Underwater Photography

a web magazine
Issue 34
Jan/Feb 2007

Discover UNDERWATER Photography

SLR-DC Housings

The Ikelite SLR-DC housing takes full advantage of the digital SLR camera's innovative features. The housing is injection molded of clear, lightweight polycarbonate for strength, visual access to the camera, LCD screens and camera controls. The housing provides controls for most camera functions. Most Ikelite SLR-DC Housings include conversion circuitry that provide TTL compatibility with the latest Ikelite DS Substrobes. Many Housings also include a Flash Compensation Module which provides over and under-exposure compensation in the TTL mode and easily allow you to switch to Manual Exposure Mode which provides eight power settings. All exposure compensation is done on the back of the housing. There is no need to access complicated camera menus.

Canon
EOS 5D
EOS 10D
EOS 20D
EOS 300D
EOS 350D, Rebel XT
EOS 400D, Rebel XTi

Nikon
D-200
D-80
D-70, 70s
D-50
D-40

Olympus
E-330
E-300
E-500

Sony
DSLR-A100

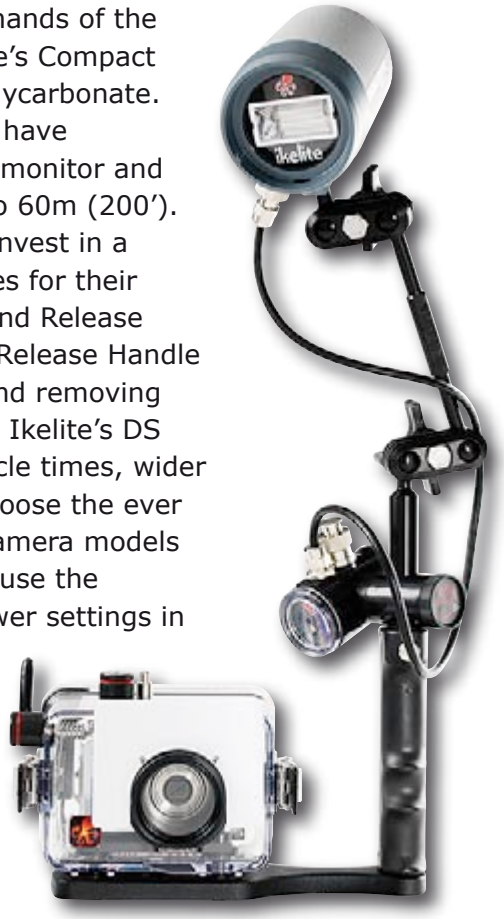
ikelite
Underwater Systems
50 W. 33rd. Street
Indianapolis, IN
46208
317-923-4523

www.ikelite.com

Compact Digital Still Housings for

Canon • Fuji • Nikon • Olympus • Sony

Ikelite offers housings for more than fifty different digital still camera models to meet the diverse demands of the underwater photographer community. Ikelite's Compact Digital Still Housings are molded of clear polycarbonate. Dive while knowing your system is safe and have complete visual access to the camera, LCD, monitor and control functions. Most housings are rated to 60m (200'). When you invest in an Ikelite housing, you invest in a system. Ikelite offers a full line of accessories for their Compact Digital Still Housings. Add a Tray and Release Handle for easier handling underwater. The Release Handle incorporates a quick-release for mounting and removing Ikelite's articulating ball socket arm system. Ikelite's DS Substrobes provide more power, faster recycle times, wider coverage and help eliminate backscatter. Choose the ever popular DS51 or DS125 Substrobe. Some camera models offer auto exposure with DS Substrobes, or use the EV-Controller which provides 10 manual power settings in 1/2 f-stop increments for precision lighting. Add the Ikelite W-20 waterproof wide-angle lens to your system to widen the camera's angle of coverage, allowing you to get closer to your subject for enhanced color and clarity.



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Contents

Cover shot
by
Joseph C. Dovala

Underwater Photography

2001 - 2007 © PR Productions

Publisher/Editor Peter Rowlands

www.pr-productions.co.uk

peter@uwpmag.com

Editorial

Ike Brigham

The sad news is that Ike Brigham, founder of Ikelite Underwater Systems, passed away just before Christmas.

I had the pleasure of meeting him both socially and for business several years ago and he left a lasting impression. He was a genuine man, passionate and good humoured, whose honest enthusiasm never diminished with time.

In his latter years he embraced the digital age at a time of life when most would be daunted. His postings aka 'the addled shopkeeper' on various forums showed a genuine interest laced with glorious self mocking and a wonderfully precise wit.

As a businessman he was legendary for customer service before profit - a rare quality in today's world and, above all, he was a great supporter of the underwater photography community.

He will be sorely missed but fondly remembered and my condolences go out to his family and to his extended family, all the staff at Ikelite.

Readers Lives

Digital lease of life

Getting your e-mail that the latest UwP is ready for downloading gives me the same thrill that I had as a child (55 years ago!) when it was our family's comic day. (In those days it was 'Micky Mouse Weekly', followed by 'Eagle' as I got a little older).

It really is a thrill to open the latest UwP; to read of the latest gear, of new techniques...and what amazing photographs today's underwater photographers are getting.

Oh how I am enjoying digital photography. My ageing underwater photographs have been given a new lease of life, just by scanning, cleaning up and grey scale balancing. New two metre colour prints, printed on Epson and HP printers on our museum walls have my photographs looking better than they ever did when new.

Regards
Pat Baker
patrick.baker@museum.wa.gov.au

Book review disagreement

Just down loaded the latest issue of the magazine. Quick look and full of infomation as usual.

I don't normal reply to reviews, but, I think you lost the plot regards "Coral Reefs, Nature's Wonders". It is not a pretty picture coffee table book and was never meant to be. It is a identification book about corals and is scientifically correct. The visuals are meant to be "more scientific than artistic"! Nothing more nothing less.

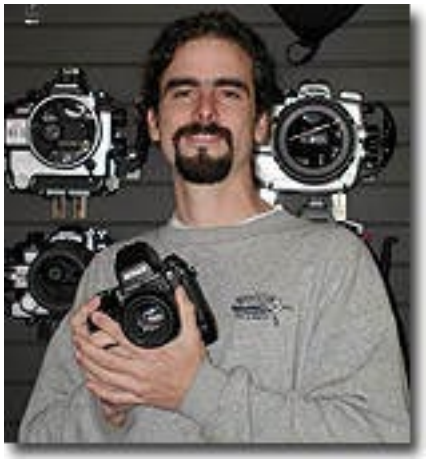
Regards,
Walt Deas.
walterdeas@netspace.net.au

News, Travel & Events

NCUPS "Underwater Imaging Today" Weekend

Seminar with Berkley White

January 12th/13th 2007



The Northern California Underwater Photographic Society (NCUPS.org), in conjunction with Backscatter Underwater Video and Photo of Monterey, and Wallin's Dive Center of San Carlos, proudly presents a very special FREE two-day underwater photo and video weekend seminar with world-renowned underwater digital photography expert, Berkley White.

www.ncups.org

Dive In To Earth Day

Week of April 22, 2007

Dive In To Earth Day is an international Earth Day celebration that mobilizes environmentally conscious communities, park managers, dive shops and other marine lovers around the world to take a stand in protecting our endangered water world.

Dive In has become a huge driving force for environmental awareness and has involved thousands of participants in active marine conservation. In the past seven years, Dive In organizers have held 2,000 marine conservation events in 117 countries worldwide, removing trash, educating children and their communities, supporting marine protected areas and much more.

It's easy, it's fun and anyone can participate!

www.coral.org

Upcoming International Photo & Video Competitions

DivePhotoGuide.com

We hope you spent your holiday doing what we did – going through another year's worth of images and submitting to competitions! You still have some time for some big ones in January and February. Start your new underwater photography year off on the right foot. Enter your best shots and you can win great prizes and eternal glory.

Jan 7
2nd Annual Wetpixel and DivePhotoGuide International Photo & Video Competition: Our World Underwater 2007
www.underwatercompetition.com/owu.php

Jan 7
DEEP Indonesia International Underwater Photo Competition 2007
www.underwatercompetition.com/deep.php

Jan 31
British Underwater Image Festival
www.divemagazine.co.uk/news/article.asp?UAN=2977&v=1&sp=

Feb 1
Underwater Images 2007
http://uwimages.org/2007/index.htm

Feb 28
OzTek '07 Photo Competition
www.diveoztek.com.au/terms.html

www.divephotoguide.com

The 2nd Annual Wetpixel.com and DivePhotoGuide.com International Photo & Video Competition

... in association with Our World-Underwater

FINAL CALL! Our panel of celebrity judges will select winners after the 11:59PM (Pacific Time), Jan 7, 2007 deadline. Winners will be announced on stage at the 2007 Our World-Underwater film festival in Chicago, Illinois (February 9-11, 2007), and will be published by our supporting media partners worldwide

www.underwatercompetition.com

Light and Water 2007

27th January 2007, Southampton, England

Cameras Underwater in association with Wild Arena and Ocean Optics are very pleased to announce our first specialist photographic seminar- Light and Water 2007.

Light and Water 2007 will combine inspirational presentations from leading marine and wildlife photographers with practical workshops designed to help you take better photographs in and around water.

Speakers confirmed already include Heather Angel, a leading figure in wildlife photography for over 20 years, Louise Murray, a photojournalist with far reaching experience, BBC cameraman Mark Carwardine, zoologist and award winning writer and Paul Kay, an authority on underwater photographic technique and an expert on British marine life. Other guests are still to be confirmed.

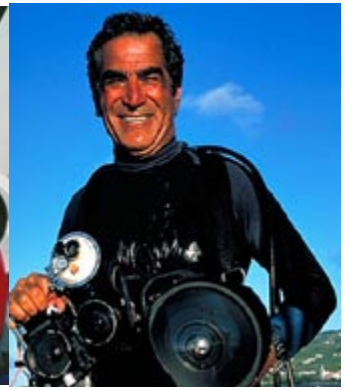
The cost is just £99 including refreshments and a hot buffet lunch.

www.camerasunderwater.co.uk
www.wildarena.com

Cocos & Malpelo, with "Her Highness" & "Her Deepness" and Amos Nachoum

May 17 - June 03 and May 21 - June 05, 2007





Amos Nachoum will be joined by 'Her Deepness' Dr. Sylvia Earle and 'Her Highness' Dr. Kathryn Sullivan on two special trips to Cocos and Malpelo this year.

Cocos, the legendary desert island of Robinson Crusoe, and remote Malpelo Island, 200 miles plus off Colombia, are world-renowned for the electrifying beauty of their blue water diving. These islands offer an opportunity to dive with the never-ending schooling of hammerhead sharks, the occasional whale shark, hundreds of white-tip sharks and bait balls. Both expeditions will have the unique ability to dive in rotation in one of the new submarine on board which provide a rare undersea exploration to 1500 feet deep!

We will operate the two vessels in concert with each other. The first expedition departs Costa Rica on May 18 aboard the Sea Hunter with Dr. Sylvia Earle, proceeding to Cocos and Malpelo. The second expedition, departing on May 22, accompanies Dr. Kathryn Sullivan aboard the Undersea Hunter to the island of Cocos, exclusively

Sylvia and Kathryn will be diving and sharing their vast and amazing life experiences on a daily basis with us. They will also lead some of the evening presentations during our diving expedition. Amos will share his skills in BigAnimals photography and will screen slide presentations of his famous camera work.

www.biganimals.com

Join Wetpixel in the Solomon Islands aboard the M/V Bilikiki

September 11-25, 2007

Wetpixel.com and photographer Eric Cheng are leading an expedition to the Solomon Islands aboard the M/V Bilikiki from September 11-25, 2007! The Solomon Islands are one of my favorite dive destinations, and offer everything from tiny pygmy seahorses to huge barracuda tornados. The topography (both topside and underwater) is absolutely breath-taking, and the crew and guides on the Bilikiki are one of the best I've encountered.

In addition to the leadership of veteran managers Monty Sheppard and Michelle Gaut, Wetpixel members and award-winning photographers Cor Bosman and Julie Edwards will also be on this trip. Cor and Julie have literally spent months in the Solomon Islands aboard the Bilikiki, and their knowledge of the area is impressive. Eric Cheng will be onboard offering informal underwater photography advice.

The total price for our 14-night charter is $4,144 + a $140 government tax on food and accommodation ($4,284 total). Price is for double-occupancy in deluxe staterooms with private head and shower, not including return airfare to Honiara.

http://wetpixel.com/trips/solomons/

Revolution in Online Photo Galleries

Two friends have launched an innovative new website that will give your online photo collection a professional makeover.

Over the past 18 months Windsor-based web designers Jack Sanderson, 36, and Matt Woodage, 29, have dedicated their spare time to producing thebigpicturelibrary.com, a web-based facility that allows users to upload their pictures and display them in a variety of stylish formats.

The whole process from registration to upload and display provides an intuitive, no-nonsense approach that puts some of its more cumbersome rivals to shame.

The free package allows users to quickly upload 250 photos, they then choose from one of 16 backgrounds to display them to friends and family or for work purposes.

The photo websites are dynamically generated which allows users to interact with their site, changing the background template with a single click and giving them creative control over their images.

Sharing the images with friends couldn't be easier as each user has their own web address and there is no subscription or fee to view or print the pictures.

Jack explained: "My father is a professional photographer and I wanted to create a site which would allow him to display his images in different ways for different client groups, that is where this all started and it has just kept on growing.

We have had an amazing response since we launched it with over 1,000 people registering in the first weekend. It is very exciting and the feedback we have received has been great. People like the professional look the templates bring to their photos and that they can change the backdrop to suit the people who will be viewing the picitures.

We can provide a more specialist service if required and are in the process of developing upgrades aimed at the corporate market which will provide greater capacity for larger photo collections and offer even more flexibility."

www.thebigpicturelibrary.com

2007 Bimini Shark Encounter

4-13 March 2007

Our course provides one of the ultimate hands-on shark experiences! Based at the renowned Bimini Biological Field Station (Sharklab) in the Bahamas, this experience will enable you to work with, learn about and film/photograph a range of sharks led by the world well-known shark biologists Samuel "Doc" Gruber and Dean Grubbs. You will learn about shark biology and conservation through a number of illustrated lectures and videos by scientists who are actively studying these magnificent predators. In addition you will film and photograph them with prize-winning photographer Sune Nightingale. We are not aware of any other excursion that offers such hands-on activity with wide range of shark species, learning in a quasi-academic setting and offering the opportunity to film under the tutelage of professional film makers.

www.wildeye.co.uk/sharks.html

Divester/Wetpixel T-shirts Available Now!

The limited edition Divester/ Wetpixel t-shirts that Eli Woolery designed are now available. Printed on 100% cotton tees, the shirts are available in sizes small, medium, large, and x-large, and are printed on black shirts -- which, by the way, look totally cool! Order while they're hot, because we're only printing 200.

The prices for the shirts are: $17.00, shipping included, if you want one sent within the USA/Canada. $27.00, shipping included, if you want one sent outside the USA/Canada.

www.divester.com/2006/10/25/divester-wetpixel-t-shirts-available-now/

NCUPS Seminar featuring Kawika Chetron

February 9, 2007

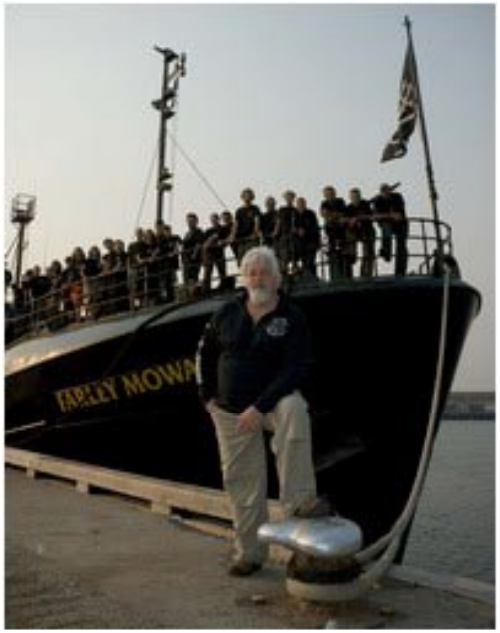
The Northern California Underwater Photographic Society (www.NCUPS.org), proudly presents a very special seminar with underwater photographer and artist Kawika Chetron of Coldwaterimages.com. An avid scuba diver since 1986 and an accomplished underwater photographer - who only recently took up the art in 2004 - Kawika Chetron's photos capture astonishing whimsical personalities rarely captured in sealife, stunning clarity of colors, and a three-dimensional depth that combine to envelope the viewer in the emotion of the moment.

This prodigal talent will offer up advice on how to capture the moment in a millisecond, shooting and lighting techniques, and choosing the right underwater photography equipment. Kawika has shot extensively with a Canon 10D Digital SLR camera in a Subal C10 housing prior to April 2006, and a Canon 5D SLR camera Digital in a Subal CD5 housing ever since. Kawika uses powerful Nikon SB-104 Speedlight underwater strobes to illuminate his subject matter.

Kawika Chetron's underwater photography seminar will take place Friday, February 9, 2006, at 8:00 p.m. Location: New Vision United Methodist Church, 450 Chadbourne Avenue, Millbrae, CA 94030 – ten minutes south of the San Francisco International Airport. Cost for first-time visitors is FREE .

www.ncups.org

Sea Shepherd Launches Operation Leviathan



On Saturday, the 23rd of December [Australian EST(Eastern Summer Time)], the international volunteer crew of the Sea Shepherd flagship Farley Mowat departed from Melbourne. The departure of the ship launches our campaign to intercept Japanese whaling operations in the Antarctic Whale Sanctuary: Operation Leviathan.

The Farley Mowat is expected to arrive in the whaling area during the first week in January where the flagship will rendezvous with the organization's newly acquired second ship, code-named Leviathan. The two ships with over 60 international volunteer crewmembers, a helicopter, and numerous smaller vessels will confront the Japanese whalers on the high seas. The volunteers represent thirteen nations with crewmembers from Australia, Bermuda, Brazil, Canada, Chile, France, Germany, Hungary, Great Britain, Netherlands, New Zealand, South Africa, and the United States.

The Japanese whaling fleet is determined to slaughter more than 1,000 whales in the Antarctic Whale Sanctuary (Photo by Mark Votier)

The Japanese whaling fleet is determined to slaughter more than 1,000 whales in the Antarctic Whale Sanctuary – where it is illegal to kill whales. Japan has doubled its illegal quota of piked (Minke) whales to just over a thousand, and will be targeting endangered fin whales, and for the first time since the early eighties, 50 endangered humpback whales.

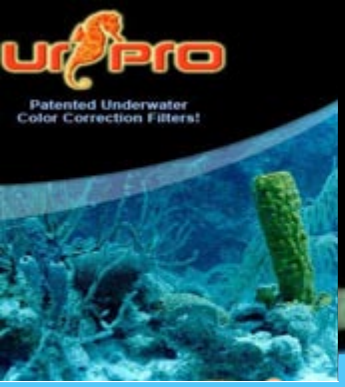
"Sea Shepherd is the only organization in the world willing to go to the Antarctic to intercept the Japanese whaling fleet and shut them down," said President and Founder of Sea Shepherd Captain Paul Watson. "This is an international effort to uphold international law against a pirate whaling operation. We are not going south to hang banners or to film and photograph whales dying. We intend to defend the whales."

Australians have come out in force to support Sea Shepherd in the past several months. During our stay in Australia, over 30,000 people have visited the Farley Mowat in both Fremantle and Melbourne. The crew has given numerous tours of the ship and participated at events around the country over the past several months. Thousands of new Oz supporters have joined the Society. Among them, advertising guru John Singleton and Bluetongue Brewery are supporting the campaign through the launch of their website www.whalesafebeer.com. The citizens of Melbourne have been very generous to Sea Shepherd by contributing tons of food, tools, supplies, and donations that are so vital to the campaign. Australian media coverage has been unprecedented as the momentum of the anti-whaling movement is reaching a critical mass. There is no doubt but that Australians love the whales.

A crowd of supporters were on hand to send off the crew of the Farley Mowat. The conservation vessel flew the flag of Fremantle, Western Australia, when the ship departed. The flag had been given to the ship by Fremantle Mayor Peter Tagliaferri with the request that we fly it in the Southern Oceans.

The ship also flew the Bluetongue beer flag in honor of Bluetongue's sponsorship of the expedition. And, of course, the ship flew both the Australian and the Aboriginal flag as a courtesy to a people who are dedicated to shutting down the criminal operations of the Japanese whaling fleet.

Sea Shepherd Conservation Society welcomes your support. To learn how to support our conservation work, please visit our donation page **www.seashepherd.org/donate.html**



May 5, 2006
COLORFUL tidings
volume 2 Issue 1

URPRO continues to be honored by many professional and amateur photographers from all corners of the globe who use our underwater correction filters to capture the full spectrum of color on their pictures. Many are just discovering the magic of underwater photography while others are veterans who have transitioned through film, video, and cine, and who are now avid digital enthusiasts.
Recently, we received a series of vibrant images along with a letter from Paul LeBourgeois, MD who has used the URPRO filters for many years. His enthusiasm for scuba diving and underwater photography is contagious. With his permission, we'd like to share part of the letter and some of his copyrighted images.

April, 2006
Dear URPRO

…..I was introduced to diving by my father in l960. At this time the basic equipment was mask, snorkel, fins, and a hard plastic back-pack to which an enormously heavy tank was attached. It had the life-saving 'J-valve' which warned when the air was almost gone. I think my Dad and I had the first single-hose regulators made. At this time, there were no pressure gauges, no depth gauges, and no weights…..and we had absolutely no idea that "dive tables" existed. We relied solely on the notion that if we didn't ascend faster than our bubbles, we'd be OK….oh how times have changed!

In 1986 my wife and I took a trip to Bonaire where she rented a VHS underwater camera and housing. Initially, I thought that there would be no better way to waste time underwater than fooling around with this "gadget." Half-way through the dive, my wife handed me the camera to take some footage of her. Upon our return home, I became "motion-sick" sitting on the couch as I watched the footage captured by my unsteady camera movements. But it was too late—I was and still remain enamored at capturing underwater pictures……..

My profession as a pathologist allows me to travel the world and to pursue my passion of underwater photography. Recent travel destinations are focused on Indonesia and Papua New Guinea where I record the variety of colorful species found near the 'Wallace Line.' Through the years, I have used almost every video camera and housing that was labeled as "this year's sensation."

…My first URPRO filter was purchased in about 1990 for the Sony MPK-TRS which was the first housing I could get my hands on that shot 8mm video. Since that time I've tried almost every brand and variation of housing and camera, but I always purchased the URPRO filter because it was the only one that really worked. If I purchased a system with a pre-supplied filter that looked like a washed out jelly-bean, I would immediately replace it with URPRO filter. I don't know how many custom URPRO filters I've had made for my systems, but the most recent is a huge filter that fits over the front of my HD FX1 housing so I can use the internal flip-in device for a diopter to get good macro.

I am humbled, gratified, and proud to experience the magic of the underwater world, and without URPRO filters on my cameras, I would probably have quit long ago, because for me, the devil is in the details, and color is king.

Signed,
Paul LeBourgeois
24 April 2006

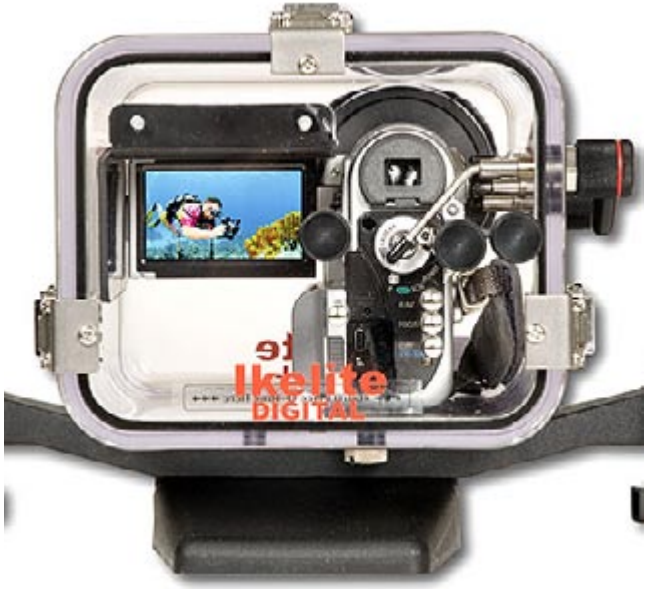
Click on images to view Paul LeBourgeois Copyright Movie Clips

www.urprofilters.com

New Products

Ikelite housing for Canon HV10 Video Camera

Ikelite have announced their housing for Canon HV10 Video Camera. It measures 8” wide, or 10.5” wide with the removable handle bar attached; 8” high including the removable base; and 12” deep



including knobs and port. The weight above water is less than ten pounds and it operates safely to 60m (200 feet).

The clear housing back provides a full view of the camera’s LCD monitor while underwater. Simply open the LDC display when installing the camera in the housing.

Canon BP-310 or BP-315 batteries can be used with the camera.

The housing port is threaded for fitting an optional 67mm threaded waterproof wide-angle lenses such as the #6420 Ikelite W-20. It also accepts Inon (UWL-100 Type 2) and Epoque (DCL-20) lenses.

Canon’s WD-H37C Wide 0.7X Converter Lens can be used on the camera with this housing. Using this lens requires the original port be replaced with either the optional Ikelite Dome Port #9306.70 or Flat Port #9306.71. The Dome Port provides a wider angle of coverage, but has limited zoom and macro range. The Flat Port offers full zoom and full macro capabilities.

There are controls for: Power On/Off, Recording start/stop, Zoom control, Photo, Backlight, Tape/Card, Focus Assist, Function, Focus, Exposure, Display, Digital Effects, Record/ Review, Drive Mode, Menu Button/ Set Dial

The base removes instantly with a unique toggle clamp for traveling or attaching of the optional Pro Video-Lite 3 battery pack. The handle assembly detaches from the housing by removal of just two nuts for packing.

www.ikelite.com

Sony HVR-V1N HD camcorder

Sony is expanding its professional HDV line-up with the new HVR-V1N, featuring 24/30P progressive scan capture based on the 3 ClearVid CMOS Sensor ™ technologies. Added to this is the HVR-DR60, a new lightweight portable HDD recording unit, to allow more flexibility for video production.

The HVR-V1N features a high-resolution, 3.5-inch LCD screen with Clear Photo LCD Plus ™ technology for superb contrast and accurate color reproduction. It is also equipped with HDMI output and 1.2M still picture capture.

www.sony.com

SeaLife DC600

Cameras Underwater are pleased to announce the arrival of SeaLife's latest digital offering; the DC600.

The DC600 is a 6.1 mega pixel, purpose built underwater digital camera. Waterproof to 60 metres and built to last, this camera is brimming with the latest technology and becomes Sealife's new flagship model.

The DC600 is faster than any of its predecessors and has a much bigger 2.5" LCD screen; essential for underwater use. It has a 3x optical zoom and 12 different modes making it suitable for use on land or at sea. The diving mode takes underwater conditions into account and adjusts the exposure control and colour correction.

The DC600 is part of a modular system and be purchased in various kits; the basic camera outfit, the pro set which includes a dedicated strobe, the Elite set which has a strobe and a wide angle lens and the range topping MAXX set which has two strobes and the wide angle lens in a deluxe travel case.

The DC600 range is available now and prices start at £329.99 for the basic outfit, £459.99 for the Pro set, £599.99 for the Elite and £999.99 for the flagship MAXX outfit.

www.camerasunderwater.co.uk

Sea & Sea 860G

The Sea & Sea 860G 6.2 megapixel camera and housing is rated to 45 metres and has a 2.5" LCD screen with a 3x zoom lens.

The housing has bayonet front to take wide angle and close up accessory lenses. There are controls for Power button, Shutter lever, Wide / Tele buttons, OK / Menu button, Macro button, Flash button, Self-timer button, Voice memo button, Exposure / Delete button, Mode button (Still, Play, Movie).

www.seaandsea.com

Gates tripod

Featuring widely spaced and fully articulated legs, the Gates tripod provides a stable platform for video housings.

Each leg is extendible from 7 to 18 inches and can be folded when not needed.

www.gateshousings.com

Sealux HDX200 for AG-HVX200 DVCPRO HD

The SEALUX HDX 200 underwater housing HD3 for the camcorder Panasonic AG-HVX 200 and the superior technology of the camcorder set new standards in the high-definition picture quality also for use underwater.

The SEALUX HDX200 housing makes it possible to fulfil effortless all demands on professional video recording up to 90m water depth. The new Leica Dicomer HD wide-angle zoom lens and the large dimensioned view finder are particularly suitable for the underwater field. All important functions can be operated via the adjusted handles.

www.sealux.de

Canon WP-DC7 housing for Digital IXUS 900 Ti

The Digital IXUS 900 Ti (SD900 Digital ELPH in the US) is a 10 megapixel camera with 2.5" LCD screen and 3x optical zoom. It can shoot up to ISO 1600 for low light conditions.

The housing is rated to 40 metres with controls for all the cameras functions.

www.canon.com

INON X-2 Canon EOS housing

The INON X-2 houses the Canon EOS 10D, 20D and 30D cameras and incorporates a new 45 degree optical viewfinder.

The EOS 20D and 30D are fully compatible with S-TTL so the INON Z-240 and D-2000 series strobes can be used via the dual optical ports. Nikonos sync connections are an option..

The housing is rated to 75 metres and is machined from aluminium with a Teflon coating. It weighs 2kg and is 178mm (w) x 158mm (h) x 116mm (d). Underwater, with camera and port it weighs 550gms.

Flat ports are available for 60mm and 100mm macro lenses and there is a dome port for the Canon 15mm F2.8 fisheye.

www.inon.co.jp

Aquatica Aqua View viewfinder

Aquatica is pleased to introduce there long awaited viewfinder Aqua View to its line of accessories.

This new viewfinder combines top quality coated glass element to deliver a bright and crisp image of the camera viewfinder, user removable design allows for quick and easy removal for storage and transportation, the body is made of hard anodized aluminum and the exposed glass is made of corrosion resistant material.

The Aqua View will take underwater photographer image taking experience to a new level. The actual viewing area with the Aqua View is 100% of the actual DSLR finder

Developed as an additional improvement to our already large system of accessories, the rugged Aqua View is compatible with our recent line up of camera housing,

The 100 meters (over 300 feet) pressure certification is at par with our housing and is sure to please the technical diver.

www.aquatica.ca

Two views of the Nikon D80 & Ikelite Housing

By Dave Harasti and Peter Rowlands

Dave Harasti:

It took four years for me to cave in but I finally succumbed and upgraded to a digital SLR. For the past couple of years my photography skills had been honed using the Nikon Coolpix 5000 and more recently the Coolpix 8400 and whilst I've managed to get a couple of decent shots out of both camera's I had found the shutter lag to be extremely frustrating. This shutter lag has prevented me photographing many small fish species as all I ever ended up with was shots of their butt…

The Camera

The Nikon D80 was released in September 06 and is a 10.2 megapixel camera that sits on the Nikon digital SLR scale between the D70s and the D200. It utilises an image processing engine similar to the D200 / D2X and has a quoted 80 millisecond shutter lag. The large 2.5 inch LCD screen is fantastic to review images on and the D80 incorporates a new 11 area AF system that makes focusing your images all that much easier. The battery life for this camera is very impressive as it easily lasted 4 hours underwater and took over 300 photo's without going flat. A 2gb SD card will give approximately 250 images whilst shooting the highest resolution jpeg or 130 in Nikon Raw (Nef) format.

The Housing

I'm not sure how they managed to achieve it but Ikelite moved heaven and earth to have a housing designed, built and shipped to me in Australia within 1 month of them receiving the camera! It arrived a week before my research trip to Papua New Guinea which was to provide a perfect opportunity to give the camera and housing a good test run.

The Ikelite D80 housing is surprisingly quite compact and as the D80 is slightly smaller than its Nikon 'cousins', Ikelite have ensured that the housing is also of minimal size. The D80 housing is slightly larger than my Coolpix 8400 housing and even manages to fit in the same travel bag. One major difference in travelling between the two camera's is all the additional ports and lens that are required for the SLR; a drawback when it comes to flying! One excellent feature of the Ikelite housing is that the camera does not need to be removed from the tray to take out the battery or the SD memory card. This is very handy as it means you do not have to keep unscrewing the camera from Ikelite tray.

The Ikelite housing provides full TTL functionality with digital strobes such as the Ikelite DS200, DS125 and DS51. The TTL system can only be described as sensational as it is very easy to change the strobe power output through the slight turn of the strobe control dial that is conveniently located on the back of the housing. With the simple turn of the dial, strobe power can be varied by four 1/3 f/stop increments over or under flash compensation, or seven manual power settings in

Angle of View: 72.4 - 20.2 degrees
Minimum Focusing Distance: 20cm/7.9 in.
Maximum Magnification: 1:2.3
Filter Size: 72mm
Dimensions: Dia 79mm X 82.5mm long (3.1 in. X 3.2 in.)
Weight 455g/16.0 oz

The Sigma 17-70 macro is a versatile lens as these two shots, taken on the same dive, illustrate.

half-stop increments.

The Ikelite housing allows control for all camera functions except the lock switch (which is not essential). Strobes are attached through the quick release handles that allow easy attachment and removal of strobe mounting arms at the touch of a button. One of the huge benefits of the Ikelite housing is that the clear polycarbonate material allows the photographer to check that the o-ring is sealed correctly. This is very important as it allows you to check if any sand, cable ties or other foreign matter are hindering the o-ring seal. The housing is also rated to a depth of 60 metres which is more than enough for most divers!

The Sigma 17-70mm macro lens

The Ikelite housing allows use of most macro, wide angle, and zoom lenses through the use of flat and dome ports and the new 'Super Huge' 8 inch dome port. The 8 inch port is fantastic for use with the Nikon 10.5mm fisheye and the Nikon 12-24mm zoom lens; this port also makes under/over shots much easier to take. Another ideal lens for consideration is the Sigma 17-70mm macro zoom lens; this lens was used on a recent trip to Papua

New Guinea and proved to be very successful behind the 8 inch dome port. On the single dive I was able to take wide angle reef shots and then was able to zoom in nice and close on nudibranchs only 2cm long – the lens is incredibly versatile. My preferred lens for macro and fish portraits is the Nikon 60mm which works very well with dual strobes in TTL mode.

For further information on the Ikelite D80 housing and Ikelite port systems visit the Ikelite website at www.ikelite.com

Dave Harasti
www.daveharasti.com

The large dome port worked well with the Nikon 10.5mm fisheye producing no flare but the test conditions were a slightly overcast day.

Peter Rowlands:

As soon as a new camera comes onto the market there is always a gestation period before a housing becomes available. The length of time depends on the manufacturers construction method i.e. machine a pre-moulded housing or start from scratch. Ikelite have always used the former method and as a result are nearly always the first to market when a new model becomes available.

The Nikon D80 housing was no exception and I was able to have one for a trip to Raja Ampat months before any other housing manufacturers had theirs available. Another point to bear in mind is that, as DSLR cameras become cheaper and the intervals at which new models appear becomes shorter, many aluminium housing manufacturers decide to concentrate on the high end, pro level cameras and don't produce a housing at all.

As a long term aluminium housing user I was interested to gain my first impression of the Ikelite housing and I cannot say that I was disappointed at all. The main polycarbonate body felt very robust and reassuringly chunky. Mounting the camera onto the rear baseplate was easy and held it in position very accurately whilst still allowing access to both the battery and SD memory card.

Fitting the camera into the front of the housing was also easy and the three over centre catches closed firmly showing a nice O ring seal through the transparent hull. This transparency is always useful to keep an eye out should any water droplets enter but I must say that you would have to be extremely careless to allow that to happen. This is a pretty much foolproof design.

In keeping with their design philosophy Ikelite use standard control glands for their 1/4" shafts which may be larger than others but they do allow for the controls to be lifted and repositioned if needed. Where Ikelite housings do differ is in their need to have extra weight added to keep then from being too light underwater. This is done using a weighted baseplate which incorporates handles left and right. The resulting system is larger than most but once underwater this is really not an issue.

Once underwater, ergonomic handling was good with all of the main controls falling easily to hand. With todays DSLR cameras and all of their function buttons/controls it is a near impossible task to achieve ergonomic perfection through a housing but in practice all of the controls which you need to use to shoot quickly are right where you need them.

The other big advantage when using an Ikelite system is their TTL flash system. I was using their D125 strobe and arm connected through the rear mounted sync socket. As a longterm manual flash

The large TTL control knob on the right hand side allows you to adjust the TTL output to your preference. The large strobe sync socket on the left hand side houses solid contact pins which give a good, reliable TTL connection but the downside is that it is bulky and obstructs access some of the left hand row of buttons. That's a minor drawback compared to a reliable TTL connection!

user I have always been used to setting my aperture dependent on the flash to subject distance. With the immediate results of digital cameras I have always found this worked fine for me. However having now used the Ikelite system I am sorely tempted to stick with it because the performance of the circuitry was very impressive and gave me one less thing to think about leaving me free to concentrate on subjects and composition.

Fine tuning of the TTL output was very simple with the rotary control on the right hand side but in practice I found there was very little tweaking needed and I soon became happy to trust the system's electronics.

One of the reasons for the reliability of this system is the larger than normal sync socket. This incorporates the five large solid pins needed to make all the contacts and, once again, it is virtually foolproof. As an underwater photo repairer I've lost count of the number of problems I've had to solve which were caused by using the old Nikonos V flash pins design with their two sprung loaded contacts and three small solid pins. Their design allowed previous model flashguns to be used but, in hindsight, it would have been far better to bite the bullet and use 5 larger and solid pins like those in the Ikelite connector.

As a user of the GS magnifying viewfinder now available on many aluminium housings I knew I would be disappointed by the Ikelite viewing optics but you must bear in mind that the cost of a GS viewfinder is not far off the cost of the whole Ikelite housing so this is definitely not a fair comparison! In practice though the viewfinder image was perfectly usable and the readings under the image were clear to see. The more I used it the more I got used to it.

The interchangeable ports are one area which need care when assembling. The rear O ring is not retained in a groove and care must be taken to make sure it doesn't misalign when pushing the port into the housing. Once properly inserted the port is retained by two push clips at 180° and it is possible to check the integrity of the seal through the housing.

I came away from my trip with the Ikelite D80 system very impressed indeed. This is a very good value for money outfit with few limitations but more importantly it was first to market in an ever changing world. You could wait for a more expensive aluminium housing in the belief that it is more durable and longer lasting but the chances are, by the time you take delivery of it, there will already be rumours about the Nikon D90. And then what do you do?

Peter Rowlands
peter@uwpmag.com

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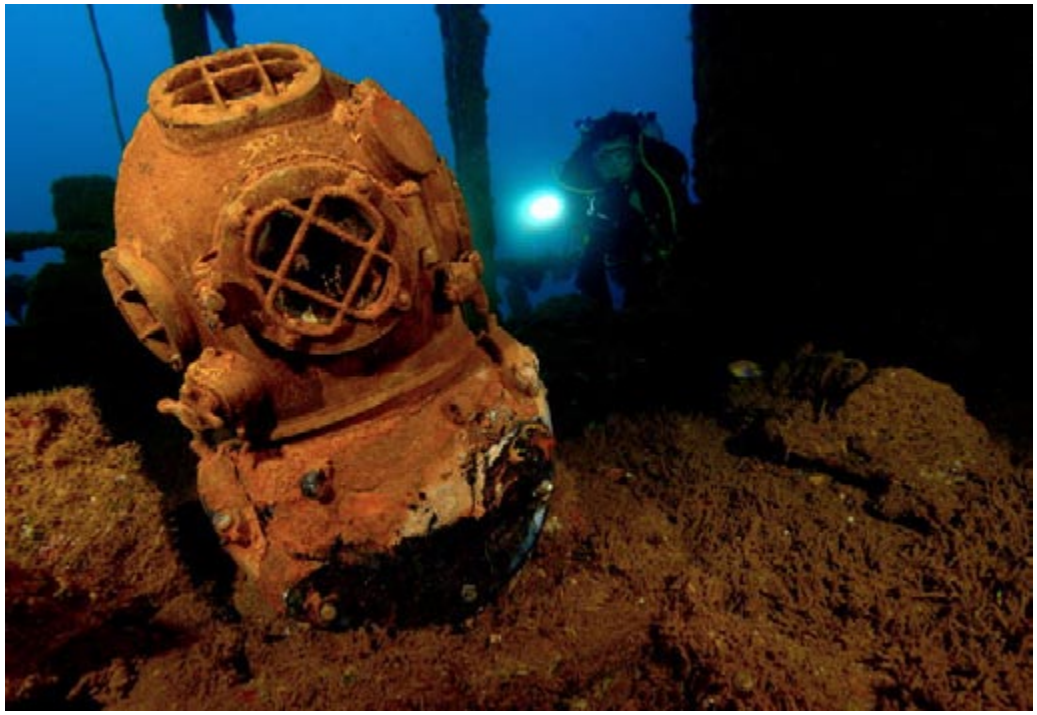
Shooting Below Decks

by Joseph C. Dovala

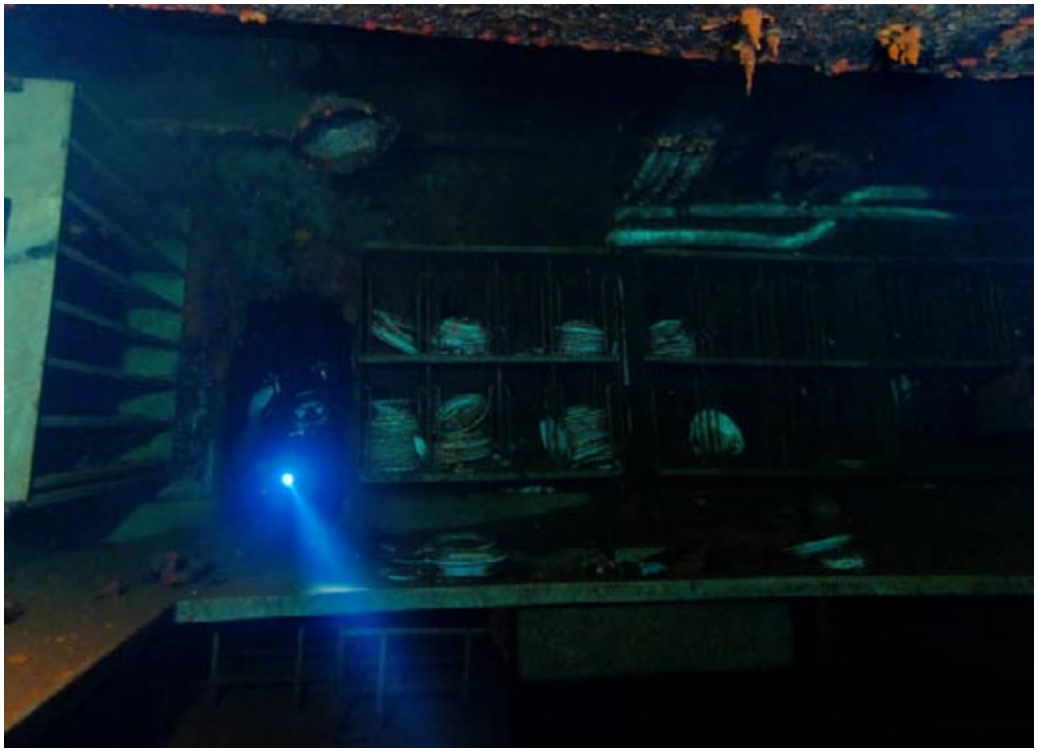


A real treasure. Navy Mk V helmet in USS Saratoga, Bikini Atoll Nikon D2X, Subal ND2, 12-24mm nikor zoom, f8 @ 1/80 sec, 200 iso, twin Sea&Sea YS-120's, half power/diffusers.

Not all sunken ships are the same. There are shallow wrecks, deep wrecks, very old barely discernable wrecks, wrecks sunk in war, wrecks sunk to make artificial reefs, even wrecks placed on the sea bed for Hollywood movies. While each ship has a different history and characteristics they share one thing in common – they all have been transformed into undersea time capsules. The ship's design reflects how life at sea existed in a particular era, and personal effects that went down with them signs a personal signature to those that walked and worked the decks. Even vessels placed intentionally on the bottom as man-made reefs, often have glorious histories contained within their hulls that can be felt by the astute diver during a visit. As artificial reefs they tend to attract, and ultimately, possibly sire their own population of critters from encrusting invertebrates to apex predators. Between the assemblage of marine life and the ships themselves there's no shortage of photographic opportunities. The emphasis of this article will be on bringing back meaningful images from inside the passageways and compartments – AND do it as safe as possible. In no shape or form is this piece intended to be all encompassing text on wreck penetration or photography; but merely a primer of some things to think about.

So you want to crawl inside what's essentially a submerged man made cave, place hundreds or thousands of tons of steel over your head, and then work in near total darkness? The absolute first criterion is to evaluate your skill and desire level long before you book that trip. If you do not have the proper training and gear then entering any overhead environment is foolhardy. Yes, it's done all the time, and every year the fatality statistics show some a mere portion of the results, as the number of near misses don't make the list. There is a BIG difference between managed risk and home grown risky behavior.

Serious wreck explorers make a substantial investment in education and equipment before making penetrations. They also study maps and drawings of the vessel to learn as much as possible before getting wet. Paying close attention to briefings and soliciting information from others is an integral part of the dive plan. The immersion calls for strict adherence to bottom times, air consumption rates, desired length of penetration, and most importantly emergency contingencies. The degree of planning is reflected in their equipment. They carry adequate gas supplies for the objective which usually consists of twin cylinders, but could also be a large capacity single with a smaller tank (sometimes called a pony bottle) for a redundant gas supply held in reserve. Breathing gas is managed based on consumption rates of those divers making the plunge. The highest breathing rate and decompression obligations of the dive are usually the limiting factors for its duration. One common technique of managing gas supply is called the "rule of thirds." One third of the available gas is used for entry, one third is used for return, and the last third is held for emergency use only. Redundant



A guide who knows the layout is priceless. USS Saratoga scullery, Bikini Atoll. Nikon D2X, Subal ND2, 10.5mm FE f8 @ 1/50 sec, 200 iso, twin Sea&Sea YS-120's, full power/diffusers.

Careful fin techniques keeps silt down Nikon D2X, Subal ND2, 10.5mm FE, f7.1 @ 1/50 sec, 200 iso, twin Sea&Sea YS-120's, half power/diffusers.

regulators, multiple powerful lights, guide reels, computer/bottom timer with backups are also required before every significant penetration. Adequate cutting tools - at least two, are a must as well. Besides the cables, ropes, lines, etc., that most sunken wrecks are "equipped" with before they sunk, there most likely will also be a nice selection of fishing line, anchor line, nets, and maybe even diver guide lines left behind by visitors after sinking. A sharp blade for ropes and nylon lines and a pair of shears for cables, wires, and other metals need to be added to the wreck diver's kit.

Techniques and skill development are as important, if not more so, than having the proper gear. Buoyancy and propulsion techniques have to be mastered before swimming inside overhead environments. These two diving inherent skills, while not overly difficult, do require effort and practice. Far too many certified divers, including "advanced" c-card holders, show a lack of ability in this department. Ricocheting off the deck with fins and arms flapping all over the place is not a pretty picture and becomes dangerous quickly in a confined space. Even a small amount of silt kicked up will pretty much negate any chance of capturing good images. The nuances of buoyancy control apply to the entire dive team.

Ideally you want as horizontal a position as possible without needing to do excessive hand or feet movement to maintain it. This can be achieved through shifting a small portion of ballast weight around the body as needed. For instance, if your feet float you can shift a couple of pounds to the lower legs with ankle weights. If head up is a problem you can put a few pounds on the upper

Placing teapot on table. USS Saratoga, near captains quarters, Bikini Atoll.
Nikon D2X, Subal ND2, 12-24mm nikkor zoom, f8 @ 1/40 sec, 200 iso, twin Sea&Sea YS-120's, half power/ diffusers.

Diver ready to enter USS Saratoga, Bikini Atoll. Nikon D2X, Subal ND2, 10.5mm FE, f7.1 @ 1/100 sec, 200 iso, twin Sea&Sea YS-120's, half power/ diffusers.

Heavily reflective bulkheads in dentist office. USS Saratoga, Bikini Atoll.
8) Nikon D2X, Subal ND2, 10.5mm FE, f7.1 @ 1/50 sec, 200 iso, twin Sea&Sea YS-120's, half power/ diffusers.

portion of the air tank. A combination of BC jacket weight pockets and a belt will also spread some of the weight around. Make sure to pay attention to roll, as a little too much lead or gear on one side or the other can make it very difficult to stay right side up. With the plethora of weighting options available to us today it has never been easier to achieve balance in the water. If you can maintain a horizontal position with a foot or two of water beneath you without stirring up or crashing into the bottom, you're buoyancy skills are in excellent shape.

Flailing arms and legs are the single biggest enemy of keeping the water clear inside a wreck so being proficient with your fins is far better if it's not an after thought. Large kicking sweeps suitable in open water have no use inside a confined space. A number of other fin movements such as the "modified flutter" work well and still give adequate propulsion. The legs are bent at the knees and only the ankles are used to power the fins, the thighs are kept stationary. Another popular method is the "shuffle kick" where again the knees are bent upward and you use small sideways motions with the calves bringing both legs out and then back in together. The key is small efficient movement as far away from sediments as possible. Hand movements are also controlled with only gentle minimal sculling or a single finger used to keep balance. Wildly swinging arms will not only dislodge sediment (or a buddy's mask), but also give you a fairly decent chance of having to rummage through the first aid kit after the dive because of skin to steel impact. The wreck diver's mantra, indeed every diver's mantra, should be to keep your hands to yourself and know where your fins are.

It is not only the dive kit that needs special attention for penetration but also the camera configuration. Long multiple arm sections on strobes might be great for open water wide angle but inside a ship they can be grabbier than a drunken frat boy. A single arm on each side works far better. Keeping the strobe arms collapsed parallel with the camera housing body helps to keep a low profile while navigating passageways and hatches. I find that keeping just enough tension on the flash arm joints to keep them in place works best. This way it's a simple matter of pulling them into position and collapsing them again without having to constantly fumble with the ball clamps. Unless you're in a very large compartment such as a cargo hold, you'll generally want the flashes pointed close to 45 degrees, or more, away from the lens direction. Even if you have perfect fining

technique there will always be at least some particles forced into the water column. Ever heard of "thousands of tiny scrubbing bubbles…?" (From an old TV toilet bowl cleaner advert) Well, unless you're on a closed circuit rebreather, every exhale is going to send a barrage of "scrubbing bubbles" heading for the overhead and rust, paint chips, silt, and crud is going to come raining down. The first couple of minutes, or seconds, is when you generally have the clearest water for image making when first entering a particular section or compartment. This is why you don't want to waste precious time fumbling with strobe arms just prior to a shot. For smaller compartments it sometimes is better to send the model in and then just stick your camera through the hatch and fire away. This method keeps your bubble trail out of the compartment and may buy you a couple of extra frames. Once a section is even partially silted out the game is over.

Photographically speaking, lighting is arguably the biggest concern when shooting below decks. While backscatter as mentioned above is a primary problem there are a host of other less obvious illumination issues as well. A full power strobe blast can ricochet off bulkheads like a Hollywood action movie bullet. Even the darker rust/silt covered varieties of older ships reflect more than seems reasonable. Newly sunk artificial reef vessels can positively glow. At other times they soak up light like the office rummy with alcohol at the company Christmas party. The trick is to try and use the reflective light as an ally when setting up composition and exposure. Direct full lighting with flashes can result in harsh murky hotspots with very dark backgrounds. There is little sense of "being" there as from the perspective of an exploring diver. For an example, the image of the hellfighter in the hanger loses much of its mystery when over lit up from multiple high power strobes. Using only diver HID's and a touch of ambient light gives the scene a more "realistic" look, as though the viewer is actually on the dive. Admittedly, this takes far more effort and cooperation from your dive buddies to pull off, so make sure you have something to bribe them with.

Using lower output lighting usually means far slower shutter speeds and wider apertures. Camera stability becomes more of an issue once below 1/30 second give or take. On land, of course, you'd break out the trusty tripod. While tripods can and are used underwater by a number of photographers, they definitely increase the complexity. Taking yet another piece of bulky gear on a penetration has to be weighed against the increased hassle factor and risk. I have used tripods in open water but prefer to try and use naturally existing supports inside of wrecks. Fortunately there are often pipes, beams, cabinets,

Before entering make sure you are properly equipped and trained. Spiegel Grove, Florida. Nikon D100, Light & Motion Titan, 16mm nikkor, f8 @ 1/100 sec, 200 iso, twin Ikelite SS-200's, half power/diffusers.

Almost all available light with only low power from one strobe. HMCS Yukon, California.
Nikon D100, Light & Motion Titan, 10.5mm FE, f6.3 @ 1/1.6 sec, 200 iso, single Ikelite SS-200, 1/8 power/ diffuser.

Only a touch of strobe with slow shutter speed. HMCS Yukon, California. Nikon D100, Light & Motion Titan, 10.5mm FE, f6.3 @ 1/1.6 sec, 200 iso, twin Ikelite SS-200's, 1/8 power/diffusers.

Despite near direct flash this diver blends into background wearing all black. USS Saratoga, CIC, Bikini Atoll.
Nikon D2X, Subal ND2, 12-24mm nikkor zoom, f7.1 @ 1/40sec, 200 iso, twin Sea&Sea YS-120's, full power/diffusers.

etc., that can be used as an impromptu camera stabilizer. Extreme care must be used maneuvering around these objects. Besides the obvious potential entanglement issues, all one needs is solid jagged steel contact with the dome port to end that good nitrogen narcosis feeling. As on land, breathing techniques can help in steadying the camera. Typically some version of holding your breath is used just before pressing the shutter release. For a variety of reasons I try to avoid doing this underwater especially on decompression dives. When I'm doing things right my breathing rate is slow and steady with deep inhales and slow extended exhales. During the last second or two of my exhalation I try to be in position to take advantage of the "natural" interval before taking my next breath. While this takes a little practice, the method works quite well and becomes second nature in no time. The trick is to let the time gap between breaths be conducive to one's own breathing cycle and not consciously extended (that's holding your breath) to get that extra time delay.

Using strictly natural available light usually means having a port, hatch, torpedo hole, or some other opening letting in the sun. This kind of illumination can make for very dramatic images. Mostly this means silhouettes; but by adding a touch of flash and letting the ambient light "take over" the exposure you can create an ethereal quality to the photo. When I shot film my waste basket tended to fill with slides of ambient-light-take-over accidents. With the immediate feedback of digital it has become easier to fine tune just the right amount of over exposure for the look you want. Available light is also the king of black and white shooting. The high contrast ranges can make for very effective grey scale images. Again, with the versatility of digital you can visualize for both color and B&W on the same dive with just one camera. Most image makers I know shoot in color and then convert later on the computer. Better B&W images

Perspective can make mundane interesting_USS Saratoga_Bikini Atoll. Nikon D2X, Subal ND2, 10.5mm FE, f9 @ 1/50 sec, 200 iso, twin Sea&Sea YS-120's, half power/diffusers.

are generally of higher contrast and strong shapes but don't ignore the mysterious look of muted grays and dark contours shipwrecks can provide.

Working with models below decks takes very good communication that starts well before anybody starts blowing bubbles. Underwater instructions must be clear and simple. Often the best outcome requires multiple dives in the same area to figure out the best way accomplish the task. When that isn't possible, learning as much as possible about what to expect from someone else who's been inside is quite useful. And an experienced professional guide is invaluable. Once you've formulated an idea, make sure to talk to your model(s) in enough detail so they won't have to second guess you down below. Adlibbing during a penetration dive is NOT a good idea for no photo is worth jeopardizing the safety of the dive team. Taking the images have to be secondary to all else of the dive exploration. Keep in mind when working with people in overhead situations that they are already task loaded. Avoid hitting them with point blank high power strobe blasts. Watch your own fins. Pay attention to time, depth, and other dive requirements. You can often let some of these parameters slide in open water but not here.

Wearing some kind of color on the model really helps with separating them from the dark background. Lively fins, mask, and gloves are a big help as are red and yellow B.C.'s. They don't have to be gaudy but having something other than light sucking black makes for a brighter image. And make sure to let the model dive. A wreck explorer is always in some kind of action, albeit slowly. Static looking divers staring at the camera rarely exude the excitement of adventurers. Pulling an artifact from the muck or showing a perfect fining technique through a silted out compartment can help share some of the thrill.

To be sure the "keeper" rate is low shooting in this environment. There is increased risk for both you and your equipment. Finding buddies who'll put up with your crazy filming ideas are hard to come by. And there're more than enough challenges for all who venture inside; but the chances for some unique images are definitely under all that steel.

Joseph C. Dovala
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when the last individual of a race of living things breathes no more, another heaven and another earth must pass before such a one can be again."

-William Beebe

TTL in 2007

by Alexander Mustard

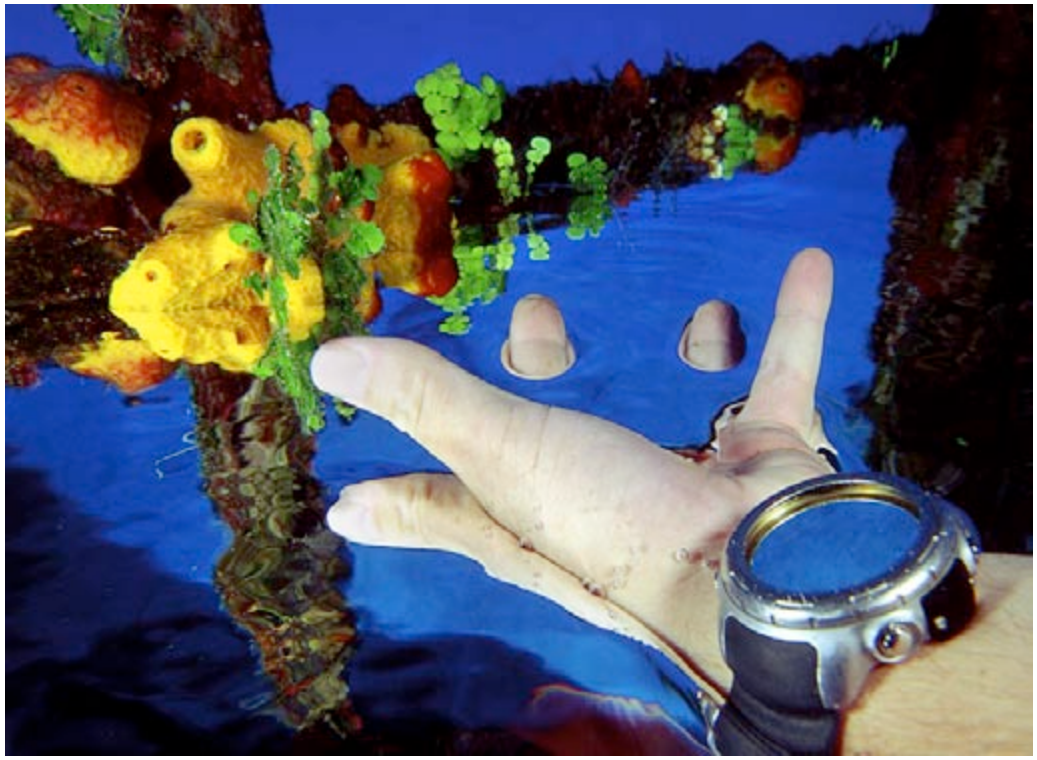
Looking back several years to the early days of the proliferation of digital photography underwater it is surprising what we worried about. One of the biggest concerns for many of us in the transition from shooting film to shooting digital was being without TTL flash metering. (TTL is a system where the camera measures and controls the output of a strobe Through The Lens, quenching the light when the correct exposure has been reached.)

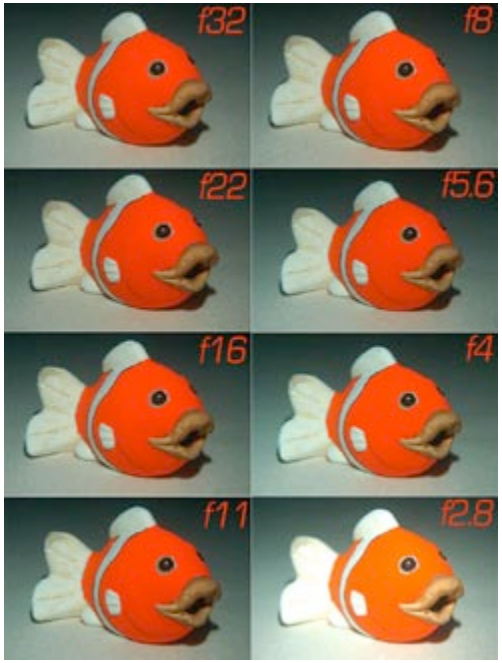
We have come a long way since then. At the time, underwater strobe designers had a technological mountain to climb to make TTL available for the wide variety of cameras we were using underwater. Not only were the likes of Nikon, Canon and Olympus very secretive about the electronic protocols used for their various flavours of TTL, but it also seemed as if they varied the TTL recipe with each of new model of camera. And yet a handful of years later we find ourselves sitting on the top of that mountain. Thanks to innovators and engineers throughout the world of underwater photography digital TTL solutions are now widely available.

But do they work and do we want them? I have regularly written articles over the last few years saying that there is really no need for TTL in digital underwater photography. And if you will excuse the personal bias of this article, now at the start of 2007 I wanted to look again at my opinion on this subject and find out if it is still relevant or whether my views are as dated as a Nikon D1.

But first a bit of history. The reason that this issue exists at all is that TTL worked so well with film SLRs, particularly in macro photography where you could almost guarantee 36 out of 36 correctly exposed images on a roll of film. The problem with digital was and remains that film camera TTL protocols do not work on digital SLR cameras (Fuji's S2 aside), and at the time existing underwater strobes were only capable of these film TTL protocols. Many of us were scared to commit to exploring the world of digital photography without the support of something so fundamental to our technique.

Back in 2002 when I took my first DSLR underwater I dealt with this hurdle by buying a strobe housing and a digital land flashgun (and





On film TTL was de rigeur for most of our shots. Even unusual lighting situations such as this reflection shot of an air pocket in a wreck was easily dealt with. Nikon F100 + 17-35mm, Subal housing. 2 x Subtronic Alphas on TTL. (Right) TTL has been possible with housed strobes since the early days of digital SLRs, but this solution is not without drawbacks – often limiting us to a single strobe, or the low coverage and cool colour temperature of land strobes. This image, originally from UWP 16 shows TTL correctly adjusting strobe output over 7 stops. Nikon D100 + 60mm, Subal housing. 1 x SB80DX in Subal housing on dTTL.

For several years now manufacturers have been introducing innovative products bringing digital TTL more and more into the mainstream. This image was taken two years ago with Inon's D2000 strobe, which produces TTL exposures with many digital compact cameras. Olympus 5060, PT-020 housing. Inon UWL 165 and D2000 on sTTL.

A photo of a parrotfish from my first dive with the Ikelite D80 combo. With the camera on F8 and aperture priority (-0.7 exp. comp.) and the strobe on TTL (no comp.) the system produced shot after shot of correctly exposed images. Nikon D80 + 60mm, Ikelite housing. 1 x DS125 on iTTL.

SB80DX) so that I could continue to shoot with TTL. In early 2003 (UWP 16) I proudly showed off my digital TTL images. This solution was far from ideal. I was restricted to a single strobe and it meant spending more money. At the time I was so preoccupied with whether I could get TTL to work, I didn't stop to think of whether I should.

In reality this reliance on TTL was more dogma than necessity. The hurdle was more mental than physical, but this made it no easier to overcome. Personally I could not be told –believing necessitated seeing. I had to be shown the way, and those who educated me were not the old masters of the film age, but the young turks of the digital revolution, who approached this issue without the intellectual baggage of underwater analogue photography.

What I and many, many others found was that shooting without TTL was easy, and with a bit of practice it soon produced a hit rate almost as high as TTL had on film. And far more than just 36 correctly exposed pictures per dive! Shooting without TTL works so well on digital because of the instant feedback on exposures provided by reviewing images in the LCD screen, allied with the fine-tuning possible in a RAW converter and perhaps most importantly, the fact that most underwater photos are taken from very similar camera to subject distances and therefore require very similar if not identical exposures. For all those years on film TTL circuitry had simply been churning out near identical amounts of light.

I had learned my lesson, and in

Fast moving subjects and a blue background were produced very easily with the same settings as before, despite rapidly changing exposure values. The Ikelite system and standard settings made most images point and shoot simple. Nikon D80 + 60mm, Ikelite housing. 1 x DS125 on iTTL.

an effort to save other people making the same mistakes I wrote about it and even I started a discussion on the Wetpixel forums in summer of 2004 called "TTL Anonymous". The aim of this discussion was to allay the fears of those scared to go digital because TTL was not available to them, by collecting together examples from people who had had the same worries and through experience had learned they were misplaced.

Anyway that is history. It is now 2007 and the technology of underwater photography has progressed massively. First, nearly everyone has switched from film to digital and second many manufacturers have cracked the TTL codes producing reliable converting electronics and/or TTL compatible strobes. It was clearly time for me, such an outspoken believer in manual strobe control, to take the plunge and try one of these cutting edge digital TTL systems properly in the ocean.

This image was taken by my girlfriend during her first few minutes of underwater photography ever. Ikelite's system is perhaps most impressive when it is given to someone who has never taken an underwater photo before and they finish their first dive buzzing with excitement about the images they have got. Nikon D80 + 60mm, Ikelite housing. 1 x DS125 on iTTL (photo by Eleonora Manca).

My weapon of choice was Nikon's latest DSLR, the D80, in an Ikelite housing with iTTL circuitry and a single TTL compatible Ikelite DS125 strobe (thank you to Ikelite and Cameras Underwater in the UK for trusting me with this kit). And three minutes underwater was all it took for me to realise how wrong I had been.

To keep matters simple on my first dive with the camera, housing and strobe I stuck the camera on F8, aperture priority (with –0.7 of a stop exposure compensation) and put the strobe on TTL with no compensation. I even shot JPGS. Looking back over the pictures from that first dive I shot about 50 images in the first 25 minutes and 48 of them are correctly exposed. The Ikelite/D80 combo just took everything I threw at it and produced pleasing image after pleasing image. I was sold.

While TTL can increase your hit rate with one off photo opportunities, it still has a working distance range for any given F-stop. The range is much wider than if shooting on manual strobe settings, but this shot is a rare example of TTL failing to produce a good result, probably because I was a little far away from this angelfish. Nikon D80 + 60mm, Ikelite housing. 1 x DS125 on iTTL.

The system became possibly even more impressive when I let my girlfriend try it on the next dive. This only seemed fair, as it was her D80! She had never taken an underwater photo before and leaving the settings as they were in their fully automatic state she produced a large number of impressive underwater images. Several of the images that illustrate this article were taken by her during her first three photographic dives.

One of the often-quoted arguments in favour of TTL is that it enables you to get an image even when you only have one shot at it. Shooting with the Ikelite system I found that this was only true to a certain degree. The downside is that accurate TTL strobe metering has a working camera to subject distance range for any given F-stop. Get too close

Reflective subjects often confuse TTL, but I feel that the D80 and Ikelite's system have done an impressive job on the very reflective scales of this tarpon. Nikon D80 + 60mm, Ikelite housing. 1 x DS125 on iTTL (photo by Eleonora Manca).

and the strobe cannot be quenched fast enough to stop over-exposure, shoot from too far away and even at full power the strobe cannot produce enough light. So while TTL will certainly increase your chances it is still vital to consider your choice of F-stop, as you would when shooting manually.

The main problem I have with TTL strobe control is when we are using two strobes, which will often be the case in underwater photography. With standard TTL control both strobes will produce the same amount of light – which will not always be desirable. Of course one or the other strobe could be set on a manual power, aimed away from the subject or moved backwards and forwards to vary the power, but all of these approaches are more complicated than simply starting with both strobes on the same manual power and varying them manually from this point.

On the positive side, it is now clear that these systems now work reliably. I was left in no doubt that they are perfect for anyone new to underwater photography, who will be able to produce many pleasing images right from their first dive. Armed with TTL any new photographer will have an enthusiastic introduction into this hobby driven by their successful images.

But what about the more experienced shooter? Would I want TTL on my underwater strobes? Quite simply, yes! The bottom line with all these TTL protocols is that you can always switch them off. And there are always times underwater when the subject or the action is fleeting, currents are ranging or narcosis is clouding our judgement where point and shoot automation will greatly enhance anybody's hit rate. And at other times an experienced photographer would quickly learn to distinguish TTL friendly situations from those when it won't work and adjust their settings accordingly.

I believe that the technology has now reached the point where I would like to have TTL as an option again on all my dives. Unfortunately with Ikelite's current system it is not possible to have TTL with their strobes, unless you also own an Ikelite housing. So I will be investigating other brands. Digital TTL has matured - to dive without it is simply to deny ourselves another tool for creating images underwater.

Alexander Mustard
with photos from Eleonora Manca

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Four Kings and an Ace

by Peter Rowlands

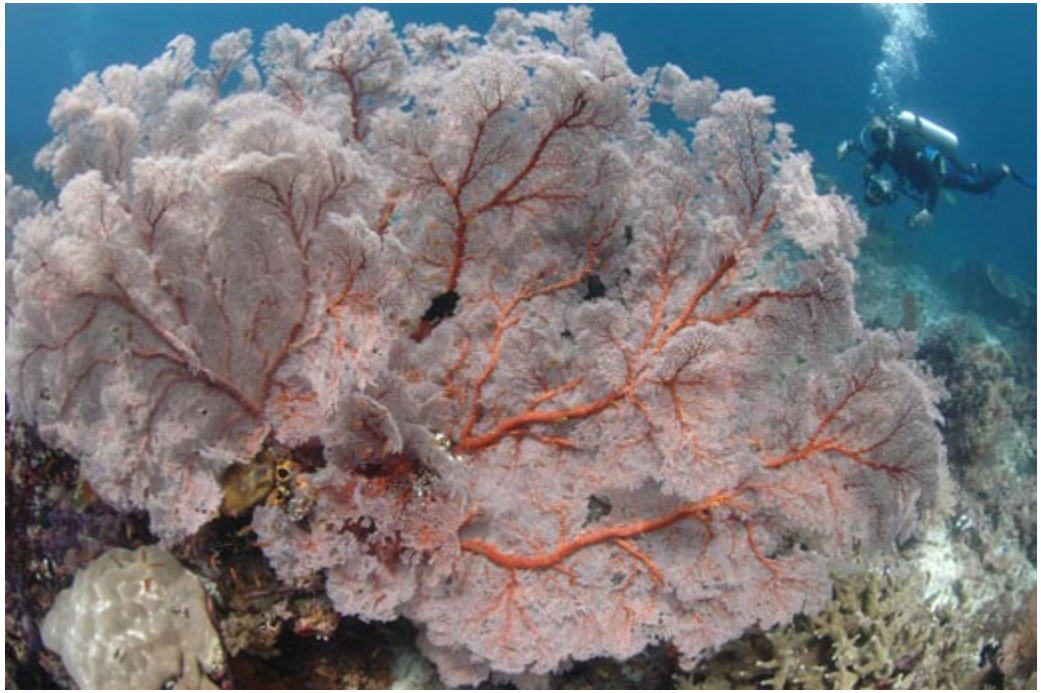
'Seahorse' is a new liveaboard which operates in the Raja Ampat region offering a variety of schedules to some of the most remote diving in the region.

Raja Ampat has, for some time, been the 'must go' location - teeming with fish life and adorned by pristine corals. It has spawned superlatives from top underwater photographers who have dived there and their images have certainly confirmed the recommendation.

But what if you were offered more than Raja Ampat? What if, after your first few dives in RA en route to an almost undived area further south, as you got back into the dive tender babbling about how amazing it all was and the best you'd ever seen, you were told, quite seriously, "You ain't seen nothing yet!" Such was the confidence of one Graham Abbott of Diving 4 Images.

Graham has been a dive guide for over 7 years and he came to realise that keen underwater photographers need to be provided with something not quite 'out of the box'. He started Diving 4 Images to cater for those who had specific photographic needs in terms of subjects or who wanted to operate in an underwater photography friendly environment. The former tended to be clients like professional cameramen like Peter Scoones and Norbert Wu or fish experts like Gerry Allen whilst the latter were above average underwater photographers who wanted to maximise their time underwater and concentrate on their images. He provides a very personal service backed up by his extensive

(Right) The corals are pristine and so big that you need a large object such as Alex Mustard in the background to give a sense of scale.
Nikon D70, Subal housing, 10.5mm lens, Magic filter available light, 400asa 100th @ F5.6



knowledge of the diving world, its prime locations and its exotic and sometimes rare inhabitants.

Diving 4 Images have recently teamed up with the liveaboard 'Seahorse' to provide what I think is a new and exciting combination where the boat owner/skipper looks after the boat/catering and Graham/D4I organise the diving. The owner/builder of 'Seahorse' is an amiable Spaniard called Txus (pronounced like Juice) and he has spent the past two years building the boat locally to a traditional design.

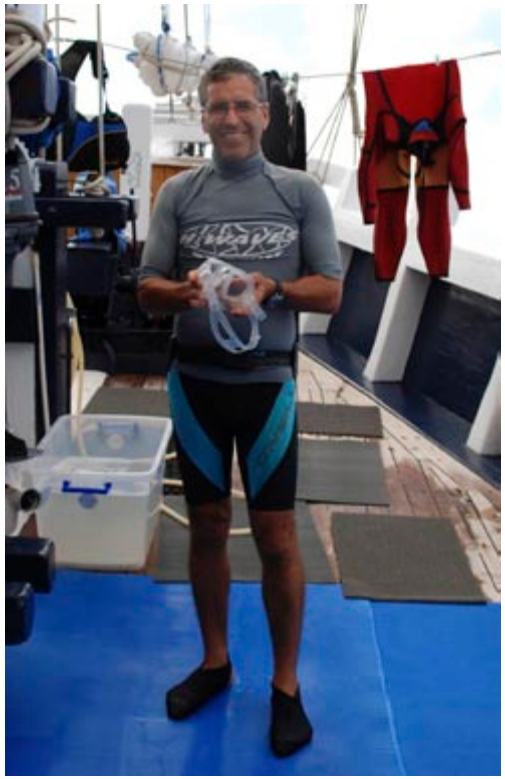
And so it was that I was travelling with Alex Mustard in the slipstream of his latest project (which he won't let me tell you about) to a location which Graham would rather I didn't tell you about in too much detail!

For our trip 'Seahorse' was operating out of Sorong which, flying from the UK, meant London-Singapore, Singapore-Manado, overnight there and Manado-Sorong the following day. Like all 'on the edge' destinations you must be prepared for lengthy travel times. I have no problem with that as, nowadays, you have to go further and further afield to experience untouched diving.

What I do have a problem with, however, is being charged £40 per kilo excess baggage by Singapore Airlines at Heathrow. They graciously waived me some extra baggage allowance but still presented me with a bill for £250 (that's nearly $500 at today's exchange rate or to be more melodramatic, seven hundred and eighteen million, six hundred and ten thousand Lira). Not a good start to a trip especially when my dive bag then got left in Singapore and I had to pay extra to have it forwarded to arrive half way through the trip! Remember it was Singapore Airlines who did this to me. I certainly won't forget them when flying to this part of the world again…

Once on board 'Seahorse' I was generously loaned some dive gear by Tzus which saved the day. I normally travel with a full wet suit but all that was available was a 'shorty'. If you will allow me, I will refer back to this later in my report.

Being a seasoned traveller I carry some back up, stick on lenses for my optical mask which, if you remember, was still in Singapore courtesy of Singapore Airlines. These are small semi-circular flexible lenses which can be attached to the bottom of a standard mask to make sure I can see close up detail underwater. I'd never had to use them in the past because all the other airlines I have used have delivered my bags much more cheaply and efficiently than Singapore Airlines…



Tzus (pronounced like Juice) owner/builder of 'Seahorse' can't decide whether to go for a dive or enter the Tour de France.

Belgian dive guide Olivier (left) discusses the next dive while Graham Abbott of Diving 4 Images concentrates on getting the marker pen back into the jar.

Having attached these lenses in the correct position with the recommended layer of spit I felt sure I would be able to operate photographically to the best of my abilities and for a while, everything went well. It was only when I had to clear my mask that the lenses started to float around and I found myself flicking my head to try and get them back into position like some infuriating Christmas puzzle involving small balls and impossibly small retaining holes. I came up after the first dive looking like the late great Marty Feldman. Fortunately I was rescued by fellow traveller Scott Marshall who loaned me his spare, excellent, Seavision optical mask and the rest is visual history.

One of our first dives was in a pristine mangrove habitat complete with archer fish. Nikon D2x, Subal housing, 10.5mm lens 100asa, 160th @ F8 (Photo Alex Mustard)

For the first couple of days on our voyage south from Sorong we aimed to dive during the day and make passage overnight but on the first night the currents were against us and we had not got as far as we'd planned. Graham apologised but suggested we check out our present location which turned out to be a pristine mangrove habitat up an Amazon-like channel complete with archer fish and a beautiful combination of colours as brackish fresh water met clean blue seawater. There was a real pioneering feel as our diving tenders eased up the channel. A real feeling of seeing nature at its undisturbed best. How strong and healthy it appears yet how easily it has been decimated in most of the developed world.

Our voyage south continued away from Raja Ampat with dives on some of the healthiest, most pristine coral habitats I have ever experienced complete with a vibrancy of fish life which was constant, fed by the nutrient-rich currents. Nature rarely

The dictionary definition of pristine is 'pure, uncorrupted' and the reefs around Fak Fak are testament to that. Nikon D70, Subal housing, 10.5mm lens, Magic filter available light, 400asa 100th @ F4

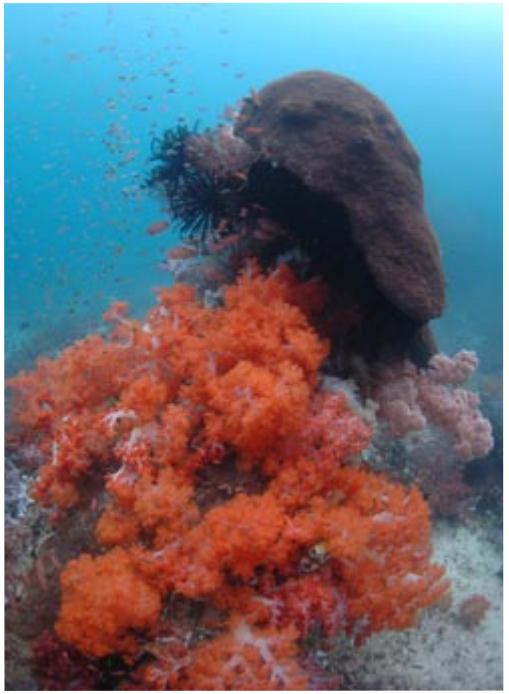
On nearly every dive you could shoot either wide angle or macro and always find suitable subjects. Nikon D80, Ikelite housing, 60mm lens, Ikelite 125 strobe, TTL, 1/125th @ F16

The diving around the islands on our way south to Fak Fak was very impressive with underwater rock formations providing unusual compositions. Nikon D70, Subal housing, 10.5mm lens, Magic filter available light, 400asa 125th @ F5.6

lets you have your cake and eat it though and the visibility was never crystal but, for our trip, always workable. I am certainly no marine biologist but I think I can recognise a harmonic environment when I see one and I've never before seen such perfection underwater. I'm sorry to bang on but it was absolutely breathtaking. Fortunately Alex, who is a well travelled marine biologist, confirmed my uneducated observations. After one particular dive we were both lost for words, which, if you know either of us, is quite unusual.

By now we were into the special location Graham doesn't want me to detail and I can understand why but from a slightly differing viewpoint. He is never happier finding exotic creatures underwater, he knows their names by heart and has photographed them superbly, armed with just a simple digital compact camera and built in flash. For me, however, this was a location of combinations each of which built to form a complete experience. Here we were on an excellent,

Our final destination was my image of 'The Lost World' complete with human remains, untouched palm fringed beaches and teeming underwater life. Nikon D70, Subal housing, 10.5mm lens, Magic filter available light, 400asa 100th @ F5.6



(Above) The icing on the cake was finding and photographing an unnamed species of epaulette shark which walks on the seabed. Alex Mustard photographed it on a night dive and, the very next day, I was thrilled to find and photograph (above centre) a new species of hard coral which will now be called Darth Vader coral. (Top right) The barrel sponges were the size of hot tubs. (Bottom right) A fire urchin provides a home for two Coleman's shrimps.

traditional liveaboard with the surface topography resembling my image of 'The Lost World' and an underwater environment where everything was larger than life. I'm sure Darwin would have got excited all over again.

The other ten guests on board were very well travelled and all agreed that the fish in particular were larger and more profuse than they had seen and then it dawned on my simple brain. Here was an area that was only fished from local canoes for personal consumption. Industrial man had not been here and should never be allowed anywhere near. The natural topography of this location makes it ideal to conserve and protect and I understand that concerted efforts are now underway to achieve this.

By now Graham's marine biological bent was going into overdrive. He knew something we didn't and he wanted to show us. On the first night dive it eluded him but on the second he found his prey – an unnamed species of epaulette shark which walks on the seabed. Dr Mustard was on hand to capture it on camera and I was instrumental in suggesting a name for the dive site, 'Walkers Patch'. Time alone will tell if the name sticks. Time has already confirmed that this is a virtually unexplored area which will no doubt reveal more such unnamed or new species.

All good things must end however and we steamed back to catch

the flight out of Kaimana.

The return journey involved several flights - Kaimana–Ambon, Ambon-Makasar, Makasar-Bali, Bali-Singapore and finally Singapore-London. Unfortunately there was a problem with the flight out of Kaimana. Also unfortunately there are only two flights a week out of Kaimana! Alex and I had built in some overnights en route just in case but this wasn't enough All of a sudden we all found ourselves with very little money stranded in a location which didn't recognize other foreign currencies, didn't have a cash machine that recognized our credit cards and didn't have a reliable internet connection even on dial up!

Eventually thanks to the sterling work of Graham, Tzus and the amazing Ci Ci all our flights were reworked in some way or other and we were loaned local currency. I'm not sure what schedule Seahorse plans for 2007 but if I were you I'd build in a more than usual time buffer both before and after this trip. In fact I wouldn't call it a trip. Think it more of an expedition and you'll go with the right mindset.

Which brings me finally to my borrowed 'shorty' wetsuit… True it fitted fine and kept me warm but, being used to a full wetsuit, my exposed, chubby legs felt vulnerable. It wasn't really a problem most of the time but I did lose my photographic concentration totally on one dive when, for a third time in as many minutes, a substantial remora came from behind and tried to attach itself to my fleshy inner thigh. With hindsight I should have been flattered but it wasn't very funny at the time and, as far as I'm concerned, it's still not that funny.

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For further information visit
www.diving4images.com

São Tomé and Príncipe

with Luiz Rocha

When one thinks about dive destinations, names like the Red Sea, Great Barrier Reef, Indonesia and the Caribbean among others come to mind, however, rare jewels outside the main traveled path can provide pleasant surprises.

Completely outside of the main diving and tourists destinations, the small country of São Tomé and Príncipe lies in the Gulf of Guinea (eastern Atlantic) about 240 km (150 miles) off West Africa, and is formed by two main islands that give the country its name. São Tomé is the largest island (about 859 sq km; 330 sq miles), covered by a dense mountainous jungle. Príncipe (about 142 sq km; 40 sq miles) consists of jagged mountains. About 95% of the population of lives on São Tomé and the official language is Portuguese.

The country has one international airport that receives weekly flights from Lisbon and a few cities in mainland Africa. Accommodations are modest, but there are two hotels with air-conditioning and TVs in rooms. The more adventurous can rent a house downtown for a fraction of the price. The country is located in tropical West Africa, and sanitation is poor, so prophylactics and vaccines against yellow fever are obligatory and against hepatitis and malaria are highly recommended. However, if you use common sense by not drinking tap water, avoiding uncooked food and using mosquito repellent you will be safe from most diseases.

The island of São Tomé lies exactly on the equator (between 0°19'N and 0° 03'S), and it is not uncommon to cross it when you go to dive sites! The water temperature hovers around 28ºC but can reach 30ºC on the beaches or near the surface. Visibility ranges from good to spectacular, and the marine life is abundant and unique. All of these factors make this an excellent dive destination.

Our first dives were at Ilha Rolas, a relatively distant site,

Gorgonian at Diogo Vaz. Nikon D2x in a Subal housing and Nikkor 10.5mm; two Ikelite SS200.

São Tomé and Príncipe lies in the Gulf of Guinea (eastern Atlantic) about 240 km (150 miles) off West Africa, and is formed by two main islands that give the country its name

(Above) Hawksbill turtle at Sete Pedras. Nikon D2x in a Subal housing and Nikkor 10.5mm; two Ikelite SS200.
(Top right) Looking back from inside the cave at Ilheu Santana. Nikon D2x in a Subal housing and Nikkor 17-55mm; two Ikelite SS200.
(Right) African Angelfish at Lagoa Azul. Nikon D2x in a Subal housing and Nikkor 105mm; two Ikelite SS200.

about one hour from the capital (but there is a resort there if you intend to stay long on that side of the island). On this site we found perhaps the best visibility, and the largest and most abundant fish. Moray eels, sea turtles and eagle rays are common sights, but there are very few live corals (true for the entire region of West Africa, which is naturally poor in corals). The dive guides are friendly, and the diving is relaxed and not very demanding.

About two thirds of the way between Ilheu Rolas and the capital São Tomé, there is a site called Sete Pedras. The name in English means Seven Rocks, and that's exactly what

(Above) New species of Parrotfish common in São Tomé waters. Nikon D2x in a Subal housing and Nikkor 105mm; two Ikelite SS200.
(Top right) Close up of a spotted moray** (Muraena melanotis) **found only in West Africa and the Central Atlantic. Nikon D2x in a Subal housing and Nikkor 60mm; two Ikelite SS200.
(Right) Top view of a** Cerianthus **during a night dive at Lagoa Azul. Nikon D2x in a Subal housing and Nikkor 60mm; two Ikelite SS200.

it is, a group of seven large rocks that surface from the shallow shelf in the region. On the seaward side of the rocks there are a few pinnacles that offer some of the best diving in the region. Very large fish and turtles are common sights. Among the sites closer to the capital, Ilheu Santana is one of the best. There is a cave that completely traverses the island and you can dive in one side and arrange with the boat diver to pick you up on the other side.

I was part of a National Geographic expedition that was studying the biodiversity in the

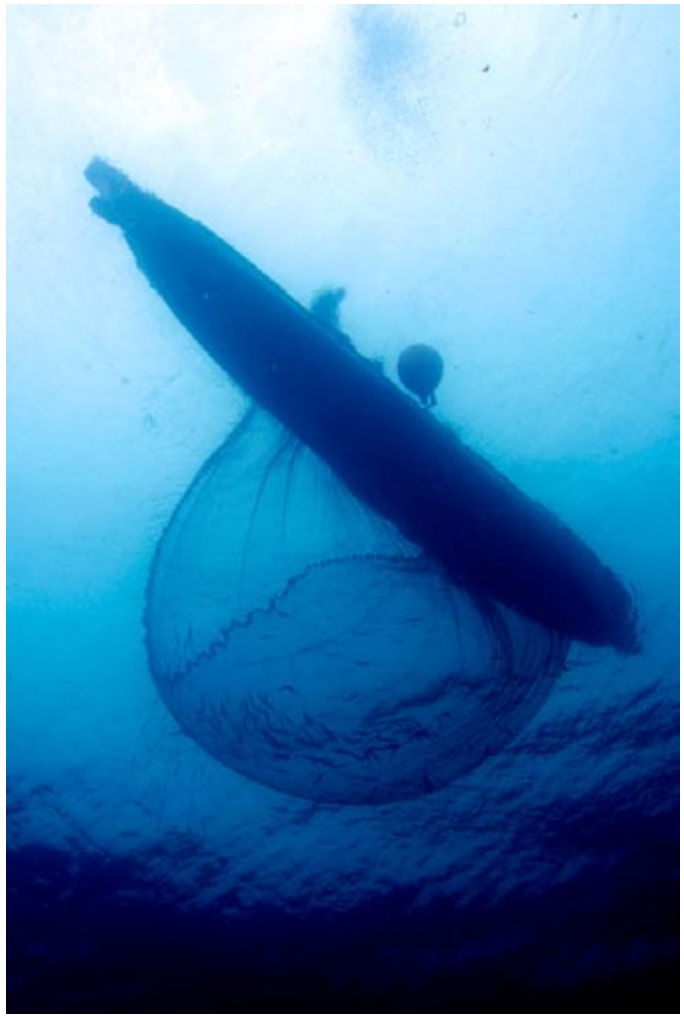
Lagoa Azul, on the northeast coast of São Tomé.

region, and one of the by-products of our expedition was the discovery of several species that are new to science. One of them is a large and very common parrotfish, and the soapfish, a small sea bass and a handful of gobies are also awaiting scientific names.

One of the goals of our expedition was to document as many different habitats as possible, and we went to a site called Diogo Vaz, which is on the opposite side of the island. Immediately upon entering the water, the site vividly reminded me of Tulamben, in Bali. The same black volcanic sand and vividly coloured soft corals contrasting with it. Even the sound of the rocks being crushed by the waves was similar. This site was among one of the best we visited, the colours and diversity of the invertebrate fauna were amazing. On the south side of the bay there is an impressive drop-off and the site is recommended only for advanced divers due to unpredictable current changes. The north side offers a calm bay that is good for snorkeling and for less experienced divers. Visibility is not great at this site, but the colours and opportunities for macro photography more than make up for this.

Hawksbill turtle meat and embryos being sold at the fish market in São Tomé. Nikon D2x and Nikkor 17-55mm, no flash.

Another excellent site for diving is Lagoa Azul. Dives can be done from shore here but a four wheel drive car is needed to reach the beach which is located about 40 minutes from the capital. Once there, the diving is easy and there are excellent photo opportunities along two small walls on the sides of the bay. The bottom is at about 18 m and the site is excellent for night dives, but be aware of



Fishermen using nets to catch needlefish. Nikon D2x in a Subal housing and Nikkor 17-55mm; two Ikelite SS200.

There is not much information about diving in São Tomé, mainly because the country is not very sought after for diving. However, the main dive operator, Club Maxel, maintains a website with lots of useful information. The diving is really good and a welcome change for those tired of repeatedly going to more popular destinations. I highly recommend it.

Luiz Rocha
www.luizrocha.com

the mosquitoes and remember to bring insect repellent for the twilight hours.

The country is very new, it gained independence from Portugal in 1975, and unfortunately, since they have to deal with so many other urgent problems, the environment is not among their top priorities. Fishing is not regulated, and São Tomé is one of the few places in the world where it is still legal to harvest sea turtles. However, there are several environmental groups starting and the situation seems to be changing for the better.

Guidelines for contributors

The response to UwP has been nothing short of fantastic. We are looking for interesting, well illustrated articles about underwater photography. We are looking for work from existing names but would also like to discover some of the new talent out there and that could be you! UwP is the perfect pubication for you to increase your profile in the underwater photography community.

The type of articles we're looking for fall into five main categories:

Uw photo techniques - Balanced light, composition, etc
Locations - Photo friendly dive sites, countries or liveaboards
Subjects - Anything from whale sharks to nudibranchs in full detail
Equipment reviews - Detailed appraisals of the latest equipment
Personalities - Interviews/features about leading underwater photographers

If you have an idea for an article,
contact me first before putting pen to paper.
E mail peter@uwpmag.com

How to submit articles

To keep UwP simple and financially viable, we can only accept submissions by e mail and they need to be done in the following way:

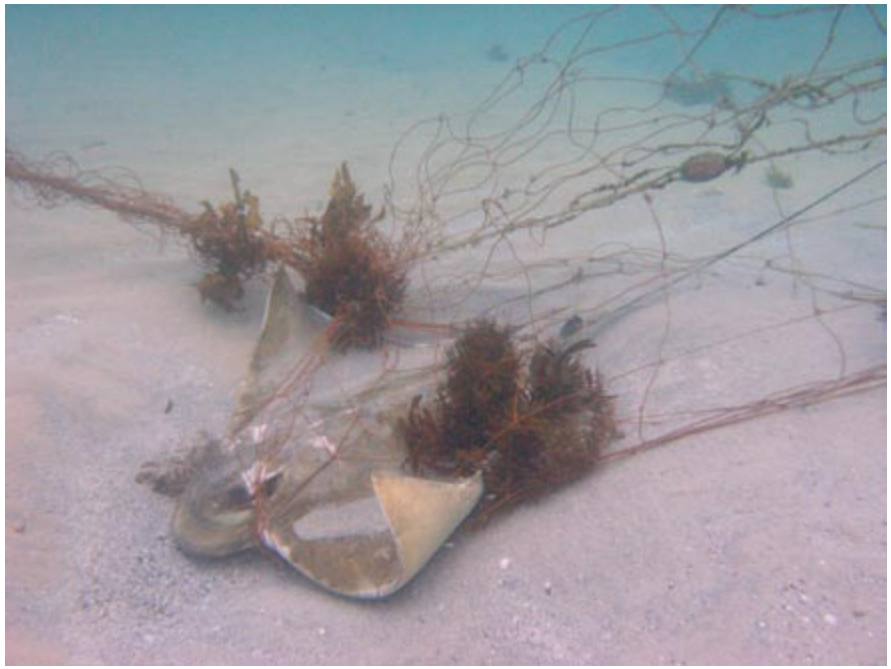
1. The text should be saved as a TEXT file and attached to the e mail
2. Images must be attached to the e mail and they need to be 144dpi

Size - Maximum length 15cm i.e. horizontal pictures would be 15 cm wide and verticals would be 15cm.

File type - Save your image as a JPG file and set the compression to "Medium" quality. This should result in images no larger than about 120k which can be transmitted quickly. If we want larger sizes we will contact you.

3. Captions - **Each and every image MUST have full photographic details** including camera, housing, lens, lighting, film, aperture, shutter speed and exposure mode. These must also be copied and pasted into the body of the e mail.

Parting Shot



Beautiful Sydney is blessed with many dive sites, ranging from the beach headlands, locations inside Sydney Harbour, and reefs along the coast and bays. One of my regular diving buddies and I decided to explore Coogee, about 20 minutes drive south from Bondi Beach. We were curious to investigate the shark nets and I had just received one of the newly released green water Magic Filters.

So on a windy and overcast November morning, we waded through the gentle surf, swam out about 400m, then dropped down in about 10m of water and continued east to the shark net.

Shortly after we got to the net, we found a southern eagle ray tangled in it with plastic threads cutting its flesh and scraping its skin. Visibly distressed, it raised its tail in warning whenever we swam towards it. Like most rays, eagle rays have a poisonous barb on their tail, which they can use for self-defence. As we didn't have the right equipment or support to safely release it, we had to leave the ray. Further along the net, we found the skeleton of an unrecognisable fish, picked clean but still tangled and swinging in the surge.

After the dive, my buddy and I organised some PVC piping to cover the ray's barb, cutting tools and extra divers to help us if we got tangled in the net. Unfortunately, the weather deteriorated. Strong winds and big seas meant we couldn't safely dive for several days. Two days after we found the ray, another dive buddy and I snorkelled out through the surf to see if the ray was still there. Avoiding the net waving in the surge, we freedived down to the ray. It had drowned, immobilised and strangled by the shark net.

This eagle ray was not the intended target of the net. But it was one of its victims. For every shark caught by these nets, many animals such as Whales, dolphins, and turtles are killed as "collateral damage". It should be obvious that I believe the shark nets are ineffective and should be removed.

It surprises me how little people know about the shark nets. They are only in place for 10-15 days per month. When they are there, they only reach up 5 metres from the bottom of the ocean, leaving 5-10 metres of water above them. About a hundred metres long, they're a fraction of the length of the beach. It's no surprise that close to half the sharks are caught on the beach side of the net as they're swimming away!

All the images from this first dive with the Green Magic Filter were taken with the Olympus C-5060 in PT-020 housing, camera set to Program mode (auto exposure and aperture), 400ASA, manual white balance, HQ JPEG format with no post-dive colour, contrast or exposure processing. I was very pleased with the results, especially as they were from the first time with the filter, and taken on an overcast day. The reduction in light (longer exposures therefore more blurring), and the inability to remove the filter during the dive are the main limitations I've encountered since. However these are offset by the absence of backscatter and the ease better colour results are achieved.

What next? For my photos in green water with suspended particles, the Magic Filter is a useful alternative to a strobe. And hopefully the photos from this dive will help stop the shark nets, and help stop further damage to the underwater world we're privileged to explore.

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Do you have a nice shot with a short story behind it?
If so e mail me and yours could be the next "Parting shot".

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