

Size Matters: Photographing the Wreck of the Vrouw Maria

by Jukka Nurminen with Alexander Mustard

It is an inescapable fact that successful underwater photography is heavily dependant on technology. Not only do our cameras have to withstand and function in a hostile environment, but also many of the images we conjure up in our minds can only be captured on film with the right kit.

Quite simply, unlike many branches of photography, good equipment yields good shots. But what do we do when it just isn't possible to produce the image we want with conventional kit? We have two choices: we can either throw in the towel or we can persevere, get inventive, play and experiment. These are surely some of the most exciting times to be an underwater photographer.

Most underwater photographs are taken of small areas, in shallow, bright conditions. A pretty biased view of the oceans! This article is about redressing the balance and tells the tale of how Finnish photographer, Jukka Nurminen, went about photographing the Wreck of the Vrouw Maria (Lady Mary) in the almost pitch darkness of the Baltic Sea.

Our story begins on the 5th September, in Amsterdam. In the year 1771. The Vrouw Maria, a two mast wooden merchant ship loaded with a precious cargo including works of art belonging to Catherine the Great of Russia, sets sail for St Petersburg. A month into the voyage, close to an archipelago of islands off southwest Finland, she is caught in a vicious autumnal storm.

The storm drives the ship onto the rocky shore of Jurmo island and sinks the Vrouw Maria on the 3rd October. For 228 years no one knew the exact final resting place of the Vrouw Maria's, but that did not stop many from trying to find this "treasure ship". Success finally came in June 1999, when the wreck was located by sonar in 42m of waters.

Wooden shipwrecks are a rarity in the oceans for one main reason: they are devoured at a tremendous rate by shipworm. However, the northeast Baltic is rather a special place. The Baltic Sea is actually a very large estuary, salty at one end and fresh at the other, and by the time we get to Finland, the water is too fresh for many marine



Jukka and the tripod at its 5m setting (without snow shoes)

species to survive, including shipworm. This makes it the best place in all the oceans for diving on ancient wooden shipwrecks.

While the conditions off southern Finland are excellent for wood preservation, they are not ideal for photography, especially the photography of a 26m long and 7m wide shipwreck. The aim of Jukka's expedition was to take the first images that



1. Bow of the Vrouw Maria. Nikonos RS, 13mm fisheye, tripod, 2 hand held torches, plus 2 stops, Fuji Provia F 400, f2.8



2. Nikonos RS, 13mm fisheye, hand held torch, plus 2 stops, Fuji

conveyed the context and scale of the Vrouw Maria to the general public, for Finland's biggest weekly news magazine, Suomen Kuvalehti, the Finnish equivalent of Newsweek or Time.

Equally, the pictures were also required by the Maritime Museum of Finland to document the wreck.

Such images would need ambient light exposures, and excuses like "it's dark for most of the year below 40m in the

Baltic" just don't wash with magazine editors.

The first challenge was finding a suitable season when there would be light at 40m. Jukka explains: "In the winter the sun is too low and in the summer there is too much plankton in the water, leaving only two possible windows; one just after the ice has melted in the spring and one in early summer after the spring plankton bloom". Even at these times the conditions are hardly ideal: the

visibility ranges from 1 to 8m and the light levels are, at best, gloomy to dark. "Long exposures are unavoidable" he summarises. The window opened in early June, and Jukka joined the research camp of the Maritime Museum.

"The easy part was I knowing I needed a tripod to get publishable colour shots. However, after studying a scale model of the wreck it was clear I had a problem: the deck of the wreck is more than five metres above the seabed and the bow is close to six. Where could I find a tripod of these proportions? And more importantly, would it be possible to use it underwater?"

After a fruitless search it was clear that if he wanted a nine metre tall tripod he would have to have it custom built. "The finished tripod consisted of 7 pieces: a tripod (1.7-3.8m), two 2m and one 1m extension parts that could be used in any combination with a special socket, a ball head that allowed the camera orientation to be altered in seconds and a quick change plate for instant camera fastening. I also fitted snow shoes to the tripod, which it needed to stand on the soft sediment and attached a cable release to the camera to ensure stability during long exposures."

As Jukka succinctly puts it "Down below 40m there isn't time to mess about with your camera" so it was important that both he and his buddy were familiar with such ungainly kit before the rare opportunity was afforded on the wreck. "We did a test dive during which we tried to overturn the tripod and practised how to move and adjust it which was a great help for the real action!

"When taking pictures in



The cover of the Finland's weekly news magazine. Nikonos RS, 13mm fisheye, Fuji Provia F 400

low viz, at 40m and in cold, dark conditions you need a meticulously planned dive. Add to this mixture a 9 metre high tripod and I needed a series of meticulously planned dives to get the shots. On the first day my two dives were about preparation. On the first I checked the visibility and the light levels (with the matrix metering of my Nikonos RS) so that I could decide on film stock. I also took time to decide on the exact length of the tripod. Back on the boat we opened the tripod and lowered it into the water, where it lay on its side on the seabed. The second dive was dedicated to getting it into place, which was quite a struggle, dragging it for 15m at a depth of 42m.

"The next day I attached my camera and was delighted that the quick-change plate worked as well as it had on the pier day before! With the camera in place, I raised the tripod to 5 meters, composed in the gloom and reversing away with the remote shutter release started shooting. Long exposures can be a real revelation underwater because the camera is able to record more than our eyes can see at the time. It is a fantastic way to shoot! The remote release for the RS is an excellent accessory and is a feature not found on most housings. One solution with a housing would be to



5. Exploring the Vrouw Maria. Nikonos RS, 13mm fisheye, 2 strobes on TTL, minus 1 stop, Fuji Provia F 400, f2.8

set the camera's shutter on a timer so that the picture is taken, say, 5 seconds after the shutter release is pressed.

"On the next dive I shot a trial roll and on the basis of the results I overexposed subsequent rolls by two stops to record more detail in the darkness. Surprisingly, there was not that much a difference between a normal exposure and a two stops overexposure, probably because of the reaction of film is not that subtle at long exposures. My buddy used two hand-held torches to illuminate and give colour to the wreck following my hand signals. The two extra stops allowed us to use the torches from further away, producing a more even lighting and letting us illuminate a much larger portion of the wreck.

"The large tripod felt a bit cumbersome on the first few dives, but soon I was repositioning it regularly, despite its in-water weight of more than 10kg. The largest configuration I used was six metres, which was tall enough for the bow and the stern. My biggest problem was composing the



3. On the deck of the Vrouw Maria. Nikonos RS, 13mm fisheye, 2 torches on the rig, two strobes on TTL, minus 1 stop, Fuji Provia F 400, f2.8

shots because the features of the Vrouw Maria were very difficult to see in the gloom. Due to a lack of time on the wreck I was not able to take a top down view of the bow or stern, which would have required the full 9m tripod. Maybe next year!

Nevertheless, it was clear

that, as long as the current is mild, the tripod was steady enough to be used fully extended in the future.

“In conclusion, I am pleased with my results, given the level of difficulty and the degree of experimentation.” As photographers we often stick

with our well used methods to guarantee a high strike rate of good shots when we dive. However, persevering with a new technique and technology adds another weapon to our photographic armoury. “My experiences with the tripod not only got the job done for me, but also taught me a new photographic approach well suited to many subjects in Baltic.” It is technique that will serve Jukka well as he embarks on a coffee table book project of the Gulf of Finland’s most beautiful wrecks.

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