

SPORT PHOTOGRAPHY

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INTRODUCTION

Close your eyes for a minute and imagine that you are on the touchline at Wembly stadium. The crowds are chanting, the atmosphere is alive with tension and all around motordrives are buzzing like a swarm of bees.

Suddenly your moment has arrived. Lineker breaks free, glides past three defenders and bears down on the goal. Time slows down as you realise what is about to happen, and excitement surges through your body like electricity.

"This is it", you think, raising the camera to your eye. As lineker shoots, you turn, focus and trip the shutter an instant before the ball hits the back of the net. The spectators are raptures, the goalie is in tears, and you have photographed the shot of the match.

This excitement is part of the sport photographer's daily work. It is a very rewarding career, as it is a game you play.

THE HISTORY OF SPORT PHOTOGRAPHY

In the earliest photographs, action was not recorded. The first photographs in which action was stopped were stereoscopic views of city streets, peopled with minute figures of pedestrians. (Newhall, 1982)

One photographer fascinated by action photography was Edward Maybridge. The argument whether or not a fast trotting horse ever had all four feet off the ground at one time, made him interested in this type of photography. He showed the world how a horse gallops. (Langford, 1980)

By 1877 he had devised a line of cameras set up beside a specially built section of a race track. Here a series of threads stretched across the track were broken by the horse. Each thread electrically fired a 1/1000 sec. shutter on one camera at a time. This was the first and most important step towards action photography. (Langford, 1980)

SPORT PHOTOGRAPHY - THE PERSON

Everybody thinks that a sport photographer is simply the person that takes photos alongside the sportsfield, but the process involved is much more complex.

The sport photographer should be able to deal with the day-to-day running of a Business and communicate effectively through correspondence and telephonically. The most important aspect is the photographer's love for and commitment to his work. The sport photographer has to prepare himself before going on a shoot. His ideas have to be formulated beforehand. He needs to rehearse the shoot including all events that could occur, even possible mishaps. Part of his preparation could also include sketches of the planned shoot.

A vast amount of experience is gained from previous mistakes, and proper planning is therefore essential. Important aspects are originally, innovation and creativity. The sports photographer needs to fix cameras in unusual positions, sometimes in positions where he is unable to remain himself.

The sport photographer should have the ability to see the potential in a subject, and possess the techniques required to transmit the images onto film. Another important characteristic required of the sport photographer is patience and, perseverance even though events could become boring. A good example of this is the sport of Cricket

which is at times slow, yet unpredictable. The photographer needs to persevere in order to capture on film the necessary action.

Sport photography is not centred around "the goal" or news events. It is centred around features, it's about getting stock shots of people in celebration or smiling. This type of photography also trains the photographer to concentrate not only on the action but also on events happening off the ball.

Probably the most important aspect of sport photography is actually understanding the event being covered thereby enabling the photographer to read the game and anticipate events likely to occur. Professionals need to know the style and reactions of individuals. For instance, when a show jumper clears a fence the photographer needs to know which way the showjumper will turn their head, as the picture will not be as powerful or striking if they are not looking at the camera.

By being aware of the different mannerisms of various sportsmen it enables the photographer to take better photographs. Unless the photographer understands what is being photographed, it is easy to miss out on vital elements.

The photographer should always consider the safety of the participants and the spectators. Their safety should be paramount. The photographer must consider the distraction caused to the participants and spectators by his flash, and should be considerate at all times (i.e. not blocking the view of the spectators). Basically safety comes first, courtesy second and photography third.

EQUIPMENT USED BY SPORT PHOTOGRAPHERS

CAMERAS

35 MM SLR

The 35 mm single-reflex camera is the workhorse for most professional sport photographers. It is small and light enough, even when fitted with a motordrive, for several bodies equipped, with different focal length lenses, and perhaps loaded with different types of film, to be carried ready for action, so that the photographer can switch easily from one to the other. (Campbell, 1981)

The major advantage of the SLR is the convenience and efficiency with which it can be used with the widest range of interchangeable lenses. (Campbell, 1981)

Both Coupled Rangefinder and Twin-lens reflex cameras create problems, especially at close focussing distances. It has problems with parallax as well. No such difficulty arises with the SLR, since the photographer views through the taking lens itself. (Kodak, 1983)

The SLR shows in the viewfinder the full-frame image as seen by the lens, whatever its focal length. The standard SLR Pentaprism viewfinder displays the image right way around and right way up, as seen by the eye. (Kodak, 1983)

The wide interchangeability of parts allow the photographer to tailor the camera to meet personal requirements, long-term or short-term. This is another significant contribution to the versatility and popularity of the 35 mm SLR. (Campbell, 1981)

MEDIUM FORMAT SLR

Many professional photographers prefer to use medium format cameras. The most obvious advantage of this camera is that it requires less enlargement in order to produce a print of the same size, so that there is a significant gain in image quality. (Campbell, 1981)

The principal disadvantages of this type of camera are its large size and heavy weight. A further drawback, is that lenses tend to have smaller maximum apertures. (Campbell, 1981)

The 6 x 6 SLR most chosen by professionals is the Hasselblad, a camera that forms part of an extensive system. Apart from lenses and film magazines, viewing aids and remote control equipment, specialized motor-driven and wide-angle cameras are available. (Campbell, 1981)

The accessory viewfinders are especially useful because the image in the standard focussing hood is reversed left-to-right, making it difficult to follow moving subjects in the viewfinder. A Pentaprism or a simple frame Sportsfinder overcomes this problem. (Campbell, 1981)

UNDERWATER CAMERAS

Occasionally a sport photographer who wants to produce unusual pictures of swimming or other water sports will choose a camera specially designed for use underwater. (Freeman, 1980)

The most frequently chosen camera is the Nikonos, a 35 mm amphibious camera with its own range of four interchangeable lenses. It has extra-large controls designed specially for ease of use underwater, including two rotating knobs that control focussing and aperture. (Freeman, 1980)

Automatic exposure and a specially produced flashgun help overcome lighting problems and an accessory frame finder can be attached to the camera to simplify viewing. (Freeman, 1980)

The Nikonos has a resin-treated body and the joints and mounts are sealed by o-rings. This makes it safe for use at depths down to about 50 metres. This camera can also be useful on land, particularly at events such as winter sports, when weather conditions are poor and conventional cameras are likely to break down. (Freeman, 1980)

An alternative to an underwater camera is a Water Tighthousing for a 35 mm or medium format SLR. Several professional camera systems offer such housings, and they are safe at even greater depths than the Nikonos. They are also bulkier, and very costly given their limited range of applications.

Whichever film format is chosen, the way lenses work underwater is different from their performance on land. For example, water increases image magnification, so the photographer is likely to need shorter focal lengths underwater. The Nikonos range of interchangeable lenses therefore offers 15 mm, 28 mm, 35 mm and 80 mm focal lengths. The greater subject-to-camera distances generally necessary with longer focal lengths can pose further problems. (Freeman, 1980)

Light diffusion, caused by impurities in the water, can present a particular difficulty if the photographer moves too far from the your subject.

LENSES

ANGLE OF VIEW AND PERSPECTIVE

The focal length of a lens controls the amount of the subject that can be included in the frame. The shorter the focal length of a lens, the wider its angle of view and more of the subject can then be included.

APERTURE AND DEPTH OF FIELD

One of the important features of any lens is its maximum aperture. Another important feature is regulating the intensity of light that enters the camera. The aperture influences the amount of the subject that is sharply focused.

In sport photography, where a confusing background is often a problem, it is often useful to keep depth of field to a minimum, so that only a single figure, or a face, is in focus and therefore stands out.

TELEPHOTO LENS

In some areas of action photography, the photographer may have difficulty coming close enough to the subject to obtain a sufficiently large image of it with a normal lens. In these circumstances, the telephoto lens is essential. (Langford, 1980)

Apart from increasing the range of subjects, longer lenses can give immediacy and drama to action pictures. A telephoto lens also compresses perspective. Besides simplifying the background by excluding unwanted detail, this can be effective in any

picture where the subjects from a group, such as a line at the start of a race. (Langford, 1980)

Although telephotos are large and heavy, most professionals carry a number of different focal lengths on all their assignments. These would include 153 mm, 200 mm, 300 mm, 400 mm and 600 mm telephotos. (Langford, 1980)

Another way of eliminating some of these lenses is to make use of a zoom. Zooms have one particular disadvantage, they don't have the wide maximum apertures of fixed-focal-length lenses. (Campbell, 1981)

Telephotos do have some practical problems which are exaggerated when the subject is moving. Supporting a long, heavy lens so that it is steady enough to take sharp pictures is one problem. The best solution is to use a Tripod or Monopod. (Campbell, 1981)

WIDE-ANGLE LENSES

The features of wide-angle lenses can easily be used to the photographer's advantage in sport photography. Whether the photographer is using the wide-angle lens to show the vast proportions of an entire stadium, or moving up close to a smaller subject, to create a dynamically distorted image of a single moving figure, this lens is a good addition to the photographer's equipment. (Freeman, 1980)

If the photographer tilts the camera when using a focal length below 20 mm, the image will be dramatically distorted, but if the photographer uses them with care, holding the camera horizontally, wide-angles give only minimal distortion. (Hedgecoe, 1984)

The most popular wide-angle is the 28 mm lens, which combines low distortion with a 74 degrees angle of view. One difficulty with these lenses relates to unwanted flare, which sometimes appears when the photographer is shooting towards the light. The appropriate lens hood should be used (the wrong one can cause vignetting) it is worth stopping down to the aperture the photographer wants to use to see the full effect on the image. (Hedgecoe, 1984)

This is definitely one lens that a sport photographer can make use from time to time.

MIRROR LENSES

Lens designers have found one ingenious way of cutting down on the size and weight of telephoto lenses. This is to use mirrors inside the lens to "fold up" the path of the light that passes through. This lens is sometimes known as reflex or Catedioptric lenses. (Freeman, 1982)

The compact design and light weight of these lenses means that they are easy to use without the elaborate supports often necessary with conventional telephotos. (Freeman, 1982)

With this lens the photographer can hand-hold a 500 mm mirror lens at fast shutter speeds without fear of camera shake. Mirror lenses will also focus sharply at closer subject distances than conventional lenses of the same focal length.

There are also some drawbacks associated with this type of lens. Apertures are not adjustable and are small by professional standards. A typical 500 mm mirror lens has an aperture of F8.

Another reason for using a mirror lens would be to obtain the benefits of an extremely long focal length.

FISHEYE LENSES

One special lens type sometimes used by sport photographers is the fisheye lens. This is a wide-angle that produces dramatically distorted images.

There are two types of fisheye lenses. Full-frame fisheyes have a focal length of about 16 mm and fill the whole of the film format. Circular-image fisheyes, with 8 mm and 6 mm focal lengths, cannot produce an image, though the camera normally uses only a section of this to cover the film. (Campbell, 1981)

Because fisheyes are expensive lenses with only limited applications, few photographers own more than one. Most photographers choose a 16 mm fullframe lens, and hire the shorter focal lengths when they are needed.

The advantage of a 16 mm lens is its compact size. This lens is only slightly larger than a standard lens.

TELECONVERTERS

Another way of cutting down on heavy equipment while still having a range of lens options, is to use a converter to increase the focal length of the lens.

Since optical quality is enhanced if the lens and converter are matched, most photographers use more than one. Two x 2 teleconverters can be used. One for lenses

up to 200 mm, and one for those of 300 mm and above, are useful. With these the 200 mm lens can double as a 400 mm and your 300 mm as a 600 mm lens. (Langford, 1980)

The drawback of teleconverters, apart from a slight loss in image quality, is that they decrease the maximum aperture of a lens. A 200 mm F2 lens, becomes a 400 mm F4, when used with a 2 x teleconverter. (Langford, 1980)

For this reason Nikon produces a x 1,4 converter which gives only a one-stop cut in lens aperture. An F2 lens has its aperture decreased to F2.8.

FLASH

Most photographers these days use fast film to compensate for lighting problems, but a flash can still be used. Ordinary photographic flash units are limited by the ability of their capacitors to discharge energy quickly enough, and a pocket flash on normal setting or an average studio flash unit have flash durations only at about 1/1000 sec. specially developed high-speed flashes, however, can now give a high output with duration shorter than 1/50 000 second. (Campbell, 1981)

EXPOSURE METERS

Although most cameras contain a through-the-lens exposure meter, few photographers trust it in every situation, and most carry at least one hand-held exposure meter. This is because camera meters can easily give readings that are misleading, even if they are accurate. (Campbell 1981)

For example, a camera meter that makes centreweighted measurements will not necessarily give the best reading if the main part of your subject is not in the frame

centre. It is possible to overcome this difficulty by re-aiming the camera after a reading has been made, but most professionals prefer using a more versatile hand-held meter. (Campbell, 1981)

The most popular meter almost all sport photographers use, is the Minolta Flashmeter 111, a model that has proved its worth in available light photography as well as in flash work. It is chosen for its accuracy, ease of use, clear digital readout and versatility.

Because exposure meters are delicate and an essential piece of equipment, many photographers have two of these general-purpose models. This has a very narrow angle of view, ideal when using long lenses, or when the photographer wants to measure the light from a small area of the subject. If a tiny but important part of the subject is lit very differently from the rest of the scene, a spot meter is ideal. (Campbell, 1981)

SUPPORTING THE CAMERA

Some means of support for the camera is essential when you are using a long telephoto lens for action photography. Apart from the fatigue involved in holding such a lens for any length of time, a degree of camera shake is almost unavoidable without support. Focussing with long lenses is very difficult, and the photographer needs to concentrate on the moving image in the viewfinder.

A Tripod is the firmest type of support, and gives the advantage of being able to set up for a shot in advance, leaving the photographer's hands free during the action. However, Tripods do require a certain amount of space, and it is not possible to change quickly from one camera position to another.

If a photographer needs to change camera positions frequently, without much room to manoeuvre in, a single-legged Monopod is useful. Monopods are light to carry and quickly to use, but they are a steadying aid rather than a rigid support.

MOTORDRIVES

Motordrives are very important and can be used effectively in action photography, especially when the photographer has not time to make use of a winder.

A motordrive screws into the Tripod bush in the camera baseplate and links up through contacts with the camera's film-wind mechanism. It can be operated on single frame or continuous run and it can also be locked to avoid accidental exposure.

Nikon claim that the MD-4 motordrive for their F3 camera is the fastest model in standard production. Its top speed is 6 frames per second, with the viewing mirror locked up. Most motor drives operate between 3,5 - 5 frames per second. (Hawkins en Avon, 1989)

Power winders usually work at about 2 frames per second. The saving in weight does not compensate for the loss of operating speed. Both devices leave the photographer free to concentrate on the image in the viewfinder. When panning, they will help to keep the subject centred in the frame. Automatic film advance helps eliminate the possibility of missing a picture when things are moving quickly.

REMOTE CONTROL

In many action situations, the best viewpoint turns out to be impossible and dangerous positions for the photographer. At many field or track events, the photographer is barred from getting too close to the action for reasons of safety or because the participants may be distracted.

With water and air sports, safety prevents the photographer from standing where the best view is, for example, the mast of a yacht or the wing of an aeroplane. The choice of remote control accessories includes: the pneumatic release, which is slow to respond, and the electronic push button cord, which is suitable for shorter distances.

The infra-red beam system can be used from about 200 feet. Radio remote-control can be operated at distances up to almost half-a-mile. (Kodak, 1983)

SKILLFUL TECHNIQUES

FILM

Shutter speed fast enough to freeze rapid action dramatically reduces the amount of light that gets to the film. One solution for this problem is to use faster film.

In exceptionally bad light, even the fastest film may not be sufficiently sensitive. By increasing the developing time of colour slide or black and white film during processing, it may be possible to wring out a little extra speed.

A moody picture can exhibit extremely fine grain, and conversely a grainy picture can be totally devoid of atmosphere.

Scotch 1000 slide film is good for grain effects. Its colour reproduction is not brilliant but its obstructive, crisp grain structure is amazing.

EXPOSURE TECHNIQUES

SHUTTER SPEEDS

FREEZING MOVEMENT

Action photography calls for a camera with a top shutter speed of 1/1000. Some modern cameras have shutter speeds of 1/2000 or even 1/4000. The question still stands, should the camera's fastest shutter speed be used to freeze action, or will a slower shutter speed be sufficient?

Shutter speed is not the only factor that will determine the freezing of action. Other factors that need to be considered are: the extent to which the moving subject fills the frame, its actual speed and its angle of movement relative to your viewpoint.

BLUR

Sometimes the feeling of movement in freezing action is lost. Everything is too sharp, too unreal. Sharpness can still be maintained, but the use of a slight of blur can make the image more definite.

The slower the shutter speed, the more blur is created. With a shutter speed of 1/8 second and less, most or all of the moving subject will be blurred. In this case it is essential to keep the camera steady to keep the background sharp.

PANNING

Panning the action is a way of producing a relatively sharp image of a moving subject but blurring the background, thereby creating a feeling of speed and also helping to separate the two elements.

When panning, pre-focus on the spot directly in front of you where your subject will be when you start the exposure. The technique is to swing the camera smoothly in line with the movement of the subject and in the same direction, keeping the subject in approximately the same position in the viewfinder. It is very important to "follow through" the movement during and after exposure. (Quint, 1985)

Panning is particularly well-suited to dim light conditions, because of the relatively slow shutter speed.

FOCUSING

One important aspect relating to focusing is the photographer's knowledge of his equipment. The photographer should know in which direction to focus for long distances and in which direction to turn the ring for closer distances

With pre-focusing the photographer should firstly select a suitable point on which to focus. Focusing distances could be marked on your lens, if there is more than one point of interest.

THE PEAK OF THE ACTION

To get maximum impact into an action picture, you need to add a sense of timing to the skillful use of your equipment. With every moving subject, there are certain positions that, when caught in a photograph, seem to encapsulate the action.

If rapid sequence photographs are taken, hoping that one picture will be just right, often the peak moment falls between frames and is missed. It is advisable, to study the pattern of the action beforehand and attempt to anticipate what will happen take place so that the shutter release can be pressed at a predetermined peak point. (Dalton, 1988).

Four distinct "decisive moments" can serve as an example to illuminate the concept: The peak of action. These moments are a basic guide.

1. The moment that is crucial to the nature of the action, such as the scoring of a goal, or a knock-out punch. This is the most obvious moment and, in a sense, represent the peak of the action.

2. The momentary pause in the middle of violent action, for example just before a runner leaves the starting blocks. This kind of moment, full of tension, is natural to certain types of action where the energy is stored up like a coiled spring, ready to be released in a sudden explosion of movement.

3. The unpredictable moment, where an unusual or unexpected occurrence shows itself in the expression or movement of the subject. With this kind of picture, which reinforces the uniqueness of all action, chance and quick reactions are all important.

4. The moment away from the action. Searching behind the scenes before or after a race or fight can produce some revealing images. The expressions and attitudes of contestants in a sport can show catharsis, anxiety, exultation or despair, sometimes providing a greater insight into a sport than the peak of the action itself. This is because the extremes of human action often draw on the extreme of human emotion. (Dalton, 1988)

PHOTOGRAPHING DIFFERENT TYPES OF SPORT

Each sporting event is different and a varied approach is necessary in order to become a successful sport photographer. The photographer also needs to become familiar with the sport that is being photographed as this knowledge will prove to invaluable in the quest for excellent sport photographs.

FOOTBALL

Good photographs can be taken from the touchline near one of the goals. The best action tends to occur in and around the penalty area. It is a good idea to capture the corners, tackles, headers and shots at goal. The best lenses to use are from 85 mm to 300 mm and at a 1/500 sec. shutter speed.

A ground-level position often gives the least complicated views with a telephoto lens, setting players against the unfocused background of stands and spectators. (Hawking & Avon, 1989)

ATHLETICS

Athletics can be divided into two groups, namely track athletics and field athletics. This sport enables the photographer to utilise techniques such as panning and slow-sync flashes from the side of the track.

TRACK ATHLETICS

The key positions are the start and finish, but head-on or at the bend from outside the track provides the photographer with opportunities for shots of athletes running in a bunch.

The field of athletes is closely packed at the start, although the most exciting action usually occurs later on in the race. For head-on shots of short distance events, such as the 100 m, sprint the photographer needs to ensure that the combination of lens focal length and camera position gives a wide enough view of the runners at the finishing line, or else have a second camera at hand with a more moderate telephoto. An inside position on the track gives the most freedom of movement, but will require permission. From the officials at the track.

A telephoto lens used from a distance allows more time for shooting than a standard or wide-angle lens, frame close to the track. Shutter speeds of at least 1/500 sec. are needed and a motordrive can be useful.

FIELD ATHLETICS

Pictures of field events e.g.: Longjump, highjump, vaulting, javelin, discus etc., call more for accurate timing than special equipment. The focal length of the lens that is needed depends largely on whether the photographer is allowed to take up a close camera position near the event.

TENNIS

Try to find a clean or colourful background. The photographer should use as long a lens as possible to blur the crowd. Be aware of structures and objects around the court that could spoil the photograph (e.g. umpire's chair) court surfaces. The court surfaces at Wimbledon and at the french open make lovely backgrounds if pictured from above.

The photographer should try to follow the game in the viewfinder, rather than pre-focussing. Photographers often try to shoot a picture with the ball on the racquet but it is often more effective if the ball is pictured in front of the racquet. It is easier to shoot a forehand volley before the player hits the ball and the photograph is often just as effective.

Photographing the motion of the racquet can also succeed as an image. A minimum shutter speed of 1/500 sec. and, where possible 1/1000 sec. is advisable.

Motordrivers should not be used to photograph a player serving. The best positions are at the centre on the side of the court or at the serving end. Doubles matches are best photographed from an elevated position e.g. a grandstand. The best method to use is to set the focussing on one particular zone and to shoot the picture when action comes into it.

GOLF

The taking of photographs is often banned at major tournaments so permission needs to be obtained beforehand. Good photographs can be taken from behind the tee, in the bunkers and on the greens. While trying to capture unusual compositions and or action shots it is advisable that the photographer considers and respects golfers concentration and attempts not to distract them. A 300 mm lens should allow the photographer to fill the frame.

HORSE RACING

The following areas are important positions to be in when photographing horse racing:

The weighting room area - the photographer can take candid formal portraits in this area. Many members of the racing fraternity allow photographs to be taken in this area. It is advisable to take the photographs when they are not too busy as the jockeys and trainees are under immense pressure before the start of the race. A 50 mm, 85 mm or 105 mm will do the trick.

The paddock area - if there are 20 runners in a race you can fill the frame with a 50 mm. Use a wider angle lens if a more general view is desired.

Bends - good photographs can be taken from this position especially early on in the race when the horses are grouped together. A long telephoto lens i.e. 200 mm or 300 mm will be useful. A shorter focal length should be used to shoot from the inside of the bend, and this provides for a totally different angle.

Fences - the photographer should pre-focus until confident enough to follow focus. A motor-drive is useful to wind on the film. An 85 mm or 135 mm lens can be used.

The start always makes for an interesting picture - a 135 mm lens can be used to photograph the starting stalls and a 200 mm lens will enable the photographer to crop close and capture the expression on the jockey's faces.

Rear view shots - the photographer can pan through from the fence to take the rear view shot. This type of photograph can be as powerful and have the same impact as a head-on photograph depicting the jockeys cracking their whips.

Photographs of victorious or defeated jockeys also make for powerful images.

SWIMMING

A good position to take photographs from is at the starting point in order to photograph the swimmers diving in to the water. Photographs of watersports can be improved through the use of a polarizing screen, This screen eliminates many distracting reflections from the surface of the water, although it could affect the atmosphere. For swimming races, shutter speeds of up to 1/250 sec. should be used. For the start of the race, use 1/500 sec. shutter speed.

Swimmers are confined to lanes, and this makes it relatively easy for follow-focusing. As most of the swimmer's body is submerged, it is thus important to time the shot carefully in order to photograph the swimmer's head as it breaks the water. This can be anticipated after watching only a few strokes. Many events are held indoors and these call for fast film and a fast lens. A medium telephoto lens is likely to be most useful focal length unless access to the poolside is restricted.

Underwater photographs are an interesting alternative, especially if the photographs are taken as the swimmers turn. These photos would have to be staged rather than taken during a competitive event.

MOTOR RACING

Access to photograph motor racing is usually restricted for safety reasons. A photographer's pass is very valuable as it allows the photographer access to a position close to the track. But to the duration of these races, the photographer is allowed enough time to take photographs from different camera positions. A grid start can be very exciting, while parts of the track that are known as likely passing places are also worth watching. A long telephoto lens can give good compressed views head-on to a curve. Panning shots, even at slow shutter speeds, can be another alternative.

Another good vantage point is at a corner or chicane where cars slow down and pre-focusing is easier. A 300 mm or 400 mm lens on a Monopod can be used to fill the frame at 1/1000 sec. shutter speed. A motordrive is invaluable in these situations. Panning on the straights and photographs taken from the inside of the bends could produce successful images.

SAILING AND POWER-BOAT RACING

The best camera position is almost always on a boat available to photographers and reporters at major event. A variety of lenses are useful, as are waterproof bags and some provision for drying and cleaning equipment in the event of a spray soaking. An amphibious camera held at the waterline close to a sailing boat can result in unusually dramatic pictures.

FREEFALL

A prerequisite for this type of photography is that the photographer should be an accomplished freefaller. Light reading should be taken on the ground, and the photographer should obtain information on the weather conditions expected at the jump height, 50 or 100 ASA film should be used. In order to be a good photographer in this field a sound knowledge of all aspects of this sport is required. The parachutists will be facing the ground, therefore the camera will be in their shadows. It is important to choose the correct exposure for these photographic conditions.

Low clouds beneath the jumpers act as a giant reflector, and enhance lighting conditions.

A fill-in flash can also be used. The Olympus F-280 flashgun syncs at all speeds, with the OM4-I TI used at 1/500 sec. Focus is also available, and the photographer needs to have a knowledge of depth of field. It is useful to use wide-angle lenses, (35 mm to a 16 mm fisheye lenses) as they depict the depth of field effectively.

The first priority is to freeze the action, at about 1/500 sec., with 100 ASA film on an average summer's day that gives an aperture of F5.6 and F8. Now decide how far you are from the subject and set the distance on your lens. To aid with composition a sight could be fitted across one eye. It contains a set of Newton rings which are parallel with the camera and marry up with the lens in use so that the photographer knows

roughly what it will see. Skylight filters fitted in front of the lens will protect it. A remote control device is very important in taking the picture. (Hawkins & Avon, 1989)

HOT-AIRBALLOONING

The secret of successful filming on any balloon flight lies in the careful placement of the cameras. If no vibration exists in the structure itself, camera positions can be as follows: attach one camera to the envelope pointing downwards, one to the upright of the basket pointing vertically upwards, and one secured to the parachuting helmet on your head.

A TTL-metering system is often the most convenient way of measuring light but should be used with care. Large areas of light, such as snow, will tend to result in underexposure, just as large dark areas, such as forests, will tend to result in overexposure.

There is no real substitute for an incident lightmeter reading in the subject areas, but if this is several thousand feet above the photographer's head, then a telephoto lens mounted on a TTL-metered camera saves making this climb. (Dickinson, 1978)

INTERVIEWS WITH PROFESSIONAL PHOTOGRAPHERS

TONY DUFFY

THE INTERNATIONAL SPORT PICTURE AGENCY

1. What are the most important qualities needed by a sport photographer?

An ability to visualize a picture and the capacity to work to get that picture. Obviously, there are other vital factors, such as sharp reflexes, but I don't think you can overestimate the value of having an eye for a picture and a feeling for the subject.

2. Why did you become a sports photographer?

My interest in sport came first and photography was just a way of translating that fascination into something visual. If I could have painted or draw, I might have tried to express myself that way instead.

3. What are you looking for when you go out to photograph a sports event?

A range of things really. The agency's bread and butter is good stock action pictures in colour and so that must be my basic priority. But obviously if I can produce a striking, unusual photograph, I know it is going to boost my reputation and make a lot of money.

I would love to be in a position just to shoot for that one great picture and if it does not happen the first time, to keep going back until it does. But unfortunately things do not quite work out like that. We are under constant pressure to take the stock pictures that guarantee the agency's income. We are so busy shooting every incident and catching every competitor that we are not able to go for the really unusual picture as often as we would like.

4. How important is it to you to keep abreast of the latest development in equipment and materials?

Absolutely vital. If a new lens comes out that is a stop faster than its predecessors, for example, I would want to get hold of its predecessors and would want to get hold of it as soon as possible.

It might allow us to shoot Kodachrome when everyone else was using Ektachrome and it would certainly make it easier to work in poor light conditions.

In the same way, a new long lens would let us frame the action tighter or a brighter viewfinder would help our focusing.

Whatever technical improvements might enable us to take better pictures, we will want to know about them. (The National Sport Picture Agency, 1985)

TERTIUS PICKARD (SA SPORTS ILLUSTRATED)

- 1. How did your photographic career start and which goals have you already accomplished?**

"My interest in photography started when I was a kid. My brother had a fancy camera which he let me use once in a while. I then studied photography in the SA air force. (3 and a half years) I then joined Beeld Newspaper, staying with them for 5 years before joining SA sport illustrated, as chief photographer in SA to specialise in sport full-time."

- 2. What have been the highlights of your career?**

"Mainly the changes in SA. I did all the first international events after SA was allowed back into international sport. It was a complete new world, very competitive and very rewarding. Every international event I've covered stands out. (If you have to have one - the game between England and Holland at Wembly this year.)"

- 3. What kind of problems have you encountered with people in your career?**

"Problems there will always be. As much as our sportsmen were left in the cold, so were sports administrators. Also with the power struggle, a lot of sports admin. people are working only for themselves, and not for the photographer who needs them for accreditation, information, etc. I have experienced endless problems trying to get a photographic pass for events, due to the lack of knowledge of admin. people."

"They are not aware of the photographer's needs, 50% of them are not interested in being aware. In England I had no problems. I was treated with respect, everybody knew why I needed what I did."

"In SA, they make you feel dependant on them - they are in charge, and you have to beg to be helped. So, you adapt and survive - remember!"

"I've also experienced a lot of reverse racism. More than you'd like to know. Sportsmen are difficult people. Some are always on time, some are always late, some never pitch for appointments and they always want to know why you want to take pictures of them. In general, I'd say SA sportsmen are very unprofessional. The odd exception (Naas Botha, Hansie Cronje, Alan Donald, Robert du Preez, Duncan Crowie) are very professional and on time but 75% are non committed. So once again - you have to get to know them and adapt to their ways. Always make sure that whoever you photograph, they will remember you the next time they see you."

4. Which technical problems occur in sport photography?

"Technical problems - plenty. My cameras average 200 to 300 pictures a day, seven days a week. Equipment takes a hammering, and there is no back-up service in SA. Frank and Hirsch, the agents for Nikon in SA, average three months on a minor repair. In the UK, they replace the broken item and they repair it in one week.

Because they care, and also understand your needs. (They are proud of their product as well!) If I have a major breakdown, I courier it to England and I get it back in 2 weeks. Sometimes they don't even charge."

"Getting the right film is also sometimes a problem. (That's gotten a little better, though, with ISO photo bringing in Fiji.) Kodak is still difficult and costly to get. I consider myself very fortunate to have the Allsport connection. They supply a lot of stuff not available here."

5. What kind of equipment do you use and think is important for sport photographers to have?

"Equipment - I use Nikon at present, because Canon is very expensive. I'd not use anything else, due to the hammering equipment takes. My setup is as follows:

16 mm 2.8

24 mm 2.8

35 - 90 mm 2.8

50 mm 2.8

85 mm 1.8

80 - 200 mm 2.8

300 mm 2.8 (+ 1.4 adaptor)

600 mm 4 (+ 1.4 adaptor)

flashes, filters, etc.

"I use a lot of filters for special effects, as I always try to get a different picture. A good Tripod is essential for cricket, surfing, etc."

"Film: I use a lot of Velvia 100 ASA, slide film. Anything over 100 ASA I use print film, and we copy the negs into trannies."

6. What are the techniques used in sport photography?

"Techniques - plenty - all the basic techniques need to be remembered all the time. (Panning, shutter speeds, depth of field, etc.) Every sport has its own tricks. You have to look at the top guys work as much as possible to keep up with new techniques."

7. What is the future for sport photography all over the world and in SA?

"Sport photography is one of the biggest money making forms of photography. Unfortunately, a lot of monopolies exist. But I firmly believe there will always be a place for a good photographer to survive. But it's a very, very competitive business, so start somewhere, (a newspaper) see what your abilities are, work your way to where you want to be. Sport will always survive."

8. Do you have any advice for aspirant sport photographers?

"What I said in the previous question, as well as never think you're reached the top. You are only as good as the last picture you took. Learn from other people, always be humble and positive. Get to know your sport and the people that take part in it. Know that Alan Donald always runs towards the batsmen when taking a wicket, Brian Mc Millan always turns around. You have to expect these things to happen all the time. You never get a 2nd chance. It's a tough game, and only the best will survive."

FIGURE 1 : CRICKET

Keeping your eyes on the game - staying with them can be difficult, but also sometimes rewarding. I tried to pick up something different by photographing individuals.



PICTURE 1 : CRICKET



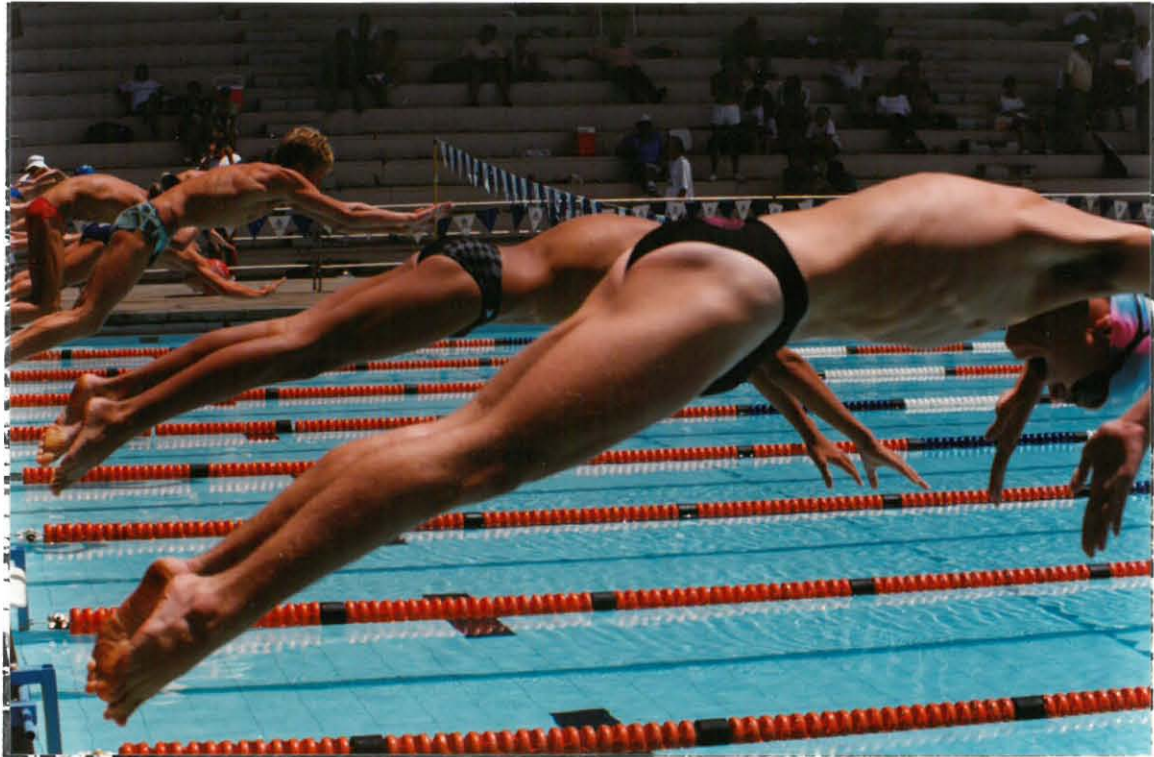
PICTURE 2 : WATERSKI



FIGURE 1 : WATERSKI

Sometimes different angles can do just the thing. In this picture I took an areal photo, which works well. I also played with angles in picture 3 and I think that this was the reason for success.

PICTURE 3 : DIVING



PICTURE 3 : DIVING

A diver photographed from beneath.

PICTURE 4 : SOCCER



PICTURE 4 : SOCCER

The technique in shooting soccer is just to follow the action and to know the game. Wait for the peak of the action and I've got the shot.

PICTURE 5 : RUBBERDUCK COMPETITION



PICTURE 5 : RUBBERDUCK COMPETITION

In this picture, I studied the action before shooting - therefor I could pre-focuse. This technique helps if things are going to quickly. I used the same technique in picture 6.

PICTURE 6 : MOTORCROSS



PICTURE 7 : UNDERWATER HOCKEY



PICTURE 7 AND 8 : UNDERWATER HOCKEY

It is always difficult to take pictures underwater. I photographed this through glass and the results were quit good. Focussing is one of the most important aspects.

To get picture 8, I had to lay flat on my stomach. The distortion made it unusual.

PICTURE 9 : STRONG MAN COMPETITION



PICTURE 9 : STRONG MAN COMPETITION



I documented the strong man competition. It was good to get a lot of expressions in this photographs on the men's faces.

PICTURE 10 : MICROLIGHTS



In order to get this photograph, I had to be flying in a microlight myself. Using long lenses helped to get this photograph.

PICTURE 11 : ATHLETICS



PICTURE 11 : ATHLETICS

I wanted to take a photo of Johan Fourie and was surprised in the suffering on the runner's faces.

PICTURE 12 : CYCLING



PICTURE 12 : CYCLING

A technique well known is panning. I used a very slow shutter speed while panning when the cyclers past me and indeed a nice effect was created.

LIST OF AUTHORS WORK

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|-----|------------|---------------------------------|
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| 2. | PICTURE 2 | WATERSKI |
| 3. | PICTURE 3 | DIVING |
| 4. | PICTURE 4 | SOCCER |
| 5. | PICTURE 5 | RUBBERDUCK COMPETITION |
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| 8. | PICTURE 8 | DISTORTION IN UNDERWATER HOCKEY |
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| 12. | PICTURE 12 | CYCLING |

CONCLUSION

Photographers come and go as years go by and every day there are something new and different to learn. Photography will always be one of the important things that will stay.

Man has always had the desire to compete, to do the best, therefore sport photography is the best way to catch this moment.

Sport photography is a tough game, and only the best will survive.

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