High on the FU SHAN HAI

At 225m long and registered at 70,000 tonnes, the *Fu Shan Hai* contains enough steel to build 10 Eiffel Towers and covers an area bigger than a football field. It's summer on the Danish island of Bornholm and 24 technical divers gather to explore this new 69m-deep wreck. Lars Kirkegaard is one of them

MY STOMACH FLUTTERS as I empty my wing and glide down through the clear green water above the wreck. At last it's time to see if it has been worth all the time and effort spent getting here. Included in my dive gang is our only female member, Suzy, and her partner Thomas, trimix instructors with plenty of experience of dives below 100m.

We stop at the deco station to test our equipment before continuing our descent. Leaving the 22° surface water, we enter a colder layer that sharpens our senses.

Dive lamps are switched on. The descent line is attached to a ladder on the roof of the *Fu Shan Hai*, the huge upper deck of which appears at about 25m.

We look at each other. The plan is to swim over the edge, heading north, but the deck is square and we are disoriented – which way is the stern and which way the bow?

The main deck lies five or six levels below, so looking down won't help. We choose to go over the side and select our direction at a greater depth.

A thin layer of blue mussels can be loosened from the wreck with a scrape of the hand. Dangling fragments of rope have been caught by the current and become entangled among the mussels, building a fascinating pattern.

Further below we can see the colour change on the underside of the hull where, after three years, the toxic paint is still keeping mussels and other sea life away.

On the main deck, we swim in under a large terrace. Fire hoses hang from the wall, and there are several doors, one leading towards the machine-room.

Commercial divers have searched for oil leaks here but the passageway is tight, still cluttered with debris. I wonder whether to crawl down the steep ladder, but quickly give up the idea. Besides, the machine-room is at least 10m down, which would spoil my dive plan.

I haven't caught an overall view of the *Fu Shan Hai* on this first visit, partly because I am concentrating on photography, partly because the wreck is just so immense. I decide that I must study the floor plans and photographs closely before my next dive.

THE STORY OF THE *FU SHAN HAI* did not start on a dark and stormy night, as do those of so many shipwrecks, but on a clear, sunny weekday in May, 2003.

The enormous Chinese freighter was on her way home from Latvia with full tanks and a cargo of fertiliser, heading north through the Baltic Sea.

The *Gdynia*, a smaller cargo boat that travelled a fast route between Poland and England, was plotting the same course, her radar on standby. Both ships were due to pass the north end of the island of Bornholm.

The *Gdynia*'s mate took over watch at noon and realised that the ship was too close to *Fu Shan Hai*. As the smaller ship, it was *Gdynia*'s duty to give way.

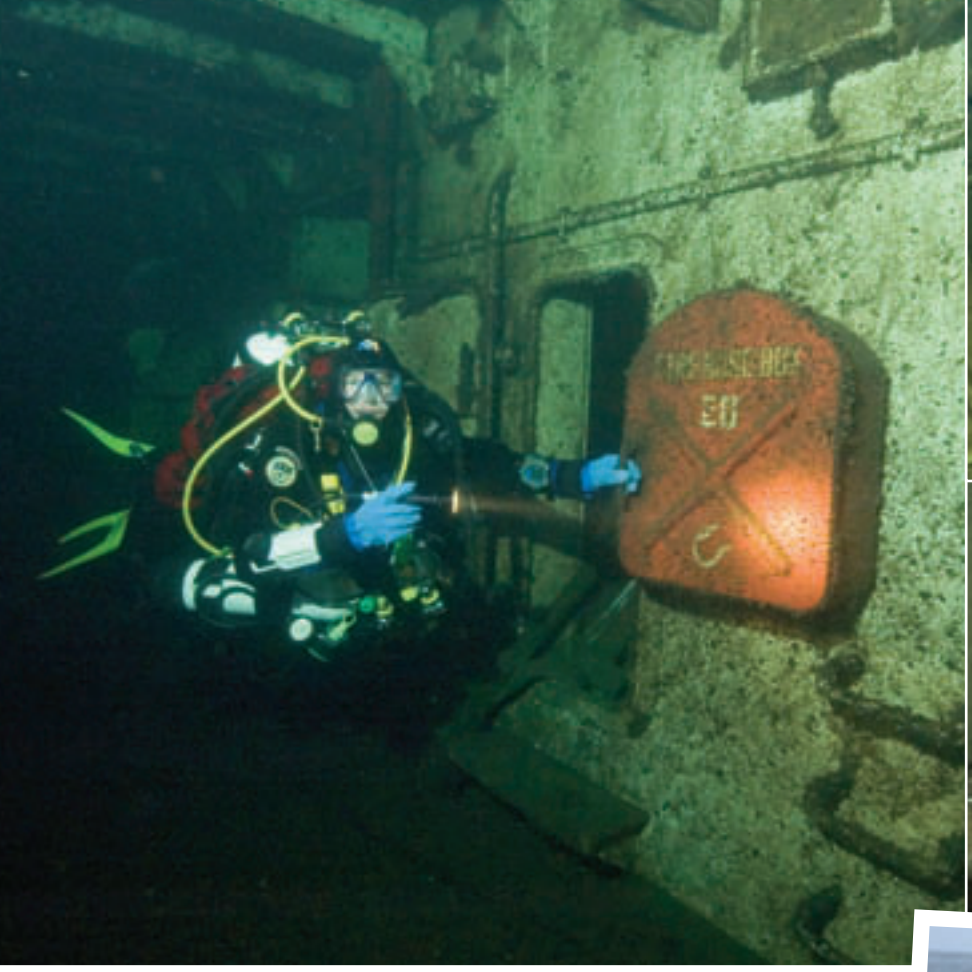
He reckoned that the two would pass at a safe distance, but another check on the radar showed that the ships were on a collision course. He tried to change direction and sheer in sternside – but it wasn't enough.

The *Fu Shan Hai*'s crew knew that *Gdynia* was closing, but another vessel to starboard meant that the bigger ship could not sheer off in that direction.

The captain ordered the engines stopped and sounded the foghorn to warn *Gdynia*, there being no radio contact between the vessels.

Gdynia hit *Fu Shan Hai* between the first and second holds, and water started to pour in. Built to negotiate Arctic seas, *Gdynia* suffered only a dented bow. ☛

Main picture: Lars and Peter reveal the lettering on the stern. **Above:** The writer, Lars Kirkegaard from **DIVER**'s sister-magazine *DYK*. **Below left:** Only woman on the *Fu Shan Hai* – Suzy explores the wreck. **Below:** On a stairway.



Fu Shan Hai's captain carried out an inspection, contacted the owner in China, and ordered the crew to secure all watertight bulkheads and oil ventilation holes before leaving the ship. Nearly nine hours later, his ship slipped beneath the surface, coming to rest at 69m.

One of the larger oil tanks sprang a leak, sending a large slick to the surface. The wind blew this past the easternmost point of Denmark, ending up on Sweden's coastline. The Danish government, fearing an environmental catastrophe, set in motion a costly plan to empty the freighter of her oil, using commercial divers.

With all the doors and hatches open, it was clear that *Fu Shan Hai* would draw in leisure divers, with all the dangers that posed – especially as the wreck lay in the middle of a shipping lane.

So the government took the unprecedented step of banning sport diving on a wreck that did not pose an immediate danger to sea traffic.

THREE YEARS LATER, on 1 July, 2006, the shipping lanes have been redirected and the Danish Maritime Authority has decided to grant an exemption for diving on the wreck to a group of technical divers from Copenhagen who have applied to dive it.

Provisos include that all divers must use trimix, and that a sturdy dive platform or larger boat be in position on all dives. Technical diving logistics are demanding. All divers have space-consuming twin-sets and stage cylinders or a rebreather, and require a lot of gas. Trimix divers with open systems consume hundreds of litres of expensive helium per dive. And most of the 24 divers signed up for the expedition are dive-club presidents, dive-centre owners and so on, used to dictating to others how to dive, and all with their own preferred routines and methods.

The cutter *Britt-Lise* has been rented as a dive platform and to transport the dive gear, while one RIB is used as a safety boat and other RIBs to transport divers between *Britt-Lise* and the dive site. Most of the group lodge close to Hammer Harbour, where the cutter docks at night.

The gas cylinders and filling equipment take up most of the jetty, but only one dive per person per day is planned, and several divers have brought filled cylinders.

So, luckily for holiday-makers using the harbour, the compressors do not need to be in constant use.

We dive fanatically. Our teams are not overly organised, so there are always spots left on the boat and at the compressor, and after getting used to each other's ways we start to behave more like a group.

Every free moment sees discussions about equipment configurations, decompression software and wreck expeditions, and there is always the chance to tease the DIR divers – in a friendly way, of course!

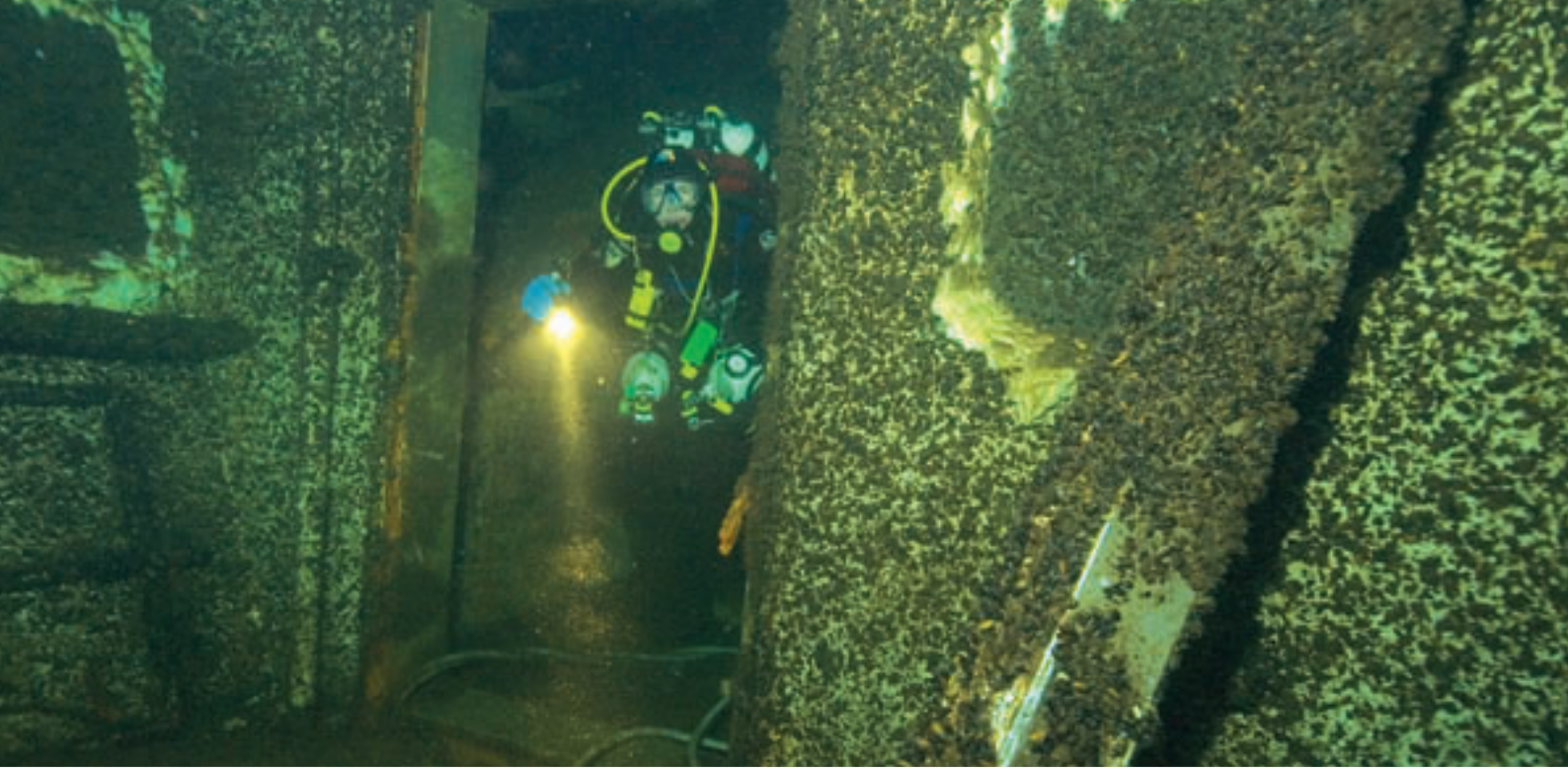
The wreck has become a very popular sport-fishing site and dozens of lines hang over the upper decks, the thin steel wire used for salmon-fishing, as well as nets, though these are usually easy to spot in our light-beams.

A buddy-pair is ascending from a deep dive when one becomes entangled in a net fluttering in the current. His first attempt to free himself only makes the situation worse, and his buddy has to work hard to cut him loose. They are further punished by the extra deco time needed up the line.

EVERY EXPEDITION HAS A DAY on which nothing seems to go right. The island TV station is visiting and I have agreed to dive with its video camera to provide a clip of the wreck for its evening news broadcast.

Unfortunately, neither the journalist nor the cameraman knows exactly how to operate the equipment, or has brought sufficient lighting, so we resort to using our dive lamps and arrange for another dive pair to model.

Clockwise from above left: A diver points out a firehose on the wreck; the captain's quarters; storage room; diving from the RIBs.



Above: Penetrating the *Fu Shan Hai*.
Below: The triumphant "Dykkeriet" group that won permission to dive the huge wreck.

The models leave early that morning and we plan to go out later with the journalists, but it rains all morning and at lunchtime the wind picks up. We prepare our equipment on land and head over the rolling waves to the cutter.

The cameraman's attempts to film a diver kitting up are quickly overcome by seasickness.

The diver starts to overheat while waiting for the rest of us to get ready and enter the water to wait, but by the time we join him the rough sea has left him, too, not feeling too good.

On the descent, I decide to test the camera, and only then realise that it has been turned on since leaving harbour. Frantically I search for a rewind button, but naturally there are no such buttons outside the housing.

I feel we should stop the dive and ascend to rewind the film, underwater footage being the purpose of the dive. We can still have a long and interesting dive at 30-35m on the bridge, and it will make no odds to the TV viewers. But even back at the surface, no-one can figure out how to rewind the film. We're all fed up, and most of us are seasick.

The first diver in calls it quits for the day, then the loop from the buoy comes undone, causing the deco station to fall apart. The buoy starts drifting in the wind, and the RIBs have to chase after it.

We give up. The cutter heads for land while we spend the best part of an hour trying to salvage and fix the remains of the buoy. The swells are long and rolling and I am exhausted when I finally clamber into the RIB. On the way back, we run out of gas...

THE FOLLOWING DAY, things work as smoothly as ever. Several dive-pairs have planned to dive to the bottom to see the propeller. From pictures we have seen that the stern seems to be vertical, but we find that it has simply imploded. While the rest of the hull is completely upright, the stern leans in at a 45° angle.

The stern is almost as wide as the rest of the hull, at 33m, and the steel plates are several centimetres thick, so it must have taken enormous power to bring this about.

Avoiding the large net fastened to the flagpole, we glide out over the stern, continuing down to the 8m-high rudder.

I go carefully, because having extended my camera's flash-arms, my "wing-width" is almost 1.5m.

It is extremely dark under the stern deck. Because of the current near the bottom the water is murky, so it would be easy to get entangled in a fluttering net. We push in tight under the rudder as we grope forward and down. Sooner or later we will see the propeller.

The water is cold and still. All we can hear are our bubbles escaping. They float towards the stern above us, trickling along the giant slabs of steel before being released to float to the surface, the only evidence that two tiny individuals lie hidden under the giant hull. Looking up, it feels as if an enormous bird has taken us under her wing. I feel totally alone, yet incredibly safe at the same time.

In front of me, Peter's dive light shines on another type of metal. The propeller is gigantic! He goes round to the other side and turns to me. I get in close, but a fine layer of silt is already spreading around and my auto-focus is having a hard time of it, even with Peter's lamp as a target.

Finally he moves his lamp ever so slightly and a sharp and fairly well exposed picture appears on the screen. I breathe a sigh of relief.

We check the bottom while we are down there. It is firm but slimy. The dive is planned to a maximum of 69m but one of my computers reads 66.5m, and the other 67.8m under the prop.

We follow the rudder as far up as we can, and at 55m swim over the enormous letters on the inverted stern that spell *Fu Shan Hai*. They are covered with muck, but easy to wipe.

Before we set course towards our first deco stop, I pat the wreck carefully on her backside and think: see you later.

THE SHIPPING COMPANY that owned *Gdynia* was found solely responsible for the sinking of *Fu Shan Hai* in spring of 2006, and a fine of US $13.5 million was imposed. It was also left to reimburse both the Danish military and Swedish Coast Guard for their extensive environmental clean-up work.

Meanwhile, our expedition's documentation and images were sent to the Danish Maritime Authority. Following the removal of the old ferry-route, at the end of January it lifted the ban, so now every diver suitably equipped can enjoy diving the "*Zenobia* of the North".