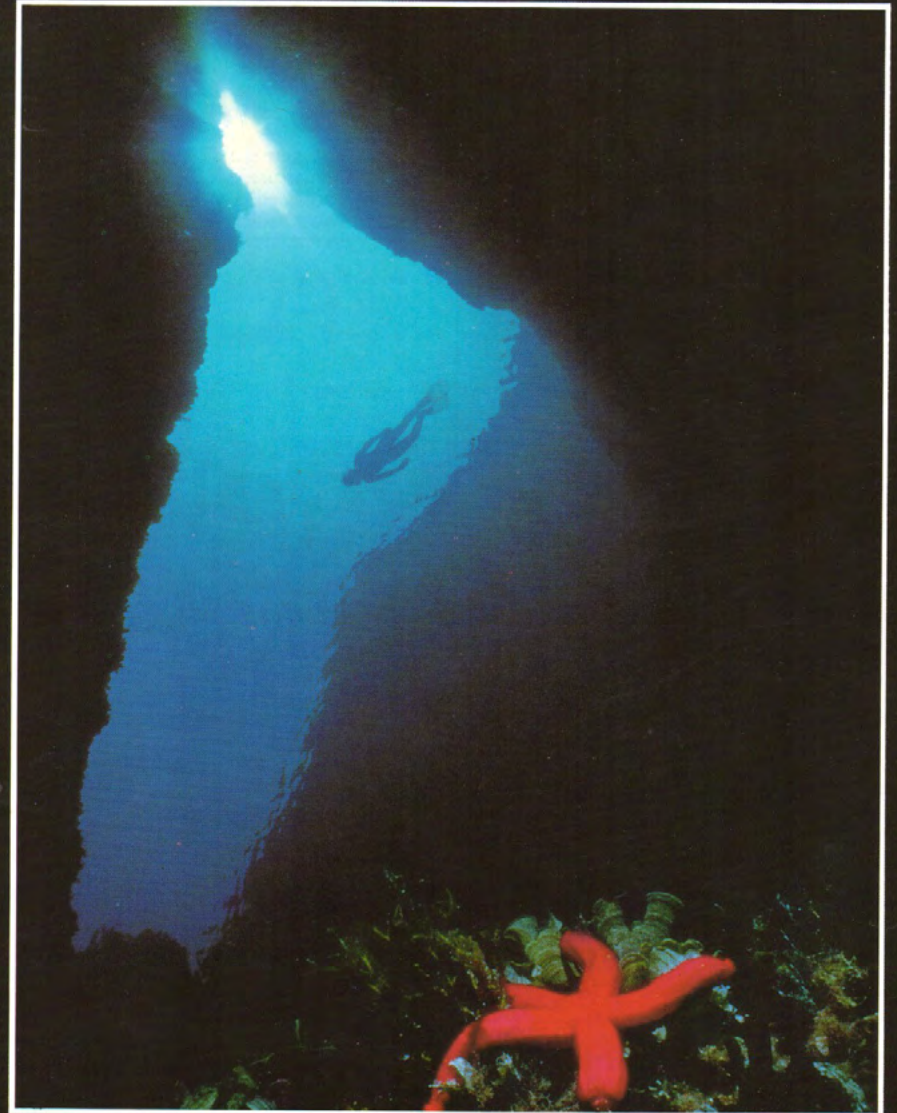


UP Supplement

UP2
Feb/Mar
1987

Underwater Photography



Contents

4. Write UP's. Your letters and comments
5. UP on board Cousteau's Calypso.
7. Product news. The latest gear on show
9. AGFA Competition winner and Competitions news
10. Basic Course. Shutter speeds and apertures
12. UP in the UK at Plymouth, Devon
16. UP Overseas in Gozo with David Nardini and Charles Hood
19. Book Reviews. The Nikonos Handbook
20. Double Exposures. UP shows how without getting wet
22. How was it done? Peter Scoones simplifies an urchin
23. BSoUP explained by Brian Pitkin
24. Photographing floating life with Dr David George
27. Classifieds
30. Short Ends and What's Next

Editorial

1987 promises to be a full year culminating in the Brighton International Film Festival in October. This is one of the oldest established events in the underwater photography calendar and promises to attract worldwide attention both in terms of visitors and entrants. In June the CMAS World Championships take place in Spain and the Editor and Peter Scoones have been chosen to represent Britain - an honour which we hope to repay by retaining the Team Trophy, won last time by Britain's Mike Portelly and Derek Berwin. At home, BSoUP is hoping for a bumper attendance for their "Splash-in" at Fort Bovisand on May 30th 1987, a year they are referring to as "The Year of the Image" where the emphasis is on picture taking rather than being dominated with equipment technicalities. We couldn't agree more and hope that the images spill onto UP's pages for us all to appreciate.

In the meantime, a Happy and Well Exposed New Year to you all.

Underwater Photography is published bi-monthly by Ocean Optics Ltd.
01 381 6108. Telex 265871 MONREF G Attn WJJ204
Subscriptions are available by mail order. Annual costs are £15 UK, £18 Europe and £20 Overseas

CLOSE



The CU 001 Close Up lens fits over the 35 or 28mm Nikonos lens and, with the camera lens set to minimum focus, will let you take pin sharp shots just 10" from the lens.

The glass optics ensure top quality performance and the aluminium body provides rugged protection. Complete the outfit with hot dip coated stainless steel probes and you have a lens system which is built to last and which will not limit your compositions.

Its the best selling close up lens in the UK and is value for money at just £69 inc VAT. (P&P £1.50)

WIDE



For many years, the Subawider lens has helped photographers to obtain high impact shots without having to pay the price of a Nikonos 15mm.

The lens pushes over the 35mm lens and increases its coverage from a narrow 46° to an incredible 90° capable of making murky water appear much clearer.

The results you will get are 'full frame' - that is free from circular fish-eye distortion and no exposure adjustments are needed. At only £155 inc VAT (P&P £2.50), its no wonder they are so popular.

SPOT



There is, quite literally, nothing to touch the Mitylite in terms of performance, size and price. That's why they are so effective and widely used.

They have limitless applications but are perfect for flash aiming lights with their pencil sharp beam (the Americans say its a state of the art, high intensity, Xenon fired lamp module and dioptic computer designed reflector that's the secret). We say they're too bright to look at and will stay working when you're snorkelling to 2000 feet (as you do).

Supplied with 2xAAA batteries, the Mitylite is just £8.95 inc VAT (P&P £1.50)

FLASH



The Nikonos V with its TTL flash metering is the most sophisticated amphibious camera around. Attach it to an Aqua F3 TTL flashgun and you have a system which will give you hassle-free exposures with your very first roll of film.

More powerful (and cheaper) than the Nikonos SB103, the F3 represents the best value TTL gun on the market today and we can't see how any other manufacturer will ever beat it.

4 AA batteries (not supplied) give a 28(m) GN with 100asa and it comes complete with a mounting arm and baseplate for just £279 inc VAT (P&P £5).

FROM

Ocean Optics Ltd
Worldwide Underwater
Photography Specialists

Lawson Wood's Eyemouth bias?

Come on, Lawson, St Abbs is a great place but there's no need to exaggerate - why not stick to its obvious good points for photography, like the viz, the scenery and the Wolf fish?

I hope future articles on dive sites worth photographing will be equally enthusiastic but with more accurate marine biological information. Can you make it a regular series? Sue Hiscock, Pembroke (Yes, regular it will be. UP)

Praise be to UP

Your magazine came like a breath of fresh air. The colour reproduction and no punches pulled equipment tests are great. Peter Scoones article was first class so keep UP coming on the same format and you will have a success

on your hands.

C. Hamilton
Liverpool
(Much appreciated comments and the cheque's in the post. UP editor)

Cautious praise for UP

I would like to add my good wishes and subscription to the pile that you are no doubt accumulating. I am not in the habit of writing gushing letters of praise to magazines, especially not the "thanks for a great mag" type, nevertheless I do feel moved to write something. While I felt the first issue was fine, two points did occur to me: Firstly the "Basics" article is an obvious starting point and no doubt valuable to those setting out, however, if the series was allowed to develop over a period of time, going into the more advanced topics once the basics had

been covered, it would make a guide to underwater photography the like of which had never been seen before. Secondly I realize that Ocean Optics is an importer of equipment but I hope that the magazine will review equipment imported or handled by others: the new Ikelite TTL flashguns for instance are likely to be just as interesting to Nikonos V users as Oceanic flashguns. R. Skelt Oxford (You've tumbled our plot with the "Basics" articles which will build, develop and be bang up to date. Secondly, even though it is produced by Ocean Optics, UP will release news of all relevant products from any manufacturer who cares to submit details. We have written and spoken to all the UK companies to encourage them to send product details.

With reviews rather than news/press releases, we would be shortsighted, from the magazine's point of view, to limit these to our own products and we have no intention of being biased in this or any other section of the magazine.

That "wrong" wreck

When I was at Ras Mohamed, I dived and photographed a wreck called the "Julanda". It looks very much like "that" wreck! P. Collings Northumberland (Quite right, admits red faced Rowlands)

Buckingham Palace replies

We sent a copy of UP to Prince Andrew, The Duke of York, and received a kind letter of thanks.



Anchored off Archway Island, the most southerly of the Poor Knights Islands, Calypso has an unmistakably attractive line but clearly visible are extra mooring lines from her stern which go ashore onto the Poor Knights - a nature reserve which supports at least one almost extinct species of marine bird. Landing is forbidden as any rodents would decimate not only the endangered species but also all of the other seabirds which nest on the Islands. These ropes were perfect vehicles for rats to leave Calypso and set up a devastating home on the Islands. Calypso was there for about 3 days before this was pointed out and the ropes were removed.

Engaged upon their 5 year "Voyage of Rediscovery", Captain Cousteau and his crew have begun their largest and most ambitious project, even by their own exacting standards, and were recently in New Zealand - a country which they had never previously visited - to film the varied underwater life from the near tropical north to the glacial south.

It was with fortuitous timing that UP Magazine ran into (no, not literally) Calypso, anchored off the Poor Knights Islands, 15 miles off the north east coast of North Island New Zealand. These islands are a nature and marine reserve both above and below the waterline and will form the centre of a future UP feature on the area but, for the time being, were the centre of attraction for 76 year old Captain Cousteau and his faithful team.

A bold approach to the vessel led to an introduction to the ship's resident underwater stills photographer, Norbert Wu, who was unable to invite us on board whilst they were at sea but suggested a meeting when they returned to Auckland Harbour in the next couple of days. This initial encounter was made all the more sweet when it was revealed that both Ocean Optics and The Underwater Photographers Handbook were institutions which were already known to the photographic crew. It was only by providing Norbert with a hastily stolen copy of "UP" magazine that the Calypso

filming crew received the vital third ingredient to help them in their work....

Auckland, the bustling unofficial commercial capital of New Zealand, was playing host to Calypso during her stay and had provided berthing facilities in the main docks right in front of the high rise office blocks which contribute to the Auckland waterline atmosphere without dominating it. How strange it must have felt for a French vessel to be berthed so close to where the Greenpeace's Rainbow Warrior had come to such a tragic end following an arrogant and almost farcical French sabotage attempt. It appears that the French can be oblivious to any such delicate situations and treat the future project as their next priority and tend not to dwell on past problems, when it suits.

However, laying aside all political sensitivity, UP's chance encounter on the ocean led to an invitation to go on board Calypso and look at the filming and photographic facilities which had, in the past, produced so many riveting underwater documentaries, the appeal of which had reached all levels of society throughout the world.

Of a usual crew of 27, the filming crew numbers just four - one land, one land sound and two underwater cameramen. The other 23 must be engaged in subservient maintenance (the yellow one we saw looked like the original used in the first series of Cousteau films back

in the early '70's), helicopter support, on board catering, media presentation and, lastly, general diving duties.

On board Calypso, UP saw where the movie cameras are stored and loaded and came away with a brand new claustrophobic feeling never encountered in 15 years of poor viz diving. This was echoed by the crews quarters where even a cat would feel cramped so we presume the rest of Calypso's 130 foot presence must be devoted to scientific laboratories, observatories and complicated control centres (or maybe its the galley, food store and state rooms for on board and visiting dignitaries). However, for a vessel whose sole aim is to produce underwater footage, this allocation of space seems well out of constructive proportion. The impression gained is that space is at a premium but the priorities for allocation of that space seem to be at odds with the work in hand.

In the hope that Nikon were using Calypso divers to field test the Nikonos V1, UP asked about the underwater still cameras but were shown a standard range of Nikonos equipment which would not be out of place in any keen amateur's carrying case. The main difference being that Nikon Japan provide Calypso with all the equipment they want/need! In addition there were camera's in housings and the usual array of underwater flashguns from most of the

THREE KINDS OF CLOSER ENCOUNTER...



- * Anodised aluminium tubes with stainless probes.
- * Available individually or as a set.

- * Colour coded for ease of use.
- * Removable probes for easier access and composition of macro subjects.

1:1 or 1:2 REPRODUCTION £39.95 each + £3 P&P: COMPLETE SET INCLUDING EXTRA PROBES FOR 1.5:1 REPRODUCTION £79.95 + £4 P&P. Further details on request.



Ocean Optics Ltd

COMPREHENSIVE CATALOGUE:
UK £2, EUROPE £3, OVERSEAS £4. 50% REFUNDABLE
MONDAY-FRIDAY 9.00 am-5.30 pm
SATURDAY 9.00 am-1.00 pm



major manufacturers but all the equipment had difficulty claiming a permanent place/locker of its own. The resulting level of unreliability (yes, they have just the same problems as us) could be blamed partly on this poor storage.

It turned out that, to our mind's incredibly, Norbert Wu was in fact the first full time underwater stills photographer ever to be aboard Calypso. His job is to produce material to illustrate a series of books planned to accompany the filming series. His presence was as a result of simply sending a portfolio of his work to the Calypso/Cousteau Society and being summonsed as a result. You don't get anywhere by sitting at home.

Accepting that stills are not as important as moving images to the Cousteau voyage, UP was shown their array of cine cameras which were all identical behind their dedicated lenses. Each camera has been designed to give the best optical performance without the need to be able to accept different lenses. Ultra-wide, standard and macro lens cameras cover the range needed to capture the action on 16mm film, lighting being provided by both self-contained and surface powered underwater movie lights. 8mm video, and in fact video of any kind, is only used on board Calypso for in-house use/information. The broadcast quality work is left to conventional 16mm film which has, and will for some time, prove both strangely economical and optically superior. These 16mm cameras looked the same as those used to film *The Undersea World of Jacques Cousteau* in the late 60's and early 70's. Are we to assume that little progress has been made in camera design and function since then? We also understand that the filming personnel were well established and had been on Calypso since the early days.

No definite filming schedule has been planned prior to the voyage. The brief is to dive the area and film what they

Top left
The on-board artist seems to specialise in caricatures with the Boss clearly visible centre top. A translation would be appreciated (it'll no doubt be full of Calypso in-jokes) as the UP french department stopped at O level and can only "Oui ou Non" when called for.
Top right
The 16mm cine cameras were specially

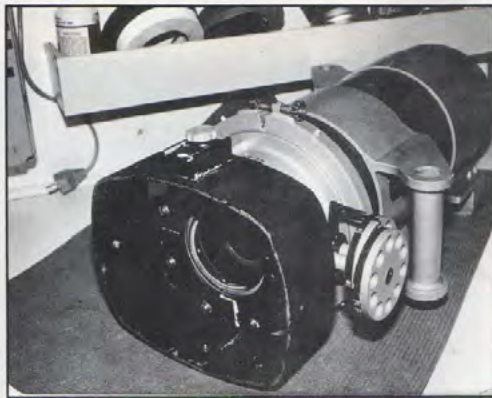


find rather than go with specific shots in mind. This leaves Cousteau and the film crew with flexibility to react to local conditions.

Still in evidence are the designer back-packs each containing triple titanium bottles, the silver suits and divers helmets which complete the wardrobe.

Above decks once more and into the strong Auckland sunshine saw a small crowd of interested admirers lining the dock, drawn no doubt by the fascinations of yesteryear, by the irresistible attraction of the pioneer spirit and by the legend that the ship takes with her wherever she goes.

built using Bell and Howell movements. There are many units on board, each with dedicated lenses to keep simplicity and reliability to a maximum.
Below
The cover is removed from a set to reveal three light titanium bottles. These provide the capacity of a twin set with the weight of a single. Stylish silver paintwork completes the hi-tech image.



Peter Rowlands

Product News

NEW VIDEO AND SLR HOUSINGS

Ocean Optics are now importing housings from Plastmeccanica, Italy. Their range includes housings for autowind compact cameras, 35mm SLR cameras and 8mm video cameras as well as a flashgun housing for use with SLR housings or Nikonos cameras. The two SLR housings will accommodate most cameras, even with a winder. The two video housings will take the Sony 8mm CV8AF and all those which look identical (there are several). All of the range are manufactured from injection moulded polycarbonate with substantial wall thickness and strong designs.

Prices being quoted are £60 for the compacts, £200 for SLR housings and £1200 for video 8.

A wide range of accessories are available from dome ports to mounting arms and lights.



The SLR housing (above) is available in two versions to fit most cameras and some with winders. The video housings (left) can come complete with two banks of lights and a battery pack under the housing.

FISH ID BOOKS

Also from Ocean Optics are identification books and waterproof guide cards published by Jerry and Idaz Greenberg. Titles in the cards include Fishwatchers, Marine invertebrates, Beachcombers with field guides for Hawaii, Red Sea and The Great Barrier Reef. Prices are £2.95 each.

Two books are *Sharks and other dangerous sea creatures* (£4.95) and *Beneath Tropic Seas* (£7.95).

A waterproof Guide to corals and fishes is only £8.95 for 64 pages of colour identifying 260 species.

UP will review them all soon.

681 6108

SEA & SEA WIDE ANGLE LENS FOR NIKONOS

Sea & Sea have announced a new supplementary lens, the SWL 16 which will fit both the Nikonos and Motomarine 35 cameras.

The SWL 16 screws into the filter threads on a Nikonos 35mm lens, and increases the angle of coverage to 91° underwater.

The 35mm lens must be set at infinity and an aperture of between F5.6 and 22 should be used.

UP will be conducting a full review of the SWL 16 in the next issue so that's another reason to fill in your subscription form.....

The importers are Sea & Sea UK Ltd, Alexandra Lane, Torquay, Devon.



Sea & Sea UK inform us that with the arrival of the SWL 16, they will no longer be importing the Widelens 17. In addition, they will not be importing the Motomarine 35 Splash camera as the UK price exceeds that of the SE version. Finally, the SeaMeter amphibious light meter has ceased production and is no longer available.

More new gear

IKELITE NEWS

The Ikelite 1986/7 catalogue is available and includes details of several new products.

The first is a "CLICKER" which is useful for attracting your buddy's attention in swimming pools and up close in open water. Supplied with a hose clip, the Clicker is £6.95 in the UK.



A TTL conversion is available to update older Substrobe models 150 and 225. This includes modifying the rear module, a new inner front module and also the 5 pin socket. The lead is not included in the UK price of £150.

Other new products include an

adaptor to allow Nikonos SB 103 and 102 flashguns to be used on the Ikelite Arm system. The UK price is £9.95.

The most interesting new product is the Nikonos TTL "T" connector which will allow any two TTL flashguns to be used on the Nikonos V. The connector can even allow different TTL flashguns to be connected i.e. Ikelite Substrobes and Nikonos SB flashguns. UK price £99.95. The Ikelite catalogue (£1 UK, £3 overseas) is available in the UK from Greenaway Marine, Post Office Lane, Broad Hinton, Swindon, Wiltshire. Tel 0793 73666/7

SCUBACHROME JOURNAL

This colourful quarterly publication is aimed at promoting the work of underwater photographers and keeping readers up to date with ideas on markets for work. Included with each issue is a "MARKETFLASH" sheet giving lists of publishers who are looking for underwater photographs together with the rates of pay and deadline dates.

The Scubachrome Journal is available mail order from Scuba Chrome, 4911 W. Grace Street, Tampa, FL 33607, US America. Annual rates are \$30 for overseas and \$25 for U.S.A. and Canada.

AQUAMATIC VHS EDITING SUITE

Peter Salmon of Aquamatic offers a facility to edit VHS tapes which is available for hire by the hour at their Hitchin premises. Video 8 format tapes can be transferred to VHS for editing and a character generator is on hand to add credit and caption sequences. For further details, contact Aquamatic, Unit E, 102 Bancroft, Hitchin, Herts. Tel 0462 52035(Eves)

AQUAVISION 8mm HOUSING

Reaching the UK at the end of February will be these aluminium housings for the Sony Handycam which have a built in wide angle lens to give 90° coverage both above and below the water. Boasting to be the smallest and lightest available, the Aquavision is indeed extremely compact and strongly designed. A complete outfit including the playback unit will fit into a standard Pelican case.

A bracket is available to attach a Nikonos onto the housing for those who want to capture all the action.

The Aquavision 8mm Handycam housing will be £850 from Ocean Optics Ltd, 4 Greyhound Road, London W6 8NX. Tel 01 381 6108.

AGFA Competition "Close ups"



A jubilant Brian Jubb from Scunthorpe won this issue's competition with a very effective shot of a pipefish taken off Knolls Pin, Lundy Island in July 1986. Using a Nikonos 111 with 1:2 extension tube, Brian lit the shot with a £5 flash in a home made perspex housing. Its angle of coverage is narrow and has helped to improve this particular shot by making the subject appear from the darkness.

Using out of date Agfa CT18 film, the pipefish was in 45 feet (15m) of water with the viz around 15 feet (5 m). Camera settings were 1/60th sec @ F22 which gives a nice black background for extra impact. 26 slides were entered and Brian's was an obvious winner.

WIN 10 ROLLS OF AGFA FILM

Next issue's competition is for ACTIVE DIVER SHOTS where the diver is actually doing something i.e. photographing rather than just looking or pointing a torch. The shots can be from any waters and must be 35mm slides. Entry fee is £1.50 per slide.

Please pack them well to arrive

before 10th March so get looking at your shots and you could win 10 rolls of Agfa slide film worth over £40. Look for shots where the diver is prominent in the frame and where it is obvious what they are doing i.e. wrecking, photographing, measuring or similar.

4TH ANNUAL WORLD UNDERWATER PHOTOGRAPHIC COMPETITION, April 4/5th, Florida, USA.

OVER \$5000 in prizes
The South Florida Underwater Photographic Society is seeking international photo entries for its 4th Annual World Underwater Photographic Competition. The competition is being held in conjunction with Oceans Miami Month and Ocean Pro '87 Film Festival held at Planet Ocean, Miami, Florida, USA on 4th and 5th of April 1987. Over \$5000 in prizes along with plaques and ribbons will be awarded for 1st, 2nd and 3rd place in each of five categories plus a Best of Show. Categories will be

Macro, Close up, Close focus-wide angle, Wide angle and Freshwater.

For an official entry form and rules, send an international postal coupon to South Florida Underwater Photographic Society, 1141 NE 142nd Street, North Miami, Florida 33161.

Entries must be received by March 10th 1987.

TOPSIDE PHOTO CONTEST

At Ocean Expo '87, (Details above) sea related shots are wanted to compete for prizes, plaques and ribbons. The winning entries will be published in the July/August issue of I.O.F.'s SEA FRONTIERS and will be shown at the Planet Ocean, Florida during April.

BSOUP SPLASH IN MAY 30TH

This annual event held at Bovisand, Plymouth has three sections - Black & White and Colour prints and "On the Day" where you expose a roll that day. The films are processed, projected, voted upon and the winners awarded all on the same day.

To encourage entries to the above competitions, details of the rules and entry forms are available from:

UP Magazine,

Please include an SAE.

KEEP UP

Underwater Photography Magazine will build up into an invaluable source of information and stimulus. Keep your copies protected and easy to refer to in our special binders capable of holding 12 copies.

These strong binders are black with rich red lettering and will compliment any bookshelf.

To obtain your binder, just send £5.95 and yours will be sent by return.

UP Magazine,



Access and Visa most welcome. Phone with your details for same day despatch.

All you have to do is control shutter speed and aperture before they control you

When taking pictures underwater using the available light filtering down from the surface, you have just two controls to set in order to obtain the correct exposure. The shutter speed and the aperture.

Both of these controls govern the amount of light which will reach the film so your job is to make sure that they combine to provide the correct amount. Too much and your shots will be overexposed; too little and they will be underexposed. Unfortunately, the human eye is not capable of judging levels of light to such a fine tolerance so we have several man made aids to help determine firstly what level the light is and secondly what aperture and shutter speed to use.

Before the days of the amazing electronic sophistication which is now miniaturised and built in to most modern cameras, photographers carried separate light meters (and some still do) to measure the light level before each shot. In their most basic form they were a light sensitive cell which generated a small voltage when light fell on it. This current moved a delicate needle - the higher the light level, the higher the voltage created so the further the needle moved. Calibrating the system with a scale relative to the needle gave a number for the light level which could then be translated into the best combination of shutter speed and aperture. Aren't you glad you weren't around in the 'good old days'!

Man obviously improved on this crude measuring device and very soon there were light meters which combined all of the readings and gave the photographer the correct aperture and shutter speed to use to obtain the correct exposure. With modern cameras, most have such a meter built in and some have systems of such phenomenal complexity or sophistication (whichever way you feel) that it takes a long time to get to know how they work.

Nevertheless, regardless of all this modern development, all you still have to do is to get the exposure correct by choosing the right combination of shutter speed and aperture. (Now do you see how little photography above and below the water has really changed?)

In order to do this, you have something important to take in. Take 10 minutes to stop and concentrate on this next part. If you do, it will sink in, stay with you and improve your photography



Two shots of the same subject show how altering the aperture will affect the depth of field without altering the focus. The top shot was at F2.8. At such a wide aperture there is very little depth of field and almost all of the rest of the photo is out of focus. The shutter speed was 1/500.

To enable F22 to be used to get the widest depth of field, the shutter speed had to be changed to let more light in. At 1/8th of a second at F22, the same amount of light reaches the film as before but, because the aperture has been stopped down to F22 the depth of field is much wider. This has resulted in all of the photo being sharp.



immediately. Right, here goes.

As was explained last issue, most cameras have a range of shutter speeds from 1 second through to 1/1000th of a second. This range is subdivided into equal parts as follows 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250, 1/500th sec. Each step towards 1/1000th reduces the amount of light reaching the film by half. (Going the other way, the amount doubles). This gives the photographer one of two controls to vary the amount of light reaching the film.

The other control is the aperture. Here, a diaphragm in the lens governs the amount of light reaching the film. Apertures aren't as simply marked but

usually go 2.8, 4, 5.6, 8, 11, 16 and 22. Going from 2.8 to 22, the light is halved with each step change (called "Stops"). Going the other way doubles the light each time.

Statisticians may now start to panic as they start to calculate the number of combinations of shutter speed and apertures which there could be but that's where the old fashioned light meter or in-camera meter come into use. What they do is to narrow the possibilities down enormously and give you a combination of shutter speed and aperture which will let the right amount of light onto the film and so give correct exposure.

Let's say for arguments sake that

the meter reads 1/125th sec with F8 will be correct for a particular scene. If you change the aperture to F11, you will be halving the amount of light so the resulting shot will be '1 stop' underexposed. However, if you change the aperture to F11 and also alter the shutter speed to 1/60th, you will counteract each change and the result will be the same amount of light as with 1/125 @ 8 so the exposure will be correct. This ability to choose the combination represents the most important choice the photographer has to make.

If you want a sharp shot of a fast moving subject such as a shoal of fish, you will want to use a fast shutter speed. This reduces the amount of light so you must compensate with the aperture to let more in. If that was all there is to it, we could all go home now but when you 'open' the aperture up, you limit the amount which is in focus (called depth of field). This calls for much more critical focusing. So if you want sharp fast action shots, you have to put up with a limited depth of field.

On the other hand, if you want another shot to be sharp from foreground to background (say an underwater scene with a clump of soft coral in the foreground), you will have to 'close down' the aperture to increase the depth of field. As this reduces the light reaching the film, you will have to compensate by using a slower shutter speed. You will have to keep the camera still when you press the shutter to obtain a sharp result and, if the speed needed is longer than 1/30th you may need to consider using a tripod to hold the camera still enough to get a sharp shot.

Long winded although it may appear, this is the most important aspect to grasp and, once it sinks in, will become automatic in your thinking.

You can relax now and have the next two months to digest this information but think about this.... "What happens if I want to take a shot of a fast moving subject and want it to be sharp from the foreground to the background?"

See you in April/May.

FOR RED SEA DIVING AT ITS BEST.... 1987/8 LADY JENNY V

Price per person - £		November 4	699
January 7, 14	719	December 2	699
April 15, May 13	755	January '88 6, 13	719
June 10	755	February 24	719
September 6	722	March 23	755
October 4 (10 days)	899	April 13	755

† - 2 weeks consecutive sailing available.

Prices include flights, transfers and full board on Jenny V.

Flights from Manchester & Gatwick SUMMER FLIGHTS EX LGW VIA TLV

EILAT - UNDERWATER CLASSROOM OF THE WORLD
Super inexpensive 'LEARN TO DIVE' packages available.

SPEED DIVING

THE CAPITAL COMBINATION



Ocean Leisure Ltd, the diving and watersports specialists, operate a concession on Lillywhites fourth floor. A 1700 sq ft shop within a shop, packed with the widest selection of diving gear, wetsuits and watersports equipment in central London. Full after-sales service and expert advice from experienced staff.

AT Lillywhites

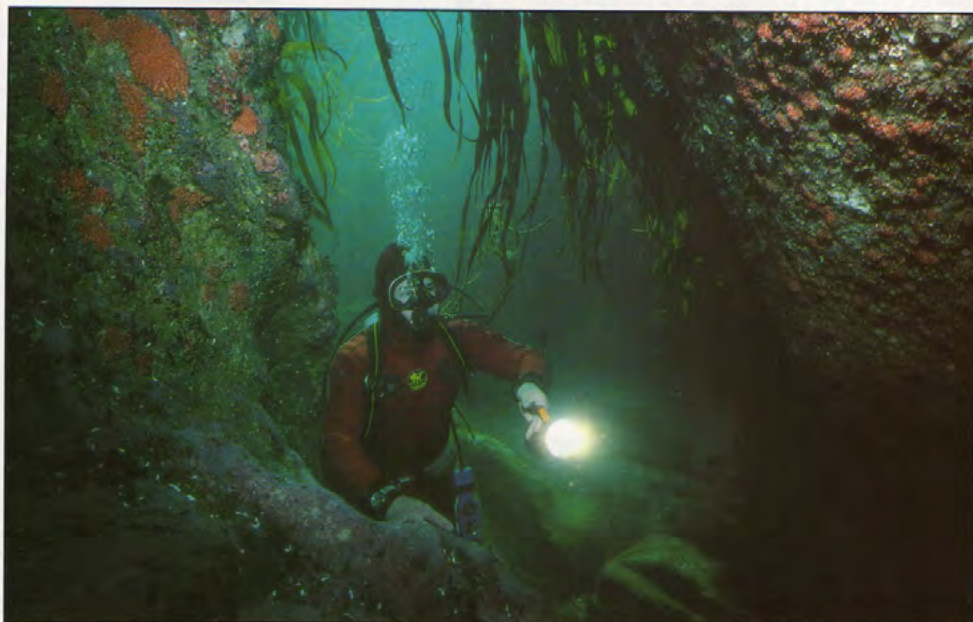
Established 1863, the name of Lillywhites has been synonymous with sports and sports equipment for more than 100 years. Lillywhites started selling underwater equipment as far back as 1948. Today, a member of the Trust House Forte group of companies, it is still the largest single sport goods retailer in the United Kingdom.



The address is Lillywhites, Piccadilly Circus, London SW1. Right in the heart of the capital and directly above Piccadilly tube station.

If you're into watersports, why not pay us a visit next time you're in town? You'll find everything you need.

UP in the UK Plymouth, Devon



Past the River Yealm towards Salcombe, the south facing shoreline is calm in a northerly wind and the large grained sand settles quickly. The result is above average viz and when its good elsewhere, its magic here. Plenty of overhangs and swim throughs make for ideal backdrops to surround the diver. Add a focal point in the form of a powerful torch and you have a scene worth a few frames of anyone's camera. Nikonos 111, 15mm lens, OS 2003, 1/30th @ F8. Kodachrome 64. Depth 10 metres.

It is not by chance that Plymouth is a worldwide centre for marine biology, home of the UK's largest dive centre and a setting off point for most Atlantic and round-the-world yachts, not to mention providing the Navy's main shipyard. Her location and the surrounding waters contribute to make Plymouth a most productive location on the south coast for divers and especially underwater photographers.

Situated at the end of the M5 motorway, Plymouth is the furthest point in the south west which can be easily and quickly reached from anywhere in the country. Going a few miles further to Falmouth in Cornwall could add a couple of hours to your journey, so windy are the roads.

Impressive dive sites are available throughout the area and even the quality of the shore diving is excellent having produced many award winning shots over the years. For the majority of visitors, Fort Bovisand is the first port of call for either accommodation, food, boat launching or air. 6 miles outside of Plymouth, the facilities provided at the Fort are very

comprehensive indeed and, for the underwater photographer who wants to see results quickly, there's even a full darkroom facility available for hire by the hour. As this is used by a wide variety of people, you would be best advised to bring your own developing chemicals and equipment for photographic safety.

Fort Bovisand runs some weekend courses on underwater photography but its main function is to train North Sea oil divers and catering for both amateur and commercial divers can cause a conflict of interest at times.

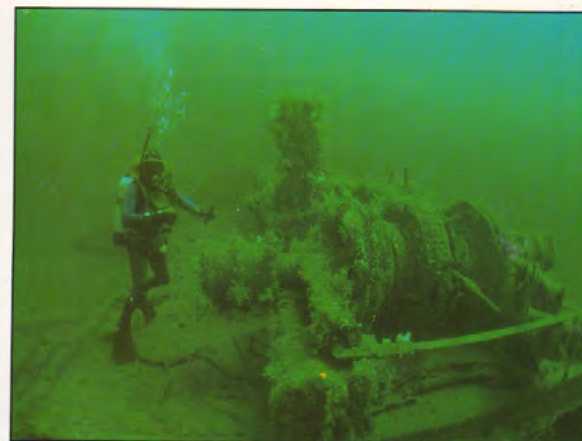
Extremely popular during the summer and especially at Bank Holidays, Bovisand is nevertheless capable of absorbing a large number of divers without feeling too crowded. Parking is a bit tight sometimes but you will only be a short walk from the water wherever you manage to find a space.

Hard boats pick up from the harbour and whisk groups away into the Channel but, for the underwater photographer, the shoreline around the Fort provides easy access for macro photography and diver shots in calmer

weather.

The outer wall of the harbour used to be packed with marine life and animals but the commercial boys decided to test underwater scrubbing equipment and wiped it clean a few years ago. See what we mean about amateur and commercial differences? Fortunately, just a short swim out from the harbour and past the junkyard seabed, there is some very pleasant shore diving where an underwater photographer will be kept engrossed for many rolls of film.

Subject to being churned up in a south-westerly, this area is shallow (not much more than 10 metres) and is a collection of rocky outcrops separated by sandy gullies. The kelp can be a nuisance during the summer but once you get under it you will find a wide variety of marine life from shrimps to blennies and from anemones to tunicates. There's even a few small overhangs to encourage you to get under them and have the sun sparkling through from the background. This is especially useful if you are into double exposures and need an easy supply of starburst sunlight.



In the summer months, cuttlefish come inshore to mate and they are seen in numbers during July just off the harbour. Look for them half buried in the sand as well as in open water.

For underwater photographers, Fort Bovisand is the home of the famous rock pool whose reputation has spread far and wide. Situated just in front of the bar area, don't look for it expecting to find a luxurious space of easily accessible water for, at first sight, the rock pool is a major disappointment. It is small, divided into two and is only accessed by clambering down some ankle twisting terrain.

However, once you are there, and as long as you've got the place to yourself, you will have a perfect underwater studio where the water settles and clears when the tide recedes and does not fill again from the ocean for several hours.

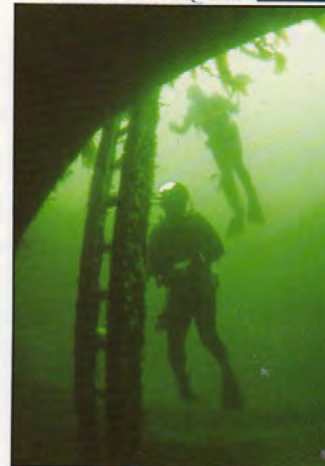
One of the pools is a maximum of 3 metres while the other averages around one metre so many photographers tend to leave their fins behind to safeguard the water clarity.

Some stunning shots have been taken in the rock pool where the stringweed in the shallower pool reaches up to the surface and is especially attractive when slightly backlit on a bright sunny day. For marine life, it depends from year to year what is there to shoot but tunicates, anemones and small marine life are nearly always in evidence. The added bonus is that you never know what the next tide will deposit so its always worth a look.

Being so shallow and controlled, the rock pool is an area where underwater photographers can spend many productive hours when the open water may be far from welcoming.

The gullies just out from the rock

Above: 30 metres down with available light on 50 asa film! Wreck of the Elk, Nikonos V 16mm (180°), 1/8th @ F4 Above right: Exaggerated with a wide angle lens, the anchor chain leads you back into the shot. Camera to subject 15 feet, same as above but Kodachrome 64 1/125 @ F22



Left: Never mind the grain, feel the mood. With 1000 asa and your camera on Auto, hold it steady and shoot into the gloom. These new supersensitive films are not only fast but also remarkably sharp and colourful. Taken at 20 metres by available light, flash would have killed the effect/mood. 16mm full frame fisheye on a Nikonos V with 1000asa Agfa slide film. 1/8th sec @ F4. Below: Bovisand on a busy day but we all manage to get cameras wet and expose film.



pool are remarkable shore dives on calm clear days when you can encounter open water marine life without having to go offshore.

For those who want the thrill of open water, the Plymouth area can offer more variety than most places and, although a south westerly will restrict access to most sites, there is always a lee shore of some kind for you to get your cameras wet.

For wreck photographers, there are several within a short boat trip. The most dived is the James Egan Layne which never seems to get exceptional

visibility but which can be ideal for wreck images and close ups as the shallower superstructure is covered in marine growth. As with most wrecks, using flash tends to destroy the atmosphere so, next time, try using a really fast film like 1000 or 1600 asa and take shots by available light. If you have an automatic camera, set it to auto and F5.6 and hold the camera steady against a solid piece of wreckage. Looking into the larger holds of the wreck will probably give a shutter speed of 1/2 second so keep still! Trial and error is the name of this game but you'd be amazed what these superfast films can produce.



You never know what you'll see in Plymouth. Diving on the same site throughout the year shows how the marine life varies from month to month. In September, there were dogfish in numbers. The above shot was with a Pentax LX in a Hugyfot housing. 50mm macro lens, Subatec S100 flash 1/75th @ F8. Camera to subject is 4 feet. Nikonos cameras are at their best when using ultrawide angle lenses or extension tubes. Here the intricate detail of a Devonshire cup coral has been captured with 1:1 extension tube lit from the top by an Oceanic OS 2000, 1/60th @ F22. Both shots: Original film Ektachrome 64 copied 1:1 onto b&w negative and printed onto Multigrade paper.



You start to get pictures of areas you couldn't see at the time!

There are a host of other wrecks in the area for you to capture on film. They vary from the pleasantly shallow to the pointlessly deep so you have your choice.

For the fish photographer, there are colourful cookoo wrasse and gold sinnies which tend to stick to the rocky areas as well as the more open water species such as pollock and the occasional John Dory. Seasonally motivated squid come and go as they deposit their eggs in shallow water while pipefish hover in

and around the kelp, just long enough to allow a close up frame to be strategically located.

On the sand, dragonets dart around and stop suddenly and then move off too quickly for you to frame and focus. The best technique seems to be to bury the close up frame in the sand and wait for a dragonet to land in the field of view. It's a bit frustrating when they seem to avoid exactly where you want them to go but, with patience, you should manage a few shots within a few minutes so its well worth persevering.

For macro photography, the

Plymouth waters are a Garden of Eden with blankets of multi-coloured jewell anemonies (especially prolific off the Breakwater and around the Shag Stone), Devonshire Cup Corals whose outstretched tentacles make them surprisingly large (1:2 extension tubes are best) and all manner of marine life. Both Jewells and Cup Corals are at their best when photographed from the side but they don't always chose a convenient location so look around before firing away. Incidentally, if anyone knows how to calculate if these anemonies will be 'out', please let me know. They don't seem to follow a sensible pattern.

For diver shots, Plymouth has great potential with several caves for framing, even a few arches (off Blackstone Point) and one or two steep drop offs (Hilsea Point). The water to the east of Plymouth past the River Yealm tends to be clearer as the sand is large grained and settles quickly and the rocks are devoid of the silt attracting growth. Access and visibility are best after periods of northerly winds.

Mentioning Plymouth without referring to the Eddystone may seem a bit lacking but it will be covered in a future issue of UP.

In general terms, the water clarity is workable on all but the most stormy weekends. However, the run-off rain from Dartmoor brings a muddy flow which can take days to settle but, with a tidal flow into a wide section of the English Channel, these waters do seem to clear up far quicker than expected.

With the onshore facilities and the varied waters, Plymouth combines most of the qualities needed by underwater photographers. These qualities are all on display when BSoUP holds its annual Splash-in (May 30th this year) and the On the Day Section sees the shots taken during the day being projected at Fort Bovisand during the same evening. To see such a variety of images come out of the area all in one day is an annual confirmation that Plymouth continues to provide the ingredients we need to produce top underwater images. But try to keep it to yourself.

Peter Rowlands

Main Plymouth Dive shops:

Fort Bovisand Centre, Bovisand,
Plymouth PL9 0AB Tel 0752 48021
Sound Diving, Queen Anne's Battery,
Plymouth Tel 0752 670674
Sandford & Down, 24 Pier Street, West
Hoe, Plymouth Tel 0752 266248

Put yourself in the picture

with
Virgin Holidays
to the Red Sea,
Mediterranean, Caribbean
and Indian Ocean...

Full details from: Derek Edwards,

Do you want to identify the animals and plants you photograph?

**MARINE CONSERVATION SOCIETY
BRITISH MARINE LIFE SLIDE SETS**

The first of a planned series of slide sets of marine life is now available.

COELENTERATES - Jellyfish, anemones, corals.
24 colour photographs taken by 5 British Underwater Photographers and an authoritative text.

Price: Just £7.50 (+ 60p UK post)

From:

Marine Conservation Society

The Marine Conservation Society is a registered charity under the Presidency of H.R.H. The Prince of Wales. The Society seeks to promote the study and protection of the marine environment.

"GOZO - READ THE BOOK AND SEE THE VIDEO"

Get away
to GOZO.

Diving
holidays

on an unspoilt

island, at prices you can afford

* For the new 1987 Gozo divers guide and
free loan of our diving video contact*



Sea gozo

OPERATED BY VACANCES GOZO, AN ATOL BOUNDED COMPANY

DON'T READ THIS UNLESS...

You want to learn to dive at a recognised school with fully qualified instructors, all equipment supplied, accomodation and meals included.

OR

You want to attend a weekend course in underwater photography with cameras supplied or bring your own.

If you do,
just send the coupon to:
**FORT BOVISAND
UNDERWATER CENTRE**

Please send
me details of
diver training
& u/w photo

Name.....
Address.....
.....
.....
.....

UP



A plain narrow gully is a useful photographic prop, especially when you light the sides ever so lightly to give the result much more depth. Nikonos 111, 15mm lens and OS 2003 on low power. 1/60th @ F11. One problem when shooting up like this, especially with a single hose valve, is your bubbles getting in shot. Some argue that they add extra impact if they are in shot whilst others prefer no bubbles for that pure underwater alone feeling. Definitely out are the thin stream of bubbles which come from leaking guages and wrist seals on dry suits.

There is no doubt that the Mediterranean Sea will never provide the "perfect studio" environment provided by the more exotic locations such as the Red Sea; it does however make available spectacular underwater formations which, with a little imagination can turn a relatively barren site into a very productive area indeed. We chose the Maltese islands firstly because they can cater for a small group of underwater photographers who want to go about their business without feeling tied to specific time-tables and sites, and secondly it provides an ideal winter/spring break without having to go on your knees to your bank manager.

The Maltese islands lie between Sicily and Libya, a set of three islands, Malta, Gozo and Comino. Gozo was chosen because of the diversity of underwater seascapes; however, the accessibility in some areas would put even Chris Bonington to the test!



At the entrance to the Inland Sea, it is common to find jellyfish near the surface. In contrast to solid objects, which would become silhouettes with the sun behind them, the inside of this translucent jellyfish is lit by the sun's rays and still allows the sun to burst through. (For further details on jellyfish shots see David Georges article on Page 24). Taken with a 15mm lens on a Nikonos 111 loaded with HR 100 slide film, the subject is no more than 6" from the lens! No artificial light was added to the exposure of 1/60th sec @ F22. Being so close, the photographer can 'persuade' the subject into aesthetic positions. It is always best to take several frames on such subjects as both you, your subject and the background are constantly moving.

All travel arrangements (which were very comprehensive) and equipment hire were booked through Vacances Gozo Ltd. The watersport orientated Calypso Hotel is a short walk from the Dive Centre where unlimited air supply is available. We chose the unaccompanied "dive package" which together with the inclusive car hire allowed us to concentrate on the better photographic sites at our own leisure and, most importantly, it enabled us to familiarise ourselves with an area and its natural varying light conditions. The dive centre has negligible photographic gear for hire and no apparent repair facilities. E6 processing on the island is dubious and will take a minimum of 2 days through the local photography shop. The hotel has 240v with standard British sockets and ample fresh water. The food is much better than in the Red Sea and for night-owls there's a Travolta-hip-swinging-cave!

Gozo is approximately 9 by 3 miles and therefore the longest car journey will be 20 minutes maximum. The best area is the Northwest tip where varied and scenic land topography reflects what will be found below the surface. A good example is the Blue Hole, a blow hole about 10 metres in diameter and 15 metres deep. Given moderate sea conditions the surface waters are mirror like offering sensational wide-angle shots with near perfect sun bursts. At one end there is a natural arch and, at the other, a cave. We found both of these of limited use and concentrated on the hole itself, experimenting on silhouettes and surface reflection shots. This is a popular site with divers and it is therefore better to wait until they have gone or preferably get in before them. With regards to lighting, midday is best for silhouettes and late afternoon for reflections.

Following the underwater ridge to



Not blessed with a profusion of life for the macro photographer, Gozo and Maltese waters do have a plentiful supply of these small anemonies under most overhangs and darker areas. They aren't usually out during the day but at dusk and into the night they open up for lenses. Fuji HR100 film in a Nikonos 111 with an Oceanic 1:2 extension tube. Lit by a Marlin flash 1/60 @ F22

the west you will reach Crack Cave, a narrow tunnel rising from 20 metres to 6 metres. The cave itself could produce some interesting images, however we concentrated on the surrounding area which is rich in canyons and boulders of dramatic size. We would like to stress at this point that images have to be created by sympathetic use of subtle lighting with careful framing due to poor marine life.

Unlike coral seas, where colour is

abundant in most subjects, Gozo sites have to be "worked" to maximise the shapes found underwater. This concept is similar to that applied in Black and White photography where the contrast and shapes eventually produce the image rather than the diversity in colour which may detract from the composition itself. So there you have it; look for it and capture it.

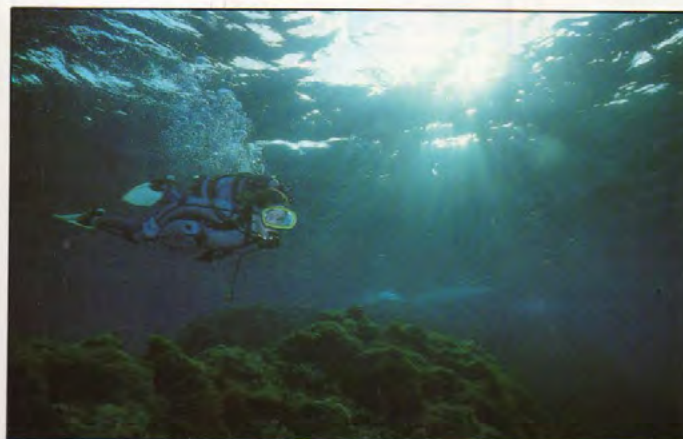
The Inland Sea is basically next door to the Blue Hole and easily

accessible. It consists of an inland "lake" connected to the open sea via a 150m tunnel half submerged and with a maximum depth of 25 metres. This is tripod country! Because of the depths involved careful planning is required. The most useful areas are the two entrances which offer a curtain of light outlined by the vast openings. With the help of a model or the ever present jelly fish, a variety of cliché silhouettes can be produced. The light levels are low and there is limited marine life. A tripod may be used for atmospheric images; it's amazing what film can reproduce that the eye never sees.

All the above sites are very poor for close-up photography, unlike Reqqa Reef which is only a short drive from the Calypso Hotel along the north coast of Gozo. Accessibility is not its strongest point, however, its vertical walls are rich in small marine life. Deeper (30 metres +), shy groupers can be found making them difficult to capture on film. Fish portraits are hard to produce due to the local enthusiasm for spear fishing which make the fish very diver conscious.

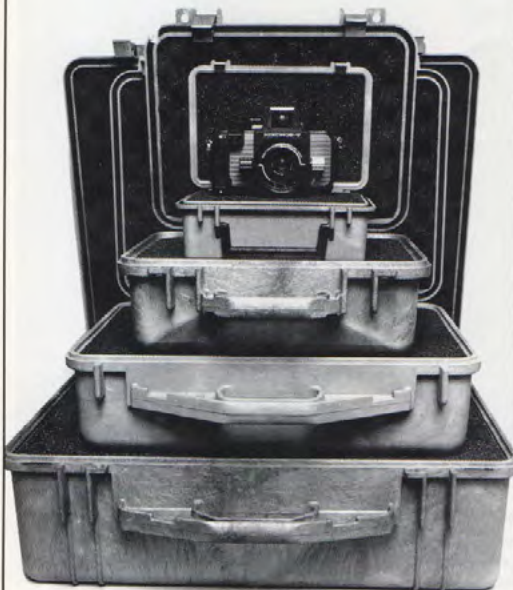
The facilities available take care of the "divers" needs, the underwater photographer will have to work at the rest; the waters are clear, with good underwater scenery. This lends itself to the use of introduced props which the photographer may use to enhance these basic characteristics. Good shooting!

David Nardini and
Charles Hood



The Maltese islands are not renowned for their lush scenery so you must make the most of what you find. By shooting towards evening when the sun is low in the sky, the surface sparkle becomes more dappled and, as the sun gets lower and lower, its colour goes from yellow to orange and eventually to deep red. As most dive tours are out of the water by then, the opportunity for different shots can be limited. Nikon F2 in an aluminium housing. 20mm lens at F8. OS 2003 flash.

A STRONG CASE FOR PROTECTION



Pelican cases come in 5 sizes to carry and protect the most extensive photographic outfits. They are guaranteed indestructible, watertight and have a pressure relief valve for safe air travel.

When you consider the cost of your outfit, the price of a Pelican case is small yet they provide total protection against any environment, especially dive boats, and are supplied with diced foam for you to pluck around the shape of your gear. A padlock and latch safety locks can be fitted to the larger cases.

GUARD BOX 8.5x6.5x3.25". £12.00
PELICASE 12.25x9.25x5.5". £46.00
PELICAN CASE 17.88x11.75x6.5". £75.95
KING PELICAN 22x17x8. £121.95
LONG PELICAN (Not shown)
50x11.75x6.5". £132.

ALL SIZES ARE INTERNAL. Available from:

Ocean Optics Ltd

Make your diving safer now with help from South London's friendly dive shop

AMPHIBIAN SPORTS will help you select the new products that can really increase your diving safety and pleasure

TRAINEES

We will spend the time to take you through your basic equipment.

★ **STAB JACKETS** the successors to the conventional ABLJ: far more comfortable: eliminates the extra straps: now rapidly taking over the market for divers' life-jackets: b/pack, 0.4ltr. bottle and Air II included



SCUBAPRO NEW MASTER JACKET £327.63

★ **Air II** Scubapro's unique 2nd stage demand valve is an octopus rig which also inflates and dumps your ABLJ: patented—nothing similar available on the market: use it to breathe direct from your cylinder and control your buoyancy at the same time: can be fitted to most ABLJs including old ones. **£90.35**

MAIN SCUBAPRO FRANCHISED DEALER

NEW FROM SCUBAPRO

HIGH TECHNOLOGY ULTRA HIGH PERFORMANCE REGULATORS START THE SEASON SAFELY

G250 Two external controls for complete breathing comfort (can be adjusted in water). **£260**

D300 Ultimate in Demand Valves effortless air flow regardless of depth (venturi initiated vacuum assist). **£281**

BEST SELLER
 Scubapro Mark IV complete **£145**

PHONE NOW FOR FAST MAIL ORDER!

MAJOR STOCKISTS OF SCUBAPRO, POSEIDON, BUDDY, VIKING AND ALL MAIN BRANDS • DEMAND VALVE SERVICING • BOTTLE TESTING TO BS5430 • SECOND HAND EQUIPMENT • QUALITY WETSUITS • FULL MAIL ORDER SERVICE • HIRE SERVICE • COMPRESSOR HIRE • £1000.00 INSTANT CREDIT

Mon-Fri: 10.00-6.00;
 Sat: 9.30-5.30
 OPEN LATE EVERY THURS
 TILL 8 pm



Amphibian Sports
 (near Wood B.R. Station)

Book Reviews

THE NIKONOS HANDBOOK BY JIM and CATHY CHURCH

Having been produced in one model or another for nearly 30 years, the Nikonos is the most widely used amphibious camera underwater and has the most comprehensive range of accessories. It is responsible for some of the finest images ever taken underwater and Nikon have led the optical field with lenses such as the 15mm wide angle and, more recently, the 20mm.

With such a wide audience, there is a need for a book written by unbiased underwater photographers. Fred Roberts did it in the past with "Nikonos Photography - The Camera and the System" and Jim and Cathy Church followed with The Nikonos Book.

As the models changed from 111 to 1VA and eventually to V, the Nikonos made each book obsolete but the latest from Jim and Cathy Church is bang up to date (unless the V1 is on the way?) with full details of the Nikonos V and all its accessories.

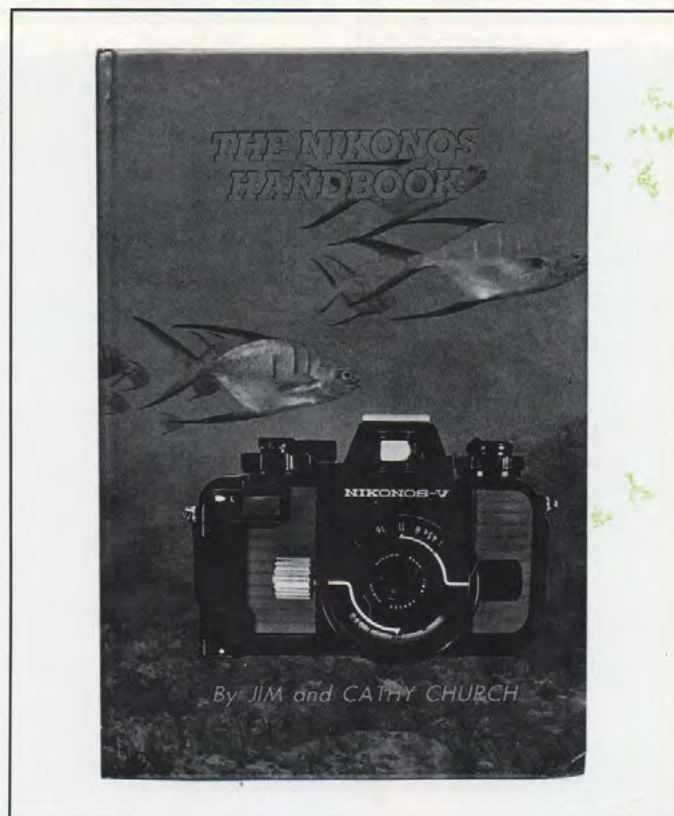
This hardback book contains 167 pages dedicated to the camera system which has, in part, helped Jim and Cathy to earn part of their living from underwater photography. You can feel through their words and delivery that they really do use Nikonos cameras for all of their information is based on experience rather than a casual interpretation of the instruction manuals.

As their previous book dealt with the Nikonos 11 and 111, their latest version deals only with models 1V and V. The contents are extremely thorough and easy to follow and will be an invaluable aid to fit in any camera bag as well as being a constant source of information at any time.

Showing you firstly how to prepare the system ready for use underwater, they go on to describe available light shooting, manual strobe exposures, auto strobes and finally TTL strobes. In each of these sections there are colour shots to illustrate the points in the text and there is also a series of small tests to make sure you are absorbing the information. I understand that Jim and Cathy are teachers by profession and this is reflected in their stage by stage approach which is most effective with such a potentially complicated subject.

Following the strobe details, you are shown how to get the best from each of the Nikon produced lenses - 35, 28 and 80mm. The majority of the book then deals with wide angle, close up and extension tube photography which are, after all, the three areas where the Nikonos excels. Each of the sections is well illustrated with both colour and black and white shots as well as helpful diagrams and drawings. Both Jim and Cathy have travelled extensively so they have a variety of interesting material. No book on underwater photography could ever claim to be telling the truth if there wasn't a section on maintenance and, more especially, on saving flooded equipment. The Nikonos Handbook is without doubt the most comprehensive when it deals with the heartbreaking job of stripping a camera or lens after a flood. For those who have not had the feeling, don't get too smug. The chances of

having a flood at some stage in your career are high so this book is a must for that occasion. Step by step guides are given for the Nikonos 1V and V as well as the 28 and 35mm lenses and both the old and new 15mm's. Although concentrating mainly on the Nikon products, there is a section towards the rear where non-Nikon products are mentioned. This is a small section which should have been expanded if the book is to be of use to everyone. Nikon may claim to produce the best quality but many people have price as their main priority and so choose equipment from independent manufacturers. This aside, The Nikonos Handbook is to be considered almost essential to any Nikon 1VA and V user who really wants to get the most from their equipment and keep it in fully working order. The UK price is £19.95.



UP shows how 2 into 1 will go



The top shot was taken in Guernsey using a 15mm lens on a Nikonos IVA loaded with Ektachrome 64 film. 125th sec @ F11. Interested more in the surface detail and atmosphere, Georgette didn't realise that this would turn out to be such a useful shot! The anemone was taken with a Nikonos Close up outfit on a Nikonos IVA and lit with an SB101. 1/190th sec @ F16. Shot in the waters around Lundy, this was one of Georgette's first dives with a camera in UK waters. The two images were then copied to give the desired scale. This meant during the slides at less than 1:1 so the surrounding areas were masked with black card to avoid unwanted detail. An advantage of doing this, as shown here, is that vertical sections can be taken out of horizontal originals.

The production of double exposures underwater as was shown in the last issue of UP can be a tricky business which requires forethought and planning. As was mentioned in the article, there is a simpler way to achieve them so let's go back to basics and see how you can produce double images which are just as effective but which you can produce without going underwater!

To produce double exposures, you will need to know how to copy or 'dupe' slides. It sounds very technical but is in fact a simple job and is particularly useful

if you want to submit slides to a library or agency but still want to use them for shows etc. Also it's a safe way to preserve your original shots if they are rare or personal favourites which you do not want to be handled unnecessarily.

To dupe a slide, all you do is place it on a diffused light source and rephotograph it using low contrast slide duplicating film. There are several commercially made slide duplicators which incorporate the light source, slide holder and a column on which to mount the camera. These are expensive (around

£200) but make the whole process much more controllable. Most dupes are same size (1:1) so you will need a reflex camera and lens which can cope with this. A 50mm macro lens with a 50mm extension tube will make 1:1 dupes and can even enlarge sections by altering the focus.

A much simpler alternative is to buy a slide copying attachment for your SLR camera. These are much less expensive (about £40) and have a slide holder and diffuser built onto the end of a lens system which attaches to your camera. The slide can be illuminated by

using an electronic flash, sunlight or a tungsten light source depending on the type of duplicating film you use.

To produce copies as near to the original, two special low contrast duplicating films are made by most of the major film manufacturers. They are for use with either artificial/tungsten light or daylight/electronic flash. The colour balance of these two types of light source is different so the right film must be used with the right light source for the correct colour balance. For fine tuning of the colour balance, filters can be placed between the light source and the slide.

If you only want to make a few dupes, the best film would be Kodak SO 366 film sold in 36 exposure rolls for use with daylight/electronic flash. The tungsten dupe film is just as good but is only sold in 100 foot lengths! As all of the duplicating films are E6 process, you can process them yourself or have them done at any chemist/photolab.

The next step is to look through your existing slide material for suitable shots. The most effective double exposures tend to be verticals so look for those first. For the foreground, choose a subject which is at the bottom of the frame and which has the top half as dark as possible. For the background/second exposure, you want the opposite - a light coloured top half with a dark bottom part.

You then copy the first shot, cock the shutter without winding on the film (most SLR's have this facility) and then take a second exposure with the second image in the slide holder. The result will be a double exposure where the foreground detail in the first shot has been superimposed into the dark area at the bottom of the second image. When you expose slide film, the dark areas are where the emulsion has not been altered by light and so are capable of recording another exposure.

Once you have experimented with a few basic images and seen what is possible, this versatile and simple technique will breathe new life into a host of previously ordinary images and will encourage you to think of newer, fresher images.

Don't be too ambitious with your first attempts. If your subjects are too large in the frame, they will probably overlap on the double exposure and destroy the illusion so, to begin with, keep the foreground subject quite small until you get used to the parameters.

The biggest initial hurdle is to decide which two images will go well together. It isn't possible to put two slides on top of each other to see the eventual effect as the dark area on one slide will block the image on the other slide! However, if you use or know someone

with an audio visual outfit, you will be able to project one slide onto the screen and then fade in the second image into the dark area. This is very effective and saves a lot of experimentation. You can even see the effect of varying the exposure on one of the images to mute it or highlight it! Once you have got used to the recognising the sort of shots which lend themselves to double exposures, you can be more adventurous.

The format of the original shots need not be limited if you copy/enlarge a section from a shot. You can then take a vertical section out of a horizontal shot (as Georgette Douwma has in the double exposure opposite), you can even turn them round to suit the composition. From there, you can get fancy when you make the copies by subtle shading to remove any unwanted detail in the areas you wish to be dark.

The possibilities of double exposures are endless. It's time that isn't; but the sight of a successful double image produced from two slides which you thought were destined for the bin is a stimulus which will have you looking through your existing material with a new and inventive eye.

Images- Georgette Douwma
Text - Peter Rowlands

IKELITE DIGITAL DIVE LOG

The ultimate waterproof dive timer and watch. This is it! Forget the others!



Full details in catalogue

MINI 'C' LITE

Now with halogen bulb. Most versatile and durable small waterproof lamp on the market. Only £27.95 Free alkaline batteries Shown used as a strobe aiming light. Details in catalogue

Greenaway Marine Ltd

SOLE UK DISTRIBUTORS OF "IKELITE" EQUIPMENT OF USA

IKELITE. Clearly superior video housings complete with corrected dome optics as standard.

Will also fit wide angle adaptor to give 95°.

Housings to fit most models. Full details in catalogue.



Suppliers and manufacturers of:
UNDERWATER PHOTOGRAPHIC EQUIPMENT

Our new catalogue contains details of the complete Ikelite and Nikonos underwater system. Strobes, torches, Dive log watch, Video housings, Cases, Boxes, etc. The complete system for underwater photographers. Clip coupon for details. Tel: Swindon (0793) 73666/7 Telex 449703

Please supply 1986/7 colour catalogue.

NAME.....

ADDRESS.....

.....

ACCESS No.....OR

Enclosed £1. OVERSEAS AIRMAIL £3

GREENAWAY MARINE LTD

Reg Office. Showroom & Workshop

UP

How was it done?

Peter Scoones gets among the urchins

Anyone who has ever tried to photograph the long spined black sea urchin will know how difficult it is to get any detail into the animal without overexposing the rest of the picture. Together with the consequences of discovering their presence other than by visually, they tend to be a subject best passed by. I was passing by a specimen one day, unusually isolated out on the white sand. I noted in passing that against the bright sand it looked even blacker. The image must have been quite a strong one for it stayed with me for the rest of the dive. On my way back I took a closer look and it impressed me how graphic it appeared.



Next dive my companion must have thought me mad when I stopped on the sand and spent the time attempting to remove the filaments of distracting crud from a decidedly suspicious urchin.

The picture envisaged was to be a high contrast black on white, the shape of the creature to be isolated.

The camera I was using, Mamiya RB67 with a 50mm wide angle lens, was loaded with Tri-X black and white film. In

order to keep all of the urchin sharp, I required a small aperture to give the large depth of field. Also a deep blue filter was fitted to equalise the difference between the bright sand and the blue background. To get the angle I wanted, it was necessary to dig a shallow hole to get the camera lens level with the urchin. Have you tried to dig a hole in sand underwater?

Having got the camera into position I found that there seemed to be a problem with focus, the urchin kept going 'soft'. Each time I refocussed, it went out again; also the spines were becoming agitated, upsetting the symmetry. The urchin had been quite happy sitting peacefully out on the sand but all this activity must have made him nervous about its exposed position and the nearest large object to provide shelter seemed to be me and my camera. It's surprising how fast an urchin can move if it has the mind! After some time elbowing backwards, belly to sand, pursued by an increasingly speedy urchin, I had to give up. But I couldn't be beaten by an urchin so the

working?". As I changed my lens, it dawned on them that I might have found something really interesting so the questions changed to "What is it?", "Where is it?", "What depth?". "I'll tell you later. Its probably gone now, you'd never find it unless you knew it's there".

90mm standard lens fitted, I returned to the battlefield. The first urchin was still where I had left it. I settled on the sand some fifteen feet away and made like a flat fish, hiding behind the camera, not to be seen. Set exposure, set aperture, focus! Miles too far away.

Gentle fin/elbow forward, eye to viewfinder. Closer, the urchin starts to wave its spines. Pause. Calm returns. Slower forward. Nearly there, more spine waving, a little closer and now wait for the urchin to settle. Now!

1/15th second at F22 with an 80b filter, Tri-X b&w negative film deliberately overexposed by two stops to increase the surrounding density without recording detail in the urchin itself. The negative was then printed onto Grade 4 high contrast paper. Depth 10 feet off Lanzarote.

game was on! There were several other urchins on the sand but few with a clear background. It seemed that they were ganging up on me.

I selected a likely specimen and placed the camera down in approximately the right position. I then swam off down range to clear the offending urchins. This requires considerable skill and finger co-ordination, the clearance was not achieved without injury.

Returning to the camera, the subject urchin had succumbed to the obvious magnetic influence that my camera seemed to have for all urchins and was cuddled up to the lens, my approach provoking frenetic activity spinwise. It was time to 'fall back and regroup'. The new attack plan was to employ a stealth technique and to shoot from further away. This required an expedition ashore to fit a longer lens.

On shore, the sight of my purposeful march to camera bag provoked the usual sarcastic comments; "Had a flood?", "Out of film?", "Flash not

Is there life after diving? Try BSoUP

says Chairman Brian Pitkin

Most divers are asked many times why it is that they spend so much time and effort getting wet. The sensation of being weightless, free to move in any direction with the minimum of effort can be described, but what it is actually like and what can be seen underwater can only be hinted at. In this context, one of the most rewarding pursuits, for any diver, must surely be underwater photography.

To capture on film the diverse and colourful marine life, long forgotten wrecks, or the way the sunlight streams through the surface layers isn't that difficult with the camera equipment now available. Your slides or prints will not only provide you with a lasting reminder of your dives, but enable you to share your underwater experiences with others.

You purchase your equipment and read the manuals. What next? Perhaps BSoUP can help. Our monthly meetings in London include a BASIC COURSE given by experienced underwater photographers. There are talks on cameras, lenses and angles, close ups and macro, maintenance, composition and fault finding. In fact everything you need to know to get your first year in underwater photography off to a successful start. The talks aren't too technical, only a minimum knowledge of picture taking is assumed.

For those who have mastered these basic techniques, BSoUP holds a monthly competition called FOCUS ON. Different categories each month ensure that a wide selection of some of the best underwater photographs around are shown on the screen. This year, the categories include still life, natural light, fish, people, against the light, macro, patterns, planktonic life and composites. The first three slides each month all compete in a final in October for a major prize.

In addition, each monthly meeting includes a MAIN FEATURE where invited speakers generally show their own work - either slides, audio visuals or films. This year, amongst others, the British Team taking part in the CMAS World Championships will be showing their entry; Belgians Jos Audenaerd and Vic Verlinden, winner and runner-up in the Dutch-Belgian Championships last November, will be showing their audio visuals; Mike Valentine, who filmed the underwater sequences for the film 'Castaway' will be talking about film making for cinema and TV. These main events offer the more experienced a chance to improve and give everyone the opportunity to see just what can be achieved.

BSoUP organises an annual 'Splash-in' at Plymouth, Devon to be held on May 30th this year which includes a unique 'On the Day' competition. For anyone who has never won an award in a major competition, BSoUP also organises a Beginners Portfolio Competition for the Diver Trophy in November and, for those who have, an Open Portfolio Competition in December. A bi-monthly newsletter, IN FOCUS, is sent to all members. This includes Society news, lecture notes, features on underwater photography, competition announcements and classified adverts.

So you see, BSoUP caters for everybody's needs, be they outright beginners to seasoned professionals, and all for just £10 (UK members) or £15 (Overseas members) a year.

BSoUP meetings are held at 7.45pm for 8.00pm in the Sherfield Building, Imperial College, London on the third Thursday of each month. For further details, send an SAE to The Secretary, BSoUP, London WC1

Books on Marine Life



Red Sea Reef Fishes £32

Dr. John E. Randall describes in detail 325 species of Red Sea reef fishes, enhanced by the author's own colour photographs.

Divers' Guide to Red Sea Reef Fishes £20

Waterproof supplementary volume to the above, containing numerous colour photographs, with common and scientific names of each species.

Sharks of Arabia £26

Just published, this is the latest addition to our knowledge of Red Sea, Indian Ocean and Arabian Gulf Sharks. Dr. Randall has combined scientific accuracy with a presentation which is of interest to the general reader and scientist alike.

The Red Sea £24

An informative and colourful book in which the author, Dr. Peter Vine, explores all aspects of the Red Sea with emphasis on its rich marine environment.

New Titles

Red Sea Safety: £16.75

Guide to Dangerous Animals

In this book the author, Dr. Peter Vine, aims to inform divers of some of the dangers of the Red Sea's marine environment and gives advice on how to avoid accidents, or deal with them should they occur.

Red Sea Invertebrates £39.50

In this well-researched book, Dr. Vine provides an up to date description of invertebrate species found in the Red Sea, with comprehensive checklists which will be of use to amateur and professional divers alike. Ecological notes, over 270 full colour photographs and many detailed line drawings serve to make this an attractive publication for anyone with an interest in marine life.



To obtain:
Send cheque (plus £2 p&np each book)/Access No to

Now you see them, now you don't

Photography of floating gelatinous animals
with Dr David George

Most underwater photographers spend a great deal of time grubbing around on or near the bottom when diving. One can hardly blame them, for they would not expect to find much in the way of photogenic subjects, apart from fish, in the water column between the surface and the seabed. The water is, however, teeming with life (plankton) during much of the year. Unfortunately many of the organisms found in this region are too small to be recorded successfully with the underwater camera systems currently available. Luckily, plankton does have larger representatives which, in some cases, may reach a metre or more in length. Such examples as the jellyfish and comb-jellies are comparatively well known in the UK and Mediterranean waters and those diving in the tropics may find in addition such creatures as the salps (floating sea squirts). The bodies of all these neutrally-buoyant beautiful creatures are fragile and gelatinous, consisting of at least 95% water and in many cases are virtually transparent, thus providing a less than ideal subject for underwater photography. Problems are compounded by the fact that those animals with little pigment in their tissues provide a very low contrast target relative to the background when viewed horizontally, especially if illuminated uniformly by daylight from above. Divers operating in the murky waters of the UK face the additional problem of the subject being partly obscured by suspended particle matter. These problems are not insurmountable, however, and the underwater photographer can get excellent shots of such animals as jellyfish and salps if the correct equipment is used and a few elementary techniques are mastered.

EQUIPMENT

Almost any housed SLR camera can be used as long as it is equipped with a suitable macro lens. Housed SLR's have the advantage of being able to focus on subjects over a great distance and size range. The reflex "sportsfinder" on reflex cameras is not easy to use, however, when the photographer is suspended in mid water and trying to keep a small, often transparent object in view long enough to focus and operate the shutter release mechanism. In practice, even specialist plankton photographers with housed cameras often use framing devices when photographing relatively small subjects. In some ways, the most commonly used



Above: The transparent medusa (*Aequorea aequorea*), lit from the side and slightly behind by electronic flash shows its internal structure and a comb jelly it has captured with its trailing stinging tentacles. Nik 11 with 28mm lens + Close Up lens and framer. Kodachrome 64. Southwest Ireland. Below: The gelatinous translucent tissues of the jellyfish (*Cyanea lamarckii*) have been shown to best advantage by illuminating it from the side and behind. Nik 11 with 28mm lens. Ektachrome 64. Plymouth.



underwater camera, the Nikonos, is well suited to plankton photography, the lack of reflex viewing being of little consequence and the need to use a framing device could be considered an advantage. A salp or jellyfish, unlike a fish, does not object, apparently, to having a frame placed around it to ease the photographers problems of focusing and composing the picture! In order that a full range of planktonic animals can be photographed, the owner of a basic Nikonos will need to acquire two sets of accessory equipment. To photograph very small medusae and comb-jellies, a set of extension tubes and framers will be required. Most

manufacturers provide sets which will produce photographs at 1/2 or 1/3 life size (1:2 or 1:3 reproduction), at life size (1:1) and at twice life size (2:1). The disadvantage of such a system is that only one extension tube or combination of tubes can be used at any one time because the tube is positioned behind the lens and thus cannot be changed once the camera is beneath the water surface. However, since the system relies on a preset focussing distance, it is very easy to use, the photographer simply manoeuvring so that the subject is in the desired position between the framer prongs, before releasing the shutter. The second set of equipment is needed to



Above. Just enough light has penetrated through the tissues of this compass jellyfish (*Chrysaora hysoscella*) when illuminated with electronic flash from the side and behind to show the gelatinous nature of the body as well as the characteristic pigment patterns on the bell. Nik 11 with 28mm lens. Kodachrome 64. Lundy.

Below. This horizontal shot in natural light of the semi-transparent common jellyfish (*Aurelia aurita*) is relatively successful because it was taken just beneath the surface on a calm day. Nik 111 with 35mm lens and Subawider. Ektachrome 200 in the Red Sea



bridge the gap between the field covered by the extension tubes and that covered by the standard lens of the camera when focussed at its minimum distance of 0.8m (2.75 ft). One such set (commonly known as a close up kit) supplied by Nikon comprises a supplementary lens which fits over the front of the camera lens, a distancing bar, and a series of field frames to be used in combination with different lenses. It can be used with either the 35, 28 or 80mm Nikonos lenses. The Nikon outfit (and similar ones supplied by other manufacturers) is ideal for photographing many jellyfish, medusae and salps. The rectangular frames of the Nikon kit replicate the shape of the 35mm transparency (or negative) and thus are

particularly useful devices inside which to compose the subject before taking the picture. Some of the biggest jellyfish and salp chains will not fit inside even the largest of the frames supplied with the close up lens (28mm lens frame). However, this is not a major problem as the supplementary close up lens can be removed underwater and the camera used in the normal way. An optical viewfinder with a parallax correcting device is invaluable in these circumstances to enable reasonably accurate framing at the greater distances involved. I have found that the 28mm lens is the most versatile when using the supplementary close up lens in front of it, whereas the 35mm lens is undoubtedly the

most useful with extension tubes. If the Nikonos operator is able to carry two cameras on a dive, then he should have no trouble in coping with all the sizes of gelatinous plankton that are likely to be seen.

LIGHTING

The underwater photographer can either use natural light when recording planktonic animals or introduce an artificial light source such as electronic flash. In my experience, a combination of the two light sources rarely seems to be successful when photographing semi-transparent organisms in mid-water, although it works perfectly well with more solid subjects such as fish. One of the easiest techniques when using natural light is to position yourself beneath, and slightly to one side of the transparent or semi-transparent subject and shoot in the direction of, but not directly towards, the light source. Under normal conditions with a more substantial subject, this would produce a silhouette, but, with a transparent animal, only some of the light is blocked by the tissue and an excellent photograph which highlights the internal structure of the animal may be obtained. This type of natural light photograph can be taken at depths of several metres below the surface in clear waters. The more horizontal the position of the photographer becomes in relation to the subject, the closer he will have to be to the surface to get acceptable results in natural light because of the problems of low contrast mentioned earlier. Nevertheless, using this technique, semi-transparent light coloured subjects such as the common jellyfish can be photographed adequately on a calm day when light is diffusing evenly through the surface water film. Natural light photographs taken looking down onto transparent subjects are unlikely to succeed.

In anything other than clear water, an artificial light (preferably an electronic flashgun) is essential. The flashgun need not be large, all that is required is that it is sufficiently powerful to allow apertures of F11-22 to be used. This ensures that the depth of field is adequate for most subjects. Animals should be illuminated on more or less the same plane from the side or from slightly behind. This technique has several advantages over frontal lighting, not the least being good contrast, enhanced edge definition and illumination of the internal surfaces of the animal against a dark background. With the light source(s) in this position, backscatter from particles in the water between the lens and the subject is reduced to a minimum.



Looking up and obliquely towards a natural light source has produced this photograph of a chain of salps (*Salpa maxima*) with their internal structure visible. Nikonos 11 with 28mm lens and Close up lens and framer. Kodachrome 64 in the Red Sea

Some photographers prefer to have their flashgun(s) in a fixed position relative to the subject (at an angle of about 60° to the optical axis), but I advocate hand-holding the gun in slightly different positions in a series of bracketed shots. This means, of course, that the photographer must be able to hold and operate the camera with one hand. In the case of the earlier Nikonos models, the addition of a thumb release and a baseplate with a handle makes this a simple operation. The later models do not need such a handle. Larger jellyfish tend to have a greater amount of pigment in their tissues; even so, in most cases, it is a mistake to illuminate them from in front, sidelighting producing far more effective results as a certain amount of light still permeates through the tissues.

NOW ITS UP TO YOU

Photography of delicate planktonic animals is not easy and many failures may occur before your techniques are perfected. Using the simple methods described above and a medium speed high resolution film such as Kodachrome 64, your chances of success are likely to increase.

Dr David George

How to photograph marine animals and plants will be a regular UP feature so make sure of your copy. Subscribe today.

SUB AQUA VIDEO HIRE



The new compact, easy to use Video 8 system; complete with housing, lamp, camcorder, charger, player, 2 x 1 1/2 hrs tapes, 4 ch/batteries, transfer leads (to own system or if required this service is available). Ideal for clubs, training etc.

1 day £55, 3 day and W/E £90.00, 7 day £125
Insurance not included

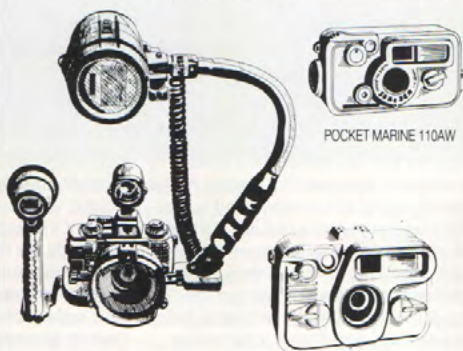
"Quote reference SAP when phoning"

CANDID CAMERAS (RENTAL) LTD

The largest domestic video hire specialist

SEA&SEA

COMPLETE NIKONOS ACCESSORIES



ACCESSORIES FOR NIKONOS SYSTEMS

Manual YSS0 auto YSS0 strobes for Nikonos III/IIIIV
TTL YS100 fully automatic strobe for Nikonos V
Sea Arm IIIA flexible quick-release arm
Sea Meter Selenium coil underwater light meter
18mm Computer designed wide-angle lens
Sea Grip V base plate/grip for easy handling
Optical view-finder with parallax control

TESTED TO 45 METERS

MOTORMARINE 36SE AND AUTOMARINE SPLASH

INFORMATION & BROCHURE SAE TO

SEA&SEA LTD

BECOME AN UNDERWATER PROFESSIONAL
Convert your skills and obtain your commercial divers licence with a school specialising in Parts 111 and 1V. Send for brochure: Diver Training School, [redacted]

FOR SALE
Aluminium box housing. 400'. Custom. Two fronts, accepts power zoom and lenses 5.5mm to 105mm macro. £1995. Tel 0872 501775

See how a box surround makes your advert stand out above the rest? They're only £5 extra.....

WANTED
UW/Nikkor 2.8/15mm N for Nikonos V along with optical viewfinder for mounting in accessory shoe. Bob Michelson, Jenfelderstr 9A, D 2000 Hamburg 70, West Germany. Tel 662346

FOR SALE
Close up lenses and accessories for the Nikonos. 6", 9" and 12" subject distances. Interchangeable underwater. Send 18p stamp for specs and prices. Z&A, [redacted] Evenings.

FOR SALE
Nikon F2 aluminium housing complete outfit with F2 body, actionfinder, 55mm macro and 20 mm wide angle, dome port and gearing. EO flash connector and carrying case. It's ready to shoot. Good value at £650 Tel D.Nardini 01 543 0185

VIDEO EDIT
Video 8 to VHS transfer. Transform your video. Hire our professional edit suite. [redacted] 52035 (eves/weekend)

VIDEO housings
for 8mm handycam and reflex cameras. From Ocean Optics from £550.

Duplicate transparencies. Hand produced from your original 35mm transparencies. Onto 5"x4" £15 each; 120/6x7 £11 each: Slight cropping on short side, or selective. CWO please to: Copy-Rite, 83 Thirlmere Drive, Ainsdale, Southport, Merseyside PR8 3TY.

Nik 1VA/V carrying case £10. Vismaster fisheye +viewfinder £40. Nik 11 flash lead £5. New Ikelite Weston light meter housing. £15. L86 meter bracket £5. Weston Euromaster light meter £40. Tel Ken 02805 636

UNIQUE SUDANESE RED SEA SUB AQUA HOLIDAYS
2 week boat based diving off Port Sudan. Superb visibility, impressive marine life, a photographer's paradise. Professionally escorted with over 11 years experience. Departures 14 March and 9 May 1987. For more details write to: [redacted]

Nikonos servicing and repairs at Ocean Optics Tel 01 381 6108

FOR SALE
Nikonos 11 without lens. £45. Tel J. Davies 0962 62155 (H)

FOR SALE
15mm Nikonos lens (new model) plus Sea and Sea viewfinder. £750 or close offer. Tel 01 585 2589

FOR SALE
Aqua F1 auto flash. Good condition. £150. Tel R. Kemp 0380 5275 (H) 0380 2274 (W)

IDENTIFY YOUR SUBJECTS with waterproof cards full of species for seas all over the world. £2.95 each. Books on the Red Sea, Barrier Reef, Bahamas. All from Ocean Optics. Tel 01 381 6108

ALWAYS MENTION 'UP' WHEN ANSWERING ADVERTS

CLASSIFIED ADVERTISING ORDER FORM

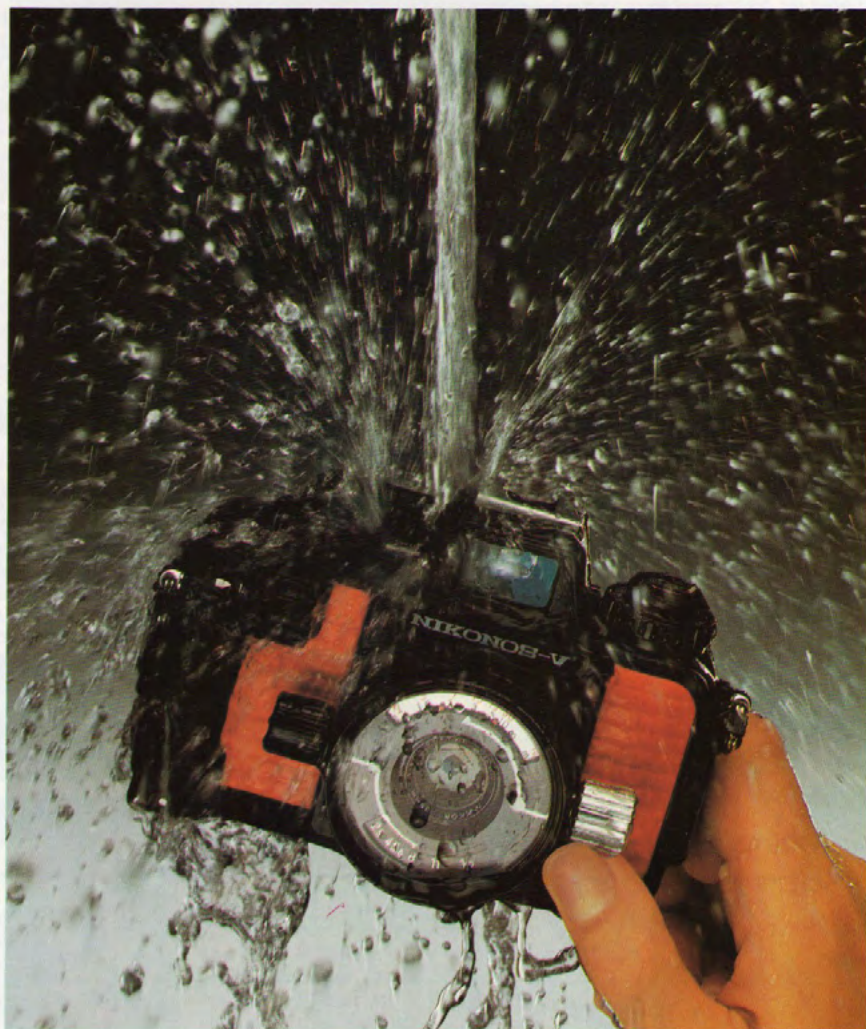
Only 25p per word. £5 for a box surround

Please include the following classified advert in the next issue of UP.

NAME & ADDRESS _____

Phone Number _____

Classifieds only cost 25p per word but must be prepaid. Phone numbers are one word. Deadline for adverts is the 1st of the month preceding publication date, i.e. 1st March for April/May issue. Make cheques payable to UNDERWATER PHOTOGRAPHY and send to 4 Greyhound Road, London W6 8NX ACCESS and VISA most welcome. Card No..... Exp date.....



THIS NIKON SHRINKS FROM NOTHING.

THE NIKONOS V IS UNIQUE. It's a 35mm waterproof camera that will work under the toughest conditions you could possibly find. You can take it diving (down to 50m), skiing, potholing, in fact anywhere you'd never dare take an ordinary camera for fear of getting it wet or muddy. And because it's a Nikon, you can rely on it not to shirk on the performance side. It's micro-electronic brain takes care of that. If you want something more than a fair-weather camera, you need the Nikonos. It really does shrink from nothing. Not even the wash.

Nikon

MORE DETAILS FROM: NIKON UK LTD., NIKON HOUSE, 380 RICHMOND ROAD, KINGSTON UPON THAMES, SURREY KT2 5PR. TELEPHONE: 01-541 4440.

Just add water and shoot



The Sony 8mm Handycam with its 40 metre housing and 80 watt light is a complete underwater video package. There's only one camera control - it's fully automatic - all you do is press.

You can play the results back instantly on your TV/monitor in full colour. No fuss, no problem. Cecil B. would drown in his grave. The Sony 8mm video system is available at special package prices from

Ocean Optics Ltd

Short Ends

CALLING ALL UNDERWATER PHOTOGRAPHERS FROM PLYMOUTH TO LAND'S END

Mark Webster of Photec is trying to organise an association of underwater photographers in the southwest peninsula. This would be designed to bring together interested individuals, for mutual benefits, who perhaps do not get the most out of their underwater photography in the normal diving club environment. Activities would include regular meetings, diving excursions, local competitions and exhibitions and a general pooling of knowledge and experience. Anyone interested living in the area should contact Mark on Falmouth (0326) 318307 or write to him at 42 Trelawney Road, Falmouth, Cornwall, TR11 3LX

DEEP SEA JIVERS

The colour shot featured in the last issue has been reproduced in both the Sun Sunday colour supplement and in Time Out, a widely read London events magazine. A black and white version appeared in the Times and there will be a feature in Camera Weekly Magazine.

PETER SCOONES WINS JACQUES DUMAS TROPHY

78 photographers from 24 countries submitted prints for this prestigious competition which Peter won and collected a \$5000 prize. Other photographers who were selected to have their work exhibited were from Italy, Germany, Canada and Portugal. Let's hope Peter's successes continue when he represents Britain at the World Championships in June.

COVER SHOT

Taken by David Nardini in Gozo, this double image started by shooting the silhouetted diver on a 15mm lens fitted to a Nikonos 111 which was loaded with Fuji HR100 slide film. Exposure was 1/60th sec @ F16 taken at midday to have the sun in the desired position.

The foreground was kept black and the starfish was added later in the darkroom. This was taken with the same outfit but lit with a modified OS 2000 flash to give a concentrated beam of light which leaves it on a dark background.

VIDEO APOLOGIES

To all those readers who subscribed so that they could read the video article promised last issue, could you please wait until next issue? as we felt that going on board Calypso deserved to be kept topical and so jumped the queue. The advantage is that three new housings should be arriving so we'll have a chance to produce a detailed review.

NIKONOS V WINNER

The fact that you are reading this and don't know who's won the Nikonos V (generously provided by Nikon UK) means that you weren't the lucky one!

The winner, who already knows, is Susan Clark from Hexham in Northumberland. She works at the Dove Marine Laboratory in Newcastle upon Tyne engaged on research linked to Newcastle University. Until now Susan has used a Canon SLR in an Ikelite housing. Her favourite lenses are the 50mm macro for close ups of marine life and a 28mm for wide angle shots.

She was over the underwater moon.

UP and coming next issue

UP on the Lady Jenny V

Combine the diving around Sharm with a well established dive boat, Lady Jenny V, add underwater photography and we must have a feature to impress you.

UP in the UK visits Lundy Island

This marine reserve is not easy to get to but when you do it's an underwater photographer and naturalists haven. BSoUP Chairman Brian Pitkin takes you there and shows the sites.

Video in depth

UP brings you the latest news and reviews two new housings from Italy and Canada. The Italian ones allow reflex viewing while the Canadian ones have ultra wide optics.

Decompression meters tested

We know they can't take pictures but these instruments seem to be made for underwater photographers. You concentrate on the shots while they take care of your diving?

Basic Course

There are more underwater cameras available now than ever before. UP helps you choose the right one for you with sensible advice on what you need.

Plus Product News, How was it done?, Competition winners, Classifieds, Short Ends and a great deal more. Subscribe and succeed.

Seacam
UNDERWATER PHOTOGRAPHIC EQUIPMENT ENGLAND

"IF YOU HAVE THE CAMERA — WE HAVE THE CASE"

SAYS LEIF ROSENGREN OF SEACAM



ARRIFLEX 16SR

If filming is your business - this is the housing for you. A truly professional case for TV and documentary filming.



PRO-16

Case for Bolex and Beaulieu 16mm cameras. Invites total freedom of lens choice 5.7 - 100mm, ultra wide angle, macro, tele, zoom.



SONY BETACAM HOUSING

Professional broadcast quality video housing.



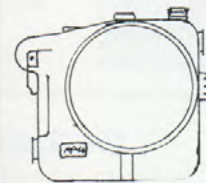
CUSTOM VIDEO HOUSING

This is an example of a Seacam custom built video housing for JVC camera with recorder. We build housings for most video cameras and camcorders on the market.



FISHEYE -35

Case for Nikon F3 with MD4 motordrive and DA 2 actionfinder. A case for the pro. Fisheye, macro, tele, you can use them all.



AP-W

Coming soon. Aluminium housing for most SLR's with or without winder. Three ports: Super wide dome Standard dome Macro



IT'S NOT CALLED THE MASTER JACKET FOR NOTHING



Scubapro Master Jacket and Scubamaster B.C.'s also available with Scubapro AIR II (see below)



AIR II Inflator/Regulator. Cat. No. 21-080-000
The greatest contribution to diver safety ever. An efficient buoyancy device inflator coupled with a good performance regulator. Do not confuse with so-called breathing mouthpiece, this is an actual regulator 2nd stage. Scubapro product patented world wide and unique.

See these and other exciting products at your local Scubapro Dive Shop

SCUBAPRO®

AVAILABLE ONLY FROM PROFESSIONAL DIVE SHOPS

For further information on the full range of our quality diving products:

Send £1.00 for catalogue, price list and stickers.

SCUBAPRO (UK) LIMITED

**UP3
will be in
UwP116
due out on
1st Sept**