

The Nikonos Story

HOW IT ALL BEGAN

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In order to really appreciate just how far the world of underwater photography has come, it is helpful to delve a little into underwater photography's deep, dark past. What is amazing about the history of underwater photography is that the obvious was not so obvious for almost 58 years. Ever since its beginning in 1893—when Louis Boutan took the first successful pictures—inventors and divers have been trying to stuff land cameras into housings that would keep them dry underwater. No material was left untried as wood, metal, rubber and, eventually plastic, were molded around expensive topside cameras in an attempt to keep them dry.

Many people saw using housed cameras as a disadvantage and dreamed of a camera that didn't yet exist. Two such men were Jacques-Yves Cousteau and Jean de Wouters (a Belgian aeronautical engineer). In 1959, when nuclear submarines were going under the North Pole, the first amphibious camera was introduced by Wouters, after eight long years of work.

This first camera was called the Calypso Phot and was manufactured in France by Spirotechnique. It would revolutionize the world of underwater photography. The Calypso Phot had a sleek gray body and included a Som Berthiot Flor 35mm f/3.5 lens that focused down to 2.5 feet and had

an f/stop range of 3.5–22. Shutter speeds ranged from 1/1000 to 1/30 second. There was a bulb setting as well. The shutter and advance controls were uniquely combined to simplify shooting U/W. To take a picture, you simply pressed the lever slightly to fire the shutter, then released it. Pressing it again advanced the film.

To load and unload the camera, the lens

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was removed and the body pried up using two levers on either side of the body. The pressure plate was not hinged, so the film slid under the plate and onto the take-up spool. As each picture was taken, the take-up spool pulled the film onto itself. The film rewind knob was a small dial on one side that was pulled up and turned.

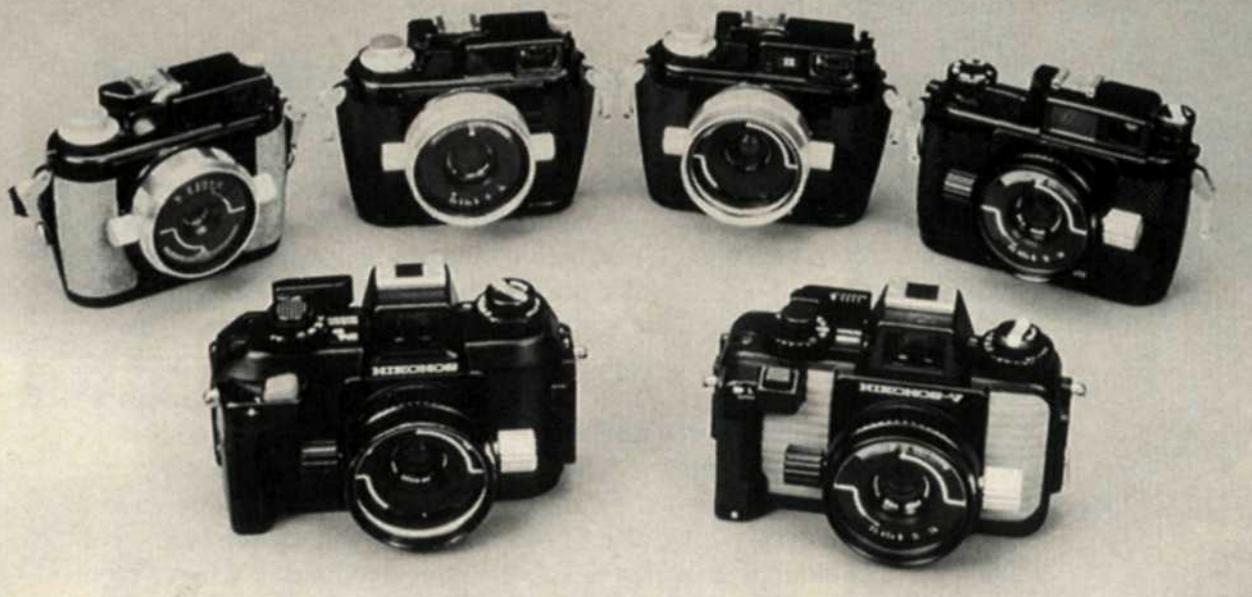
The bayonet mount for the lens had a large surface area. This same mount is still used today, some 29 years later. A small sealed port on the base of the Calypso housed contacts for flashbulb and electron-

ic flash. A small notch between the two contacts allowed for insertion of the multi-function ground and registration pin.

In 1963 Nikon acquired the rights to manufacture and distribute the Calypso. In Europe the camera was known as the Calypso/Nikkor, while the rest of the world called it the Nikonos. Nikon made a few minor changes, such as reducing the shutter speed to 1/500 second, switching to a f/2.5 35mm W-Nikkor lens and making the rewind knob taller. Inside the viewfinder Nikon added picture image margins for framing and parallax correction.

In 1968, after five years of evaluation by Nikon and divers, the Nikonos II was introduced. (The Calypso/Nikonos mentioned above was called the Nikonos I as an afterthought.) The Nikonos II had a film rewind lever, an additional R (rewind) setting on the shutter speed dial and a hinged pressure plate for easier film loading. The camera was a huge success and was reputed to be indestructible. Nikon had coated all the internal parts, just in case of water leakage, so that corrosion would not exist. By simply washing it in fresh water and drying it, the camera was ready for re-use.

Nikon, armed with seven more years of experience—and assorted input on redesign—introduced the Nikonos III in 1975. Major exterior changes were obvious. The



Far Left: The Calypso Phot revolutionized the world of U/W photography. Introduced in 1959, it was the forerunner of the Nikonos. The photo at left shows the Calypso and the five Nikonos cameras that evolved from it. Above: Starting with the back row, left, the cameras shown are: the Calypso, Nikonos I, Nikonos II and Nikonos III. In the front row are the Nikonos IV (left) and the Nikonos V. Left: The Nikonos V, introduced in 1984, has TTL metering.

overall body had been lengthened to accommodate the new positive film advance system. The top of the III had a larger rewind knob on one side and a larger black shutter speed dial on the other. The film counter was moved from the bottom to the top for easier viewing.

Inside the viewer there were additional frame markers for the 80mm Nikkor lens. The standard 35mm lens included with the Nikonos III had enlarged f/stop and focus controls for easier use by divers wearing gloves. Inside, Nikon had moved the hinge for the pressure plate to the bottom, so that it would not catch on the body of the camera when it was being reassembled.

The most welcome improvement was a sprocket drive device to ensure even frames from one exposure to the next. Uneven frames had been a problem with all the previous cameras. The uneven framing caused problems for the photo finishing labs and resulted in many unhappy underwater photographers finding their images cut in half.

The sync port on the base of the Nikonos III had three metal pins for flash bulb/electronic flash and a housing pin that lined up with the sync cord from the flash system. A welcome addition to the base was a tripod socket for flash brackets and trays, so that less tension was placed

on the synchronization plug.

By the time the Nikonos III was introduced, the Nikonos system consisted of a 35mm normal lens, a 28mm wider angle lens (introduced in 1965), an 80mm telephoto lens (1969) and a 15mm super wide angle lens (1972) as well as a Close-up Outfit and extension tubes and framers.

In 1980 Nikon made the biggest changes in its U/W camera, introducing the Nikonos IV-A. This was the first Nikonos to offer fully automatic aperture-priority exposure control. The entire camera body was newly designed and more closely resembled a standard 35mm reflex land camera. The body acted and felt like a land camera with its anatomical grip and the revised shutter release/film advance lever. Other changes included an ISO dial numbered from 25-1600, back plate and lock, and a revamped shutter speed dial. Because of the auto exposure system the shutter speed dial now had an "A" for autoexposure, "B" for bulb, "M" for manual and "R" for rewind. The manual shutter speeds were gone.

The Nikonos IV-A, the first fully automatic U/W camera, was very accurate and easy to use. The diver simply set the shutter speed dial to "A," selected the correct film ISO and desired lens aperture; the camera would select the correct shutter

speed. The meter inside the camera would read the image reflected off the gray shutter and provide a correct exposure. This new camera had a fully automatic aperture-priority metering system.

When you changed film in the Nikonos IV-A, you quickly realized just how different this new camera was. To do this with the previous models, you had to remove the lens then pull the camera body from the outer shell. When the film was loaded the process was reversed. The Nikonos IV-A had a one piece camera body. All the user had to do was open the hinged back; the lens no longer had to be removed. A special turn-key latch prevented the camera from opening accidentally.

When the camera was in the auto mode, a blinking red light in the viewfinder indicated low light/slow shutter speed while a constant red light indicated enough light for handheld exposures. The Nikonos IV-A had shutter blades instead of curtains, allowing a flash sync of 1/90 second instead of the 1/60 on previous models. The sync port on the base of the IV had a shape similar to the III but did not include the flash bulb sync. This was replaced with a ready light indicator for the SB 101 flash system, introduced in 1980.

In 1984, after tremendous input from a variety of sources, Nikon introduced its finest Nikonos yet. The Nikonos V was the first U/W photographic system. The camera body resembled that of the IV-A, but there were a great many changes.

The manual shutter speeds had returned and now included the 1/1000 of the original Calypso. But, the real change was inside the camera: It had a new TTL flash metering system. This allowed fully automatic flash with the new Nikon SB 102 and 103 strobes. The Nikonos V was unique because it was the only U/W camera with dual metering systems—one for automatic exposure in ambient light, the other for automatic flash exposure.

There was now an additional lock button on the backplate latch to ensure the back could not be opened accidentally underwater. A conventional O-ring on the back plate was easy to remove for cleaning or replacement. Inside the viewfinder, the red light had been replaced with shutter speed indicator lights and an electronic flash ready light.

Today, the Nikonos V camera system includes: the standard 35mm lens; a 28mm medium wide angle lens; an 80mm telephoto lens; a new, improved 15mm super wide angle lens (1981); a 20mm wide angle lens (1985); and a 28mm lens (1984) for land use only (this latter has been discontinued but is still available in some stores). The Close-up Outfit and extension tubes/framer are still available. The electronic flashes include the SB 102 and SB 103, which utilize TTL metering. 📷