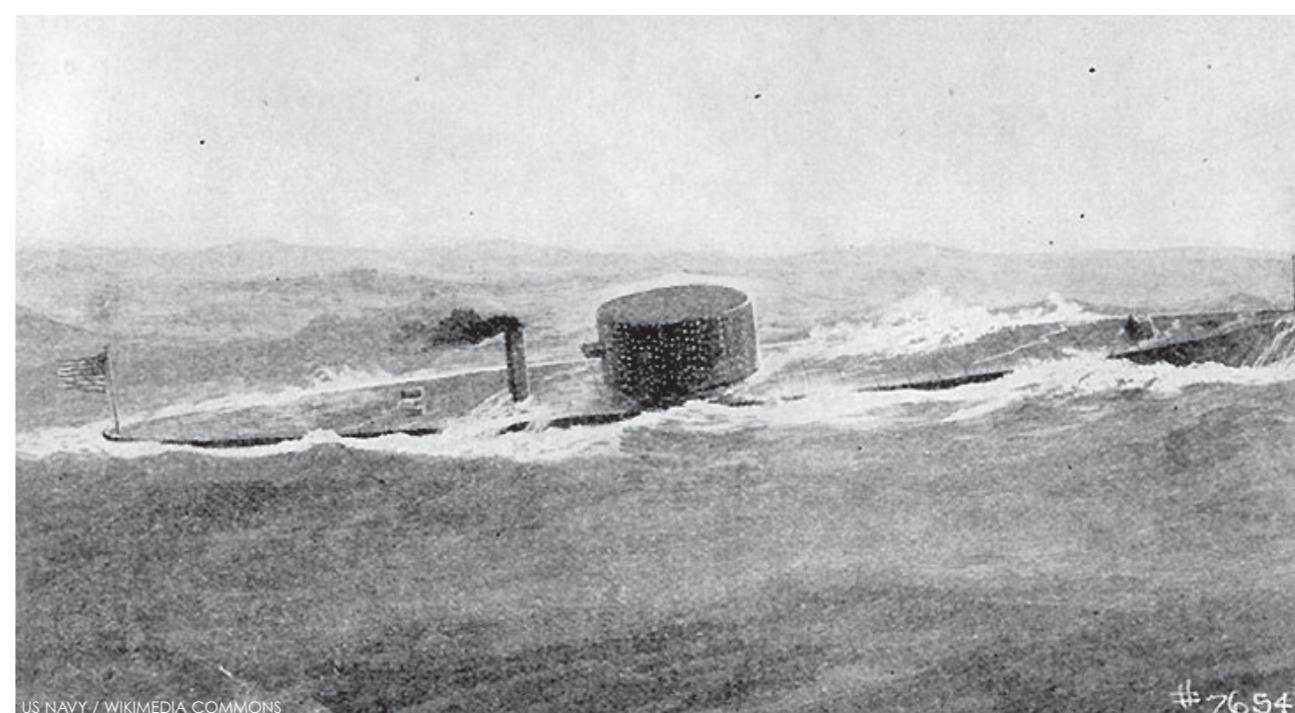
RF: I'm hoping to do a documentary on a new shipwreck in another part of the world. One that is very historically important.

*MM: Are you going to tell me the name of it or...*

RF: No. I can't. It's an unexpected shipwreck that's quite important in American history and it's in a country where access is very difficult. I have permission from the respective governments and so it's a matter of doing the work.

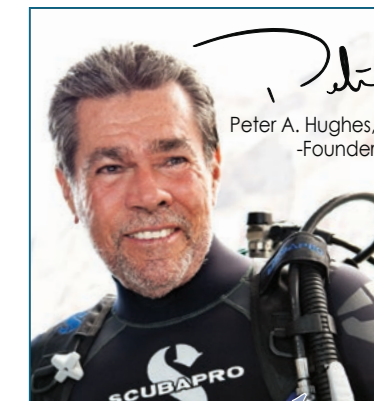
*MM: Your exploits have forced you to negotiate with a number of governments. There was the Monitor project with NOAA, the Alabama with the French. Do you see this as an increasing activity on your part?*

RF: It is, and getting more difficult because of the sheer number of wreck sites falling under government jurisdiction. Access is difficult. Governments are run by bureaucrats who are human beings; and human beings, being what they are, are inherently suspicious and proprietary of their territory. The problem becomes what I perceive as a matter of trust. They want to know "why you want to do it." In many instances, unique sites should be protected. However sites should allow diving access so that at the very least, people can be educated about them.



US NAVY / WIKIMEDIA COMMONS

Historical illustration of USS *Monitor* at sea



Peter A. Hughes, -Founder

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