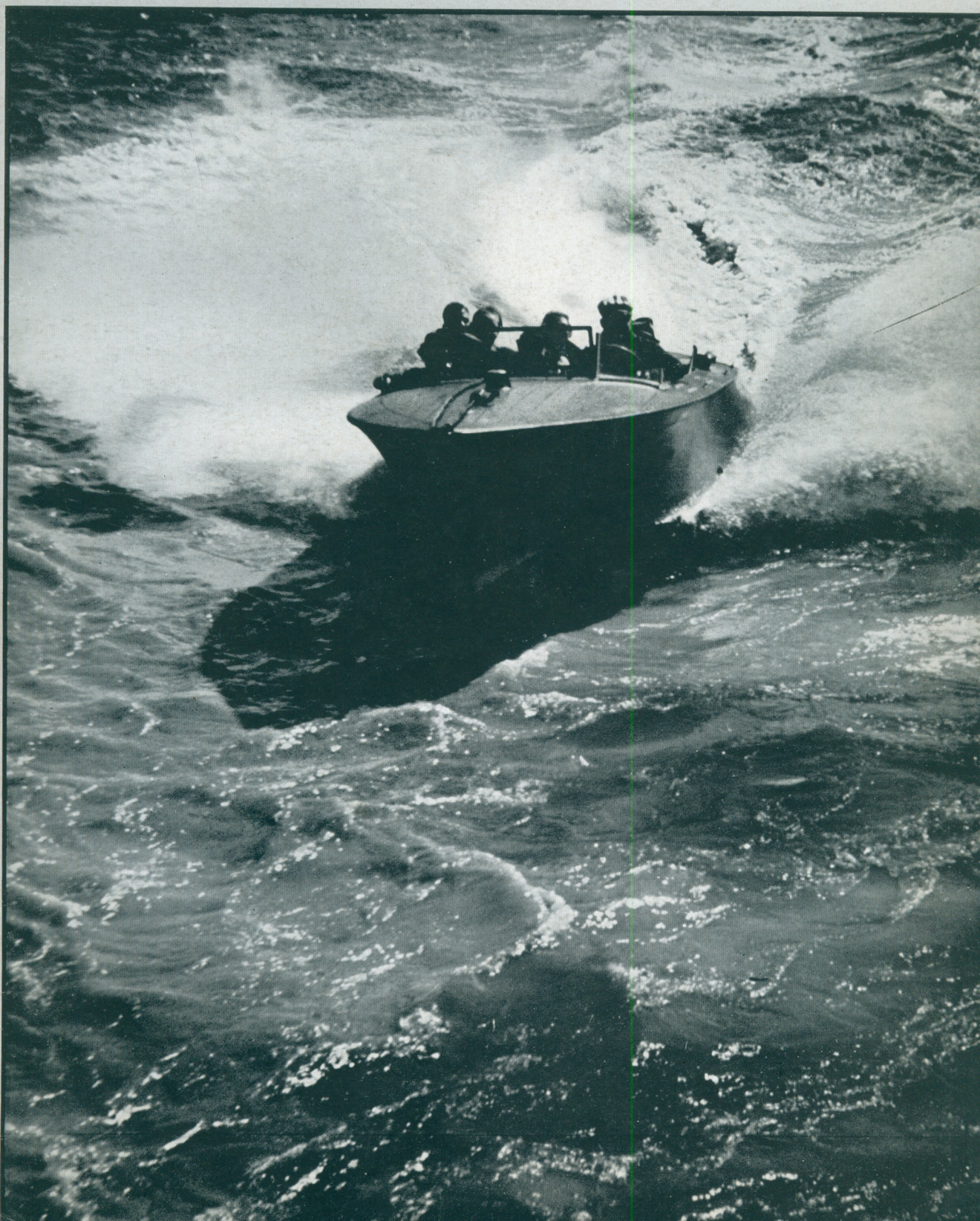


Leiss

MAGAZINE

*Jan Wille
Butler*

August, 1938



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VOL. IV
No. 8



SECOND PRIZE

Music to the Skies

PAUL KOZAK, JR.

FIRST PRIZE

By the Lakeside

RAYMOND SEBASTIAN

Zeiss Ikon Monthly Competition

MANY PHOTOGRAPHERS, either unconsciously or by intent, frequently violate what the conservative school considers the principles of pictorial design. All sorts of daring angles and forced perspectives are attempted, some of these efforts being very effective and striking. The majority of these modern pictures are ideally suited for use in advertising or newspaper fields, where the unusual or bizarre are eagerly sought as the best means of attracting reader interest. Pictures

of this type, when well done, have a vitality and force which make the reader stop and look. The conservative school, however, is more concerned with achieving a beautiful effect, a mood of peace and grace. Therefore, while their work may not have a "kick" to it, it does have a lasting quality not found in the more violent and aggressive creations. Paradoxically, it has often been noted that the hard-headed business man, when taking his camera out for a bit of relaxation, searches the beautiful and sentimental subjects; whereas the milder chap, whose life is run along more settled lines, will be more apt to go in for candid and dynamic pictures. Each group seems to balance their lives by supplying that which they lack . . . one wants peace and contentment, a lull in the daily battle, the other looks for the excitement and motion lacking in their average day.

THIRD PRIZE

Outdoor Girl

ROSS A. ROSS



Our first prize winner this month, Raymond Sebastian's *By the Lakeside*, definitely falls in the conservative class. It shows a fine sense of basic composition, the sort which makes for pleasing arrangement and is more apt to be successful in pictorial salons. The division of his picture space follows the traditional thirds, the important areas of interest falling approximately on the crossing of these imaginary lines. This is illustrated by the position of the heavy tree, the outline of the foreground where it meets the lake, the distant skyline, and the careful placing of the tiny figure. When introducing figures in a landscape, whether people or animals, choose your viewpoint so either the figures or the landscape loom the most important; there should be no conflict between them for domination. If the landscape is more important, the figures should be kept small in size and away from the immediate foreground. Here, Mr. Sebastian has made good use of the small figure, both as a balance for the large tree and as a human-interest element. There is no question but that this is a landscape study, the boy and his sailboat (*Please turn to page 191*)



FRANK SUNDERLAND

THIS MONTH

...there is announced in ZEISS MAGAZINE one of the most complete and comprehensive collections of exhibitions and lectures available anywhere. These are for the use of camera clubs, schools, museums, and ZEISS Dealers, as announced elsewhere in the magazine, without charge. While their very completeness would seem to indicate that no request for them will go unanswered, reservation in advance is suggested as the best means of assuring that you get the exhibition or lecture wanted on the date you want it. The prints comprising these exhibitions and lectures are the finest examples of pictorial work by some of the leading American workers. These exhibitions and lectures are offered in our sincere desire to be of help in raising the standards of pictorial work through the showing of photographs by the better pictorial workers. They are at your disposal without charge to do what you will with them.

... and every month from now on entrants in the national monthly competition of the magazine will find two of their prints criticized when they are returned. So many entrants have written from time to time, asking for suggestions as to how they could better their work, that this development is offered as a slight measure of our appreciation for their courtesy and cooperation in entering pictures in our competitions. The criticisms are not intended to discourage in any respect; the intent, rather, is to give some suggestions as to how you may improve the caliber of your work. We are sorry that the number of prints received each month compel us to enforce the rule that no further information will be given than that stated on the criticism. If it is not fully understood, we would suggest that you submit it to the print director of your club, a more advanced photographic friend, or your ZEISS Dealer, any one of whom will be glad to help you in this respect. And if you do not want to receive the criticism, just mark your prints "No criticism" when submitting them for entry.

ZEISS MAGAZINE

Devoted to Zeiss Ikon Photography

VOLUME IV

NUMBER EIGHT

AUGUST, 1938

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Edited by Fenwick G. Small

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Star Class

FROM THE ZEISS IKON LOAN EXHIBITIONS
SUPER IKONTA A with TESSAR F:3.5 7cm Lens; exposure of 1/200th second at F:8 with G-2 Filter.

JAMES D. FOLEY

Z E I S S M A G A Z I N E

Zeiss Ikon Loan Exhibitions

FENWICK G. SMALL

DISTINGUISHING features of past ZEISS IKON Exhibitions have been their pictorial and technical quality and the diversity of approach and subjects included. Characteristics placing them so much in demand that, in some instances, the requests of camera clubs, schools, museums, and similar organizations, as well as ZEISS Dealers, for the use of them could not be accommodated. While this did not occur often, requests for prints frequently had to be reduced in quantity on account of the many demands being made. Therefore, early this spring extensive plans for their enlargement were commenced, and announcement is now made of the largest collection of exhibition and lecture material ever before made available in this country. Those acquainted with former ZEISS IKON Exhibitions will know the standards set in preparing these new ones. Demands of exhibiting organizations and ZEISS Dealers require that they be high. Many of the prints included in these exhibitions will be recognized as having been accepted and hung by some of the leading salons throughout the world. Others would have no trouble in being likewise accepted were their makers interested in such activities. Still others have been reproduced by some of the leading American magazines or have been used in well-known national advertising campaigns. But, regardless of their source, a high standard of pictorial and technical quality has been required for their acceptance.

Naturally, because of the diverse interests and requirements of those for whom these exhibitions are intended, they have been segregated in sets of various types. Generally, they are divided into three classifications as follows:

1. *The Club Sets*: available only to camera clubs, museums, schools, and similar non-commercial organizations, these consist of the One-man Shows, Print Lectures, and Camera Club Exhibit.
2. *The Dealer Sets*: available only to recognized ZEISS Dealers, these consist of prize-winning prints from the national monthly competition of ZEISS MAGAZINE.
3. *The General Sets*: available to both ZEISS Dealers and non-commercial organizations, these consist of exhibition prints by many hundred American amateur and professional photographers.

These classifications have been necessitated by the many demands of those who wish to exhibit the prints, as well as in some instances by the requirements of photographers contributing to the exhibitions, and sets of a given classification can only be loaned to those to whom this classification is available.

Requests already made for exhibitions during the coming season indicate that the demand is going to be heavy. Therefore, advance reservations for specific exhibitions are suggested. While the very completeness of these exhibitions and lectures make certain that no request will go unfilled, it is only by advance reservation that an exhibitor can be assured of the particular exhibition requested on the specific date for which it is desired. This need for advance reservation is particularly indicated of the exhibitions included in the *Club Set* and *Dealer Set* classifications, for some of which reservations are already made as far ahead as next spring. The exhibitions included in the *Dealer Set* classifications are almost all scheduled until January, 1939, although additional exhibitions now in the course of preparation will be completed by the first of October. In order to avoid trouble and delay, the following information should be given when requesting a reservation for any particular exhibition:

1. The *quantity* of prints desired for exhibition.
2. The *date* on which the exhibition is needed.
3. The *length of time* the prints are to be on exhibition.

In applying for exhibitions included in the *Club Sets*, if an alternate date for the same exhibition or an alternate exhibition for the same date is given, considerable delay will be saved in the event the exhibition requested is already reserved for the desired date.

The Print Lectures are the newest addition to ZEISS IKON Exhibition material. They will consist of about fifteen prints by an outstanding American worker, accompanied by a typewritten manuscript giving the story behind each picture: subject matter, concept, taking, composition, etc. The print director, or print critic, of the club using the lecture can place each print individually on an easel and give the members the maker's concept of the picture, then he and the members of the club will have, (*Please turn to page 188*)

Teaching Golf with Pictures

HARRY COOPER

FOR THE LAST few years I have been using a still camera as an aid in teaching golf. From the results obtained I have come to believe it is the greatest medium to definitely show a pupil what he is doing wrong. Very frequently all the explanations in the world will not put over a particular point in teaching, but a single picture, showing the fault in the swing, will get over your point so that the pupil will try to remedy it. In this instance, seeing is certainly believing.

For my work I have been using the CONTAX with fast shutter speeds up to 1/1250th of a second, but 1/500th of a second is fast enough, and even as slow a shutter speed as 1/200th of a second will stop enough of the arm, hand, foot, and body action to get what is really needed. So long as this action is stopped sufficiently, there is no need to stop the action of the club head or shaft. Picture No. 1 (John Morrell) shows that it is still possible to see all that went on during the swing, even to the position of the hands just after contact with the ball, yet there is a slight blur in the action of the hands and arms. Note Picture No. 2 where the shutter speed was fast enough to freeze all action and stop everything cold in Ralph Gulldhal's swing. The picture was taken on the downswing with

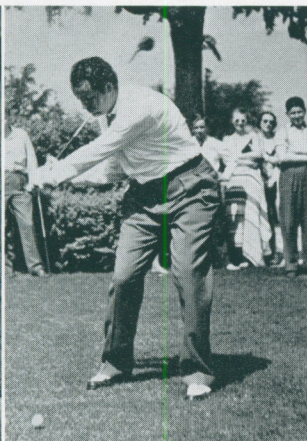
the club traveling very fast at a shutter speed of 1/1250th of a second. The sun was very brilliant, as can be seen from the heavy shadows, so I could stop down to F:4 and get a fair depth of field.

Pictures No. 3, 4, and 5 make an excellent comparison of the value of pictures in showing faults. Note how Lawson Little (Picture No. 3) and Jimmy Thomson (Picture No. 4) — two of golf's longest hitters — have kept their heads in position with their eyes on the ball as they hit through with tremendous power, also how straight the right arm is in this position of the swing. Now study John Morrell (Picture No. 5) — a two-handicap man — noting how both arms are collapsed and the head has already started to come up. These are things that can only be shown by a still camera. You can study the pictures as long as you like, while with a moving picture the action is completed before you have a chance to really study or see what happened.

Here in Picture No. 6 of Horton Smith are shown the relative positions of the ball for shots with the four key clubs — the wood and the 2, 5, and 9 irons. As you can see, the ball placement for the wood shot is off the inside of the left heel to insure hitting the ball on



PICTURE NO. 1



PICTURE NO. 2



PICTURE NO. 3



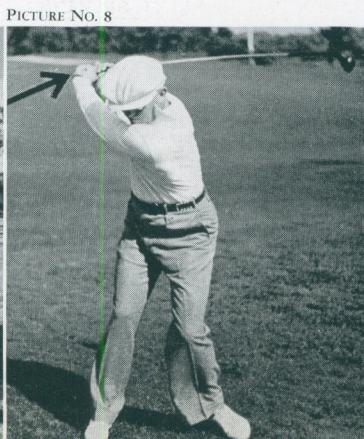
PICTURE NO. 4



PICTURE NO. 5



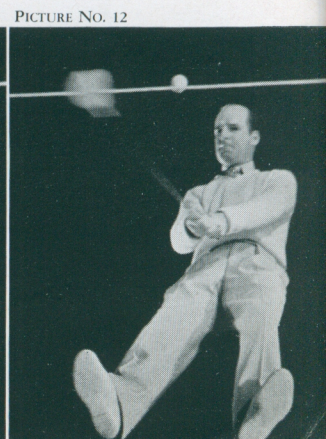
PICTURE NO. 7



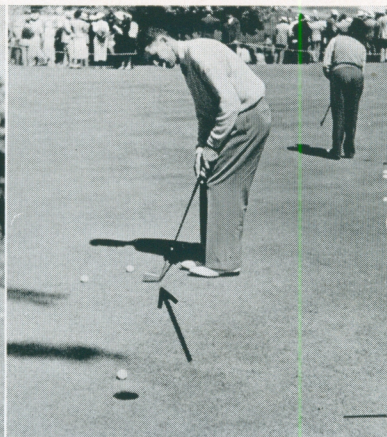
PICTURE NO. 8



PICTURE NO. 11



PICTURE NO. 12



All photographs
by
HARRY COOPER

PICTURE NO. 13

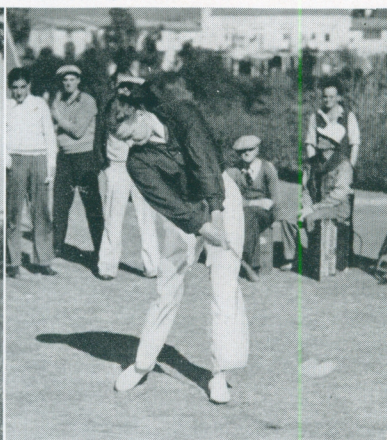
PICTURE NO. 10

PICTURE NO. 9

PICTURE NO. 14

PICTURE NO. 16

PICTURE NO. 15



PICTURE NO. 6



the up-swing. With the No. 2 iron the ball is moved a little closer to the body and back in the direction of the right foot. With the No. 5 iron the ball is moved to the center of the feet; the No. 5 is the real key club and the ball definitely should be played from the center position. With the No. 9 iron, or the No. 8, the ball is now moved to a position just off the inside of the right heel; this is to insure hitting the ball on the down-swing so as to impart back spin and control.

Now compare Pictures 7 and 8; only the still camera could pick out the differences between the two swings. Look at the hand positions (indicated by the arrows) at the top of the swings. In Picture No. 8 (John Morrell) the wrists have failed to get in position as in No. 7 (Paul Runyan) which is correct. The head of the club in No. 8 points skyward, while in No. 7 it points to the ground as it should. The cause of the errors can be composed also in these pictures. In Picture No. 7 you see a fairly upright swing with the hands high at the top, while in No. 8 they are around the player's neck. Naturally, the wrists could not be caulked with such a flat swing. While these two

pictures were taken from different angles, the points indicated stand out very clearly.

In studying Henry Picard putting (Picture No. 9) we see again how easy it is to pick out such things as where the weight is placed or how the club comes through on a line. Both are very clearly shown in this picture. Let's take it by stages. *First*, the weight is balanced towards the heels; *second*, both knees are relaxed — relaxation and freedom from tension being the main idea here; *third*, the ball has been hit and is about to go in the cup with the blade of the putter still at right angles to the line of the hole on the follow through. There is not much chance of the ball getting far off line. The face of the putter has not been opened on the back-swing nor closed coming through. If that had been done, the putter at this position would be turned over and the hands could not rest on the left knee. Rather, the club would be in a position to the right of the hole from the point of view of the (Please turn to page 191)

The Story Behind The Picture

RICHARD WURTS



THE candid phrase concerning the sucker attributed to old Phineas T. Barnum — “There is one born every minute” — certainly seems to fit the audience of the faker and his presto-chango wares especially. Here today

and gone tomorrow, with wares of uncertain origin and less certain repute, the crowd will always gather round to watch and buy the minute the pitchman starts crying his wares. And it is here that the watchful will find some of their best picture subjects.

My uncle and I had climbed out on the wide fourth-story ledge of an antique, lower-Broadway office building and set up an 8" x 10" view camera for an extreme wide-angle shot of the Federal Travel Bureau across the way. While we were waiting for the clouds to make up the sun's mind, we watched below as any one standing above a height will do naturally. Suddenly my uncle noticed the street peddler opening his pack. That was luck but habit also played its part, for I had my SUPER IKONTA B slung over my shoulder as usual. He had not finished his set-up before my SUPER B was ready and a reading had been taken with my Weston Meter. The crowd began to gather as we had expected, and even though conditions were not perfect, several exposures were made immediately. Later these first exposures were discarded, but I regarded them as insurance rather than waste.

Suddenly I saw the policeman opposite and a mean idea was born. After both of us had waved for several minutes to attract his attention, he finally saw us with the thought that he had to cope with two would-be suicides. It took several minutes of showing my camera, pointing at him, and then pointing below in Indian sign language — meanwhile he with a snarl on his face motioning us back as if to stop our jumping — before he realized what was wanted. Then, with a glad hand and a grin, he slowly strolled over in all the might and majesty of the Law, taking his stand behind the unsuspecting pitch-man.

This was my opportunity. The crowd was in a circle, there was a feeling of suspense, and all I needed was to have the street traffic stop for an instant. Since it had clouded over again and the lens could not be used

wide open on account of the required depth of field from the lamp post to the ground, 1/50th of a second was the fastest shutter speed I could use. Then a red light, and as things came to a halt I made the shot.

Fortunate it was that I shot at that instant, catching the car that fills the upper-left corner, because several seconds later, when the policeman reached over and tapped the peddler on the shoulder, I tried again. By then, however, the crowd had split into a jam with no design.

Why does such a photograph catch the eye and hold the interest? Certainly not because of any sentimentality or trick in posing. It is, I believe, due to the oddness of the angle and the human subject matter. A closer study reveals the story, and the onlooker recalls himself in such a crowd; perhaps, due to the viewpoint from above, he feels a pleasant superiority. There is both composition, built by the grouping of the crowd and the lamp post with a sauce of motion in the car, and detail, furnished by the individuals, man-hole covers, and other items, to retain interest while the picture is being studied. Since the scene itself might occur almost anywhere with only slight differences in costumes, the picture is easily understood and, therefore, has a wider appeal.

One Born Every Minute was enlarged from about two-thirds of the 2 1/4" square SUPER IKONTA B negative, as will be seen by reference to the reproduction of the contact print from the whole negative on this page. Its career to date has been rather successful, the picture having been accepted for the Fourth Annual ZEISS IKON Exhibition, reproduced in *Life*, chosen by the Museum of Modern Art for their Paris Exhibition of the history of American art during three hundred years, and exhibited by request in the First International Photographic Exposition at the Grand Central Palace where it received a Special Award for Professionals.

One Born Every Minute is a type of photograph for which I believe the miniature camera is ideally suited. It is of the so-called candid type, but unlike many such pictures, for which there is no real excuse photographically or otherwise, it does not place any one in an embarrassing or ridiculous position. It can also be considered as a documentary photograph in that a phase of our civilization containing human interest is permanently saved as a record of that instant. Such cameras as the SUPER IKONTA B are ideal for this work, and it is with such (*Please turn to page 190*)



One Born Every Minute

RICHARD WURTS

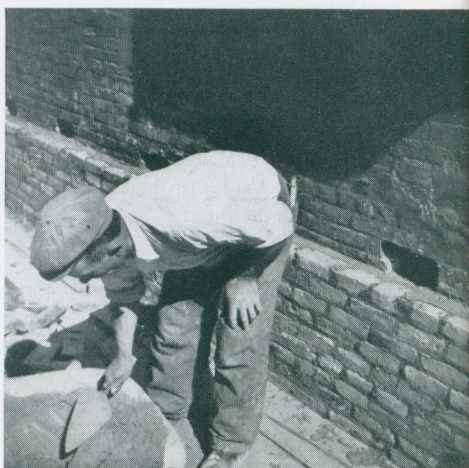
SUPER IKONTA B with TESSAR F:2.8 8 cm Lens

AUGUST, 1938

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All photographs
by
 CHARLES SANFORD KNAPP
with
 SUPER IKONTA B



Good Pictures . . . "On Purpose"
 . . . *not by accident*

CHARLES SANFORD KNAPP

YOU HAVE a ZEISS IKON Camera, the most proficient short-cut to picture making. You have available other accessories far ahead of what picture makers of the past even imagined. Great scientists and engineers worked long, hard years to give you these facilities. You invested in this equipment as much, very likely, as a thousand dollars. You are surrounded every day with thousands of picture possibilities. Honestly now, have you ever made a really good picture, one that completely satisfies you?

Be even more brutally honest with yourself. Do you know a good picture when you see one? There's a good reason for this rude question. You

cannot possibly make a picture you do not first see. Hence, if you don't know a good picture when you see it, you cannot possibly make it; that is, make it deliberately, on purpose, with some foreknowledge of what sort of print will result.

What is a good picture? I give you the answer of Nicholas Haz, the outstanding teacher of photographic composition . . . "A truly good picture is a picture that completely satisfies you, no matter what anyone else may think of it." It satisfies you because it is a complete representation of your conception, your interpretation, your idea, your view of that particular subject. Neither schools, techniques



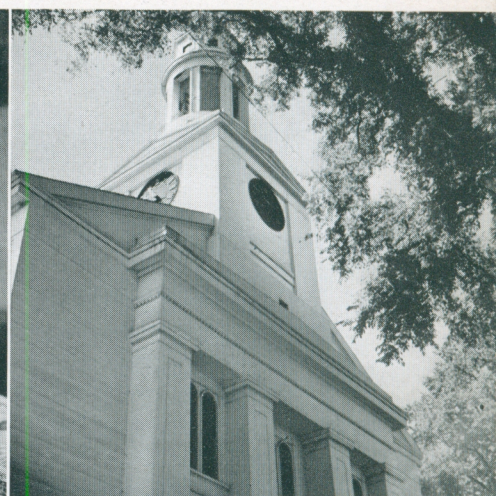
nor styles alone make pictures. Whether you make your picture according to the F:64 Group, or after the manner of the academic pictorialist, or the radical manner of Man Ray, is of little consequence. The important difference between a good, an indifferent, or a plain bad picture is solely in how well you have pictured a single idea, point of view, or individual interpretation. Single idea because there isn't room in one picture for more than one idea. Otherwise you haven't one picture but several, each competing with the other.

Your success in getting your single idea across in the picture depends first on how well you compose all its elements, how well you concentrate the line, edge, tone, and perspective of every object in your picture to achieve that singleness of idea. There is nothing in your perfect picture which does not contribute to that single idea. You have arranged all those picture elements in such fashion that when other people, not familiar with the idea, see the picture, they "read" the idea you expressed as easily as if it were printed in a four-column newspaper headline. To do that, you have utilized well-known principles of optics and aesthetics to make it as easy and pleasant as possible for others to read your idea.

The second demand your perfect picture makes of you is that it shall be technically proficient so that the idea you have composed, arranged, ordered . . . the

or a perfect print is far, very far, from being the same thing as a perfect picture. Of course, it's quite all right to spend time and money in such hypothetical pursuits so long as you don't expect to make good pictures by that process alone. *The perfect picture needs both the eye to see it and the technique to complete it.*

There are, to be sure, supercilious advocates of the "law-of-averages" method of making good pictures who are impatient with so painstaking an approach. They know that if you shoot enough film in enough different directions at enough different subjects and with a sufficient range of exposures and then make enough prints . . . well, you might figure on a really fine picture out of every one or two hundred. They can't, of course, say in advance which picture it will be, nor can they say how many you will have to shoot. They couldn't go right out and make the same kind of picture again. But this "law-of-averages" method does have the mystically adventurous thrill of spirit writing . . . "My mind was a blank and another's hand wrote the message." It's no more picture making, however, than if the camera were mounted on a truck and operated by a robot in all directions at constantly changing diaphragm and shutter settings. This article, however, is designed to encourage those photographers who bought a ZEISS IKON Camera and other equipment for the purpose of making good pictures on purpose,

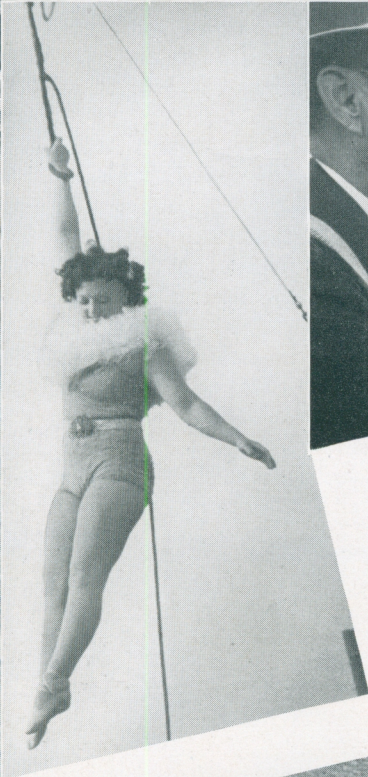


pattern of light, shade, and line . . . shall not be obscured but brilliantly and clearly shown. Technique in exposing and developing film to make the most of modern emulsions, and in making the best possible print from the negative, is not extraneous to the making of a good picture. It is but another facility, like your ZEISS IKON equipment, for carrying out your picture idea. But technique is not an end in itself as many photo-gadgeteers seem to think it is. A perfect negative

not by accident.

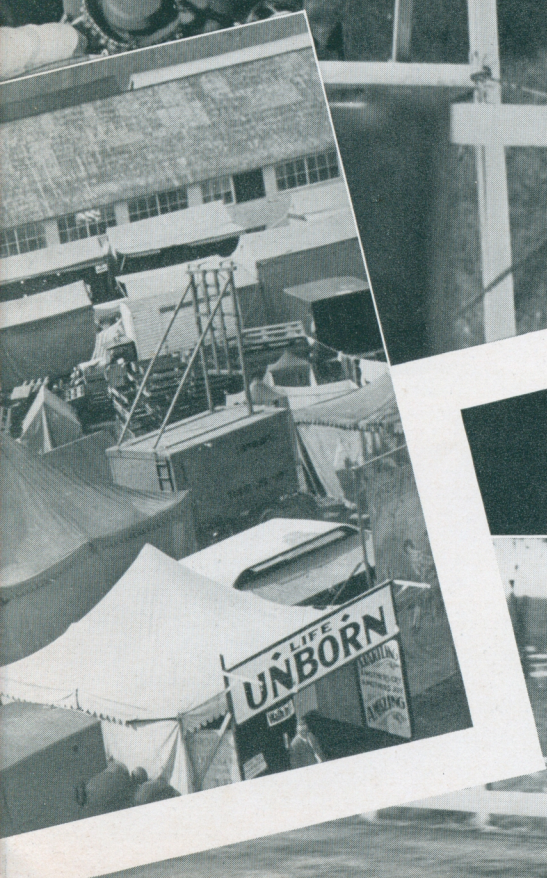
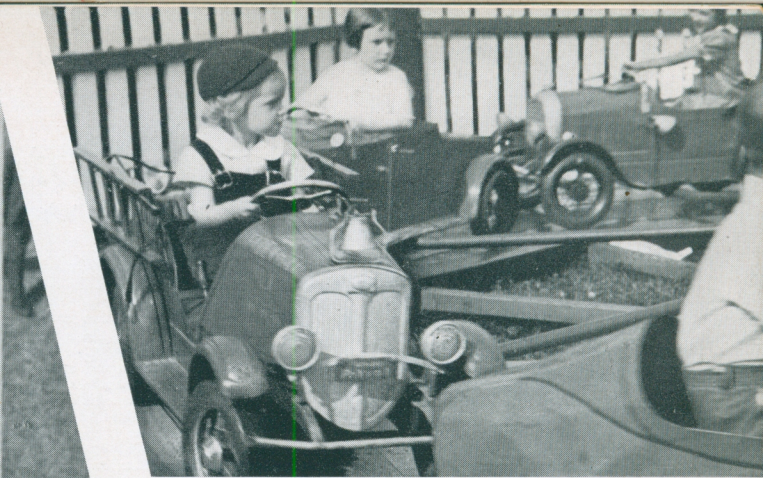
The ability to make a good picture of any subject, exactly as planned, through the discerning eye and the creative mind, calls more for an investment of mental and physical energy than for a mere investment of money. The steps to making a good picture this way are easier on the billfold but harder on the brain.

The resultant satisfaction, however, is a millionfold greater. *(Please turn to page 191)*



**DANBURY
FAIR** *photographs by*
VERNE NOLL
with
ZEISS SONNAR
F:2. 50mm **CONTAX**





Arriving at the Optimum

KLEIN, ROUP & SMITKA*

(About one year ago in Skweegee, official monthly publication of the Shorewood Camera Club, Milwaukee, we noticed a brief report concerning an investigation started by three of their members—President A. C. Klein, Rolland Roup, and Ralph Smitka—on the relationship between film speeds and developing solutions. A query addressed to one of the members with whom we were corresponding at that time brought a response which indicated that the investigation would be so intensive, so unbiased, that we requested permission to publish it on completion. This report is the result of that investigation. Inevitably it will produce discussion and dissension, but the work has been carried on so thoroughly, so conscientiously, and with such regard to the establishment of standard conditions which any careful amateur can duplicate, that we feel it makes a definite contribution to this moot question. The investigators grant that some of the newer types of high-speed films are not included, giving the explanation that they understand that some new ones are still to be introduced by other manufacturers. They promise, as soon as this is done, to continue the investigation with these high-speed films and report their results. Beside the high technical ability and knowledge evidenced by this report, it is interesting to note in the current issue of Skweegee that Mr. Roup was classed first and Mr. Klein eighth in the Shorewood Camera Club for average points scored per print in their print exhibitions during the past year. Certainly no mean achievement, for the pictorial abilities of the members of this club are well-known among camera clubs.—Editor.)

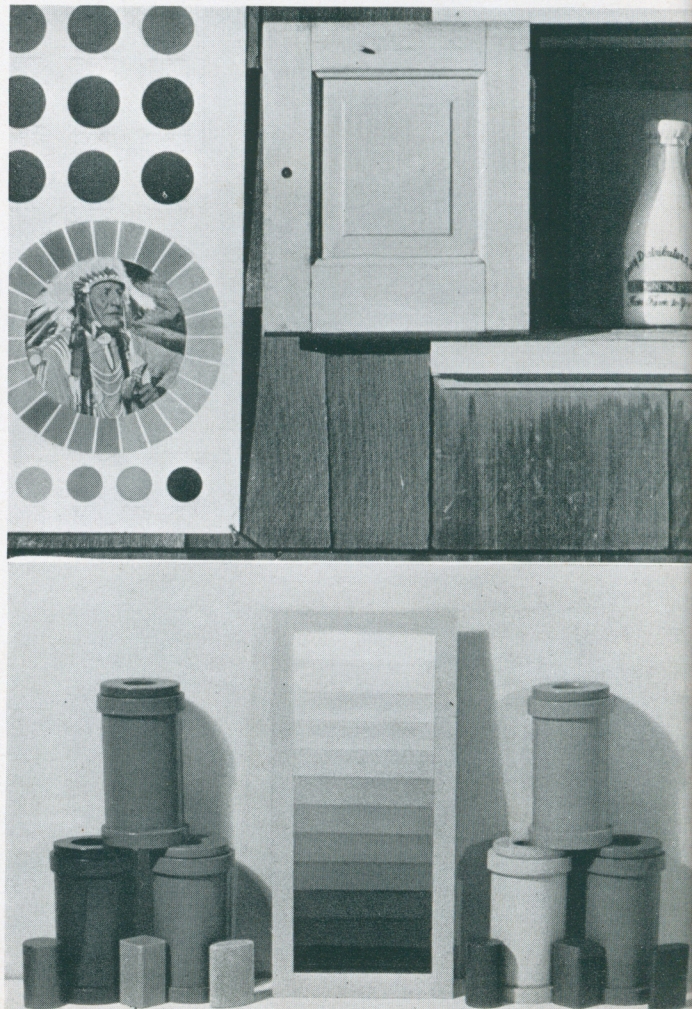
OPTIMUM comes from the Latin word *optimus*, meaning "the best," and it still means just that, the best, the most favorable degree, or the most satisfactory condition. In processing films, to use the best developer and to give a film the corresponding correct exposure necessary to obtain the most desirable negative, a negative which will render the best overall print quality, is to arrive at what is here termed *the optimum*.

Because of the wide differences of opinions regarding film speeds and fine-grain developers, and because heated arguments, contradictory articles published on the subject, and optimistic sales literature did not supply the answers, it was decided that a careful, impartial experiment, comparing a number of popular films and several well-known fine-grain developers, would be well worth while. It was thought best that these experiments be conducted under conditions and with equipment which is available to the average photographer. The three who volunteered to make the comparisons were users of miniature cameras, hence 35 mm films only were used in the tests. Nine films and six fine-grain developers were chosen for the experiments. The films selected were Agfa Superpan (old style), DuPont Superior, Eastman Super X, and Eastman S.S. Panchromatic of the high-speed group, while Dupont Parpan and Eastman Panatomic were selected from among the intermediate-speed films and Agfa Finopan and DuPont Micropan from the slow-speed type. Agfa Fine Grain Plenachrome was the only orthochromatic film used. The developers chosen were Agfa 17, Champlain 15, Eastman Ultra Fine Grain, Eastman D-76, Edwal 12, and Edwal 20. With the exception of the

Eastman Ultra Fine Grain, which it was felt could not be excluded, these are all published formulas with their faithful followers, and that is why they were selected. The exclusion of any developer is not to be construed as a criticism; all of the investigators are active in their own professions, and time limitations did not permit the inclusion of any others.

Two standard set-ups were photographed, one in daylight and one in artificial (tungsten) light. (See Illustration No. 1.) Each of these set-ups included colored objects, or charts, that covered the full color spectrum and a wide scale of gray tones. All of the outdoor exposures were made within several days between the hours of 1:00 and 2:30 p.m. on clear cloudless days. A Model I CONTAX Camera fitted with

ILLUSTRATION NO. 1—At the top below is shown the daylight set-up photographed on Agfa Superpan (old style) developed in Edwal 12. Beneath that is shown the artificial light set-up photographed on DuPont Superior developed in Eastman D-76.



*Members: Shorewood Camera Club, Milwaukee, Wisconsin.

a SONNAR F:2 85 mm Lens was used to make the 432 necessary exposures. Each of the nine films was given four separate exposures for each of the six developers on the daylight and on the artificial light set-ups at the Weston Ratings shown in Chart B and Chart C. Two Weston Meters were read in each instance by two different workers to guard against error in determining exposures.

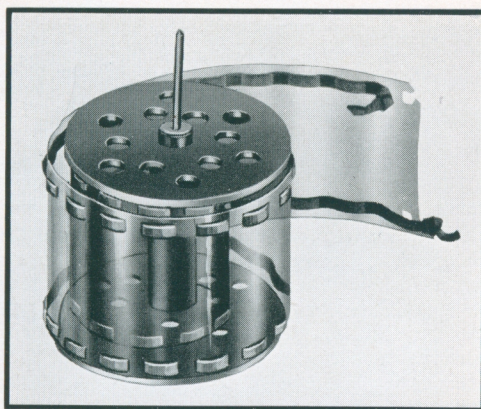


ILLUSTRATION No. 2 — One of the individual developing reels.

The four-frame strips of film were each developed on one of fourteen home-made reels as shown in Illustration No. 2. The developing time and temperature recommended by the manufacturers or originators of the particular developer (See Chart A on p. 190) were used in each case. All developers were made according to instructions with the chemicals dissolved in distilled water. A one-minute distilled-water rinse followed development. This was followed by a two-minute rinse in Champlin's Chrome-alum and sodium bisulphite stop bath.* The films were then fixed for twelve minutes in the Eastman F-5 Acid Hardening Fixing Bath, rinsed twenty minutes in running water, wiped with a viscose sponge, and dried. All rinses and baths were held at the temperatures of the developers.

The films having been completely processed in this manner, six diameter enlargements for print quality analysis were made from all of the daylight exposed films and from a cross-section of the artificial-light exposed films. These were made on No. 2 Eastman Kodabrom Paper developed in fresh Eastman D-72 Developer. A ZEISS IKON MAGNIPHOT Enlarger equipped with a TESSAR F:2.8 50 mm Lens was used in making these enlargements. Fifty-five diameter enlargements were made with a standard photomicrographic camera on No. 3 Kodabrom Paper, also developed in Eastman D-72 Developer, through the courtesy of Mr. Charles Schneider.

The first step in analysing the results

*Cf. Champlain, Harry: Champlain on Fine Grain; p. 96; Camera Craft Publishing Company, San Francisco, California.

was to make average density comparisons of all the negatives. These were made with an Orelup Negative Integrator in combination with a Weston Exposure Meter. The average integrator reading of each complete negative was thus evaluated. The readings for the daylight-exposed negatives are shown in Chart B, while those for the artificial-light-exposed negatives are shown in Chart C. It must be pointed out that the higher the Integrator reading, the lower the density; (Please turn to page 190)

Chart B — ORELUP NEGATIVE INTEGRATOR (Density) READINGS OF THE DAYLIGHT EXPOSURES OF THE VARIOUS FILMS DEVELOPED IN THE DIFFERENT DEVELOPERS*

	Weston Rating Used	Edwal 20	Champlin 15	E. K. Ultra Fine	Edwal 12	Agfa I7	E. K. D-76
Dupont Superior	64	220	180	140	—	155	160
	32	170	130	110	80	110	110
	16	110	80	70	50	65	75
	8	70	40	30	20	35	30
E. K. Super-X	64	300	260	180	200	—	200
	32	210	200	130	130	145	130
	16	150	130	90	80	100	85
	8	90	80	50	40	50	40
E. K. S. S. Pan	64	280	250	220	210	—	225
	32	225	200	160	150	180	160
	16	160	140	115	110	125	115
	8	100	90	75	70	80	70
Agfa Superpan	64	200	240	160	210	280	250
	32	170	220	115	145	225	200
	16	130	180	80	90	160	145
	8	90	110	65	50	90	90
E. K. Panatomic	40	290	320	150	170	200	170
	20	230	285	120	115	140	125
	10	160	185	75	75	90	80
	5	90	120	40	40	65	50
DuPont Parpan	40	270	265	210	220	320	290
	20	210	220	170	170	260	225
	10	140	145	115	110	180	130
	5	70	90	55	65	—	75
Agfa Finopan	32	280	360	225	210	—	265
	16	225	320	180	145	225	200
	8	145	230	130	90	170	140
	4	90	160	75	60	110	80
Dupont Micropan	32	270	200	110	160	225	210
	16	220	160	80	115	160	150
	8	140	100	45	70	100	90
	4	72	50	20	30	35	30
Agfa Fine Grain Plenachrome	40	310	285	210	200	340	330
	20	270	230	180	160	290	270
	10	210	160	120	110	225	180
	5	130	90	80	70	145	115

*The higher the Integrator reading, the lower the density; while this is not exactly a straight-line relation, the density is approximately inversely proportional to the readings.

Flashlight Photography:

Synchro-sun-flood

HERBERT C. MCKAY, F.R.P.S.

THE TRANSITION from beginner to amateur is marked generally by the time when the photographer begins to realize the difference between illumination and lighting. It is necessary to have a certain amount of light before the exposure of film is possible. This is all that concerns the beginner. It must also be admitted that it is also the whole concern of the majority of flash users.

Without dragging in the boring question of whether or not photography is a fine art, let us say that *if* there is an art in photography, a very great portion of that art is exhibited through the handling of the lighting. In fact, with the photographic process so highly mechanized, we are almost justified in saying that individuality and aesthetic expression enter only into lighting, arrangement or posing, and printing.

The indoor cameraman has the opportunity to place his lights as he sees fit, but he encounters other difficulties. The outdoor photographer, however, is too often forced to select rather than arrange. Moreover, the most pleasing arrangement open to selection is usually not the one which receives the best light. In fact, very often the light is not right for a given subject at any time of the day.

To go a step further, objects often present their most attractive appearance when we look into the light. Then we get the effects of halo, the atmospheric softness which does not look like a wet fog, and an appearance of true sunlight. But if we try to obtain a photograph under such conditions, we some times do one of two things: either obtain an unsatisfactory silhouette or, with enough exposure for detail on the shadow side, burn out all of the delicacy we wished to retain by over-exposure of the more distant parts of the scene.

Of course there are always those "impossible" shots, such as the interior of grade tunnels with a sun bathed landscape beyond; a narrow street opening into a wide, brightly lighted avenue; a shot beneath heavy foliage with an open vista beyond. It is needless to go on. Every amateur who has progressed beyond the, "Oh, let me take your picture!" stage remembers dozens, yes even hundreds of just such shots, lost because the contrast was too great for the film — or untried because experience warned they were impossible.

Then there are those late evening shots, poses against a flaring sunset at the edge of a lake. Nearby details must be lost if the sky is to be retained. The amateur on vacation has to forego at least one exhibition shot each day because the foreground is too dark.

All of these shots may be saved, not only saved but rendered even more beautiful than could be expected, by using synchronized flash to illuminate the foreground. Here indeed is one of the triumphs of synchronized flash, for these effects are possible only with the synchronizer. The exposure is extremely short; it must be because of the daylight, yet the flash gives you that auxiliary sun right where you want it!

There is really no trick to using the flash for this type of work. For example, the flash illuminates only a comparatively small portion of the immediate foreground. Because it has no effect upon the more distant portions of the scene, the exposure given is that called for by the natural light. However, the light from the flash, having no reflecting walls, diminishes

in intensity rapidly with distance. Therefore, unless the subject is extremely close to the camera, there is little danger of over-exposing. For extremely close shots, a small bulb may be used.

The flash may be used in the usual way with the reflector attached to the camera, or it may be at some distance above or to one side for angular lighting. However, because of the diffused quality of daylight, the camera position does not reveal the characteristic reflector-on-camera effect.

While it would be impossible to list all of the subjects made possible by the use of *Synchro-sunlight*,* it may be said that any subject needing added illumination in the foreground will exhibit unusual beauty when the flash is used to give this added illumination.

A second class of subject which has presented problems is that in which a fully lighted foreground is desired with the illumination dropping with distance. Here the technique is about the same as when shooting into the sun, except the exposure is calculated on a combination of daylight and flash, so that the subject in the foreground is properly exposed and farther objects under-exposed. When the daylight exposure is such that the daylight will give definite underexposure, the flash will over-ride the daylight so much that the daylight factor need not be given too serious consideration.

*Cf. Schwartz, Morris: *Synchro-sunlight Photography*; ZEISS MAGAZINE, Vol. II (1936), p. 172 (September).



This treatment is very definitely a pictorial matter, although it has been used in commercial and advertising photography to bring some specific object into prominence against a much darker background. The difference between the technique and the result in this work is obvious if compared with the Synchro-sunlight method used for shooting against the light. The latter technique may be compared to that used in motion picture work when high-intensity lights and huge reflectors are used to highlight a subject against a normal intensity background. It is somewhat akin, also, to the practice of spotlighting a subject on a stage or in a theatrical setup.



SUPER IKONTA A set for Synchro-sunlight with Kalart Synchronizer.

As an example of the under-exposed background method, we will assume that the exposure required for existing daylight conditions is 1/25th second at F:11. An exposure of 1/100th second gives only one-fourth of the desired exposure, resulting in a definite underexposure. Added to this we make use of a G.E. No. 20 or Superflash No. 2 bulb requiring outdoors a 1/100th second exposure at nine feet. Thus with the subject at nine feet we would obtain one and a quarter times correct exposure, so the distance is increased to about ten and a half feet and the exposure made. The subject will then receive about four times as much light as the rest of the scene, and the desired result will be obtained.

There is still another use for Synchro-sunlight which is of extreme value. This is the photography of subjects indoors in such an arrangement that the picture includes a window with daylight outside. It has always been a difficult task to obtain detail under such circumstances. Either the interior is badly underexposed or the outdoor scene is burned up. Even extreme contrast compression is rarely satisfactory, for the contrast range in the two scenes is then unsatisfactory.

By making the interior exposure with flash, the two exposures may be equalized and the two parts of the subject be reproduced just as the eye sees them. In such circumstances the flash is used which will best correspond to the exterior light. A meter reading is taken of the exterior scene. When stop and speed have been determined, the flash-bulb size is chosen which most closely corresponds to this reading. By

manipulation of bulb size and distance of the flash from the subject, either the interior or the exterior may be made the brighter. This makes it possible not only to properly photograph such a scene, but also to balance the two scenes to present the best pictorial effect.

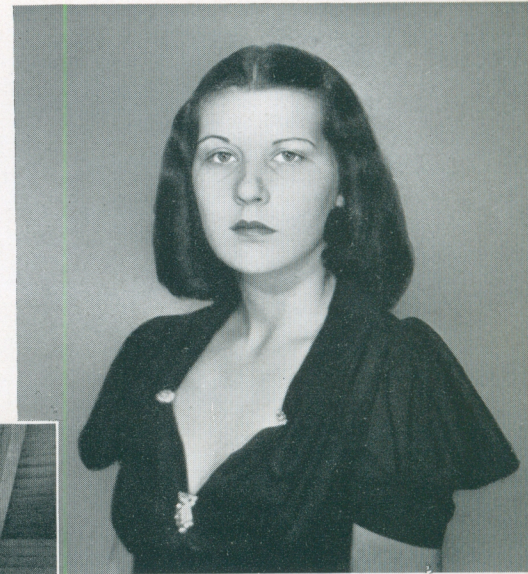
Under such conditions it is assumed that the interior will be the normal, so that the manipulation can reproduce the exterior as it would appear under all conditions from intense summer sunlight to twilight.

To sum up, it will be seen that flashlight is no longer to be regarded as an emergency light for use when darkness prevails. It is rather an auxiliary sun which can be used under all conditions when additional light is needed. It is properly called a "sun" for its intensity is such that at ten feet it actually surpasses the average intensity of midsummer sunlight. Because of this, all degrees of balance between the sun and the flash can be obtained according to the effect desired.

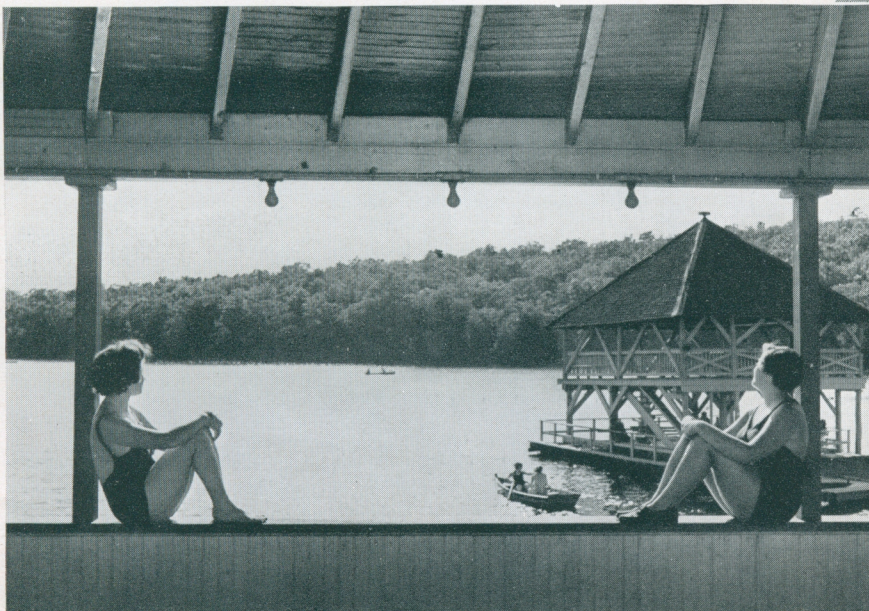
However, the flash is just as useful as an auxiliary to flood as to sunlight. At first it appears absurd to make use of flash when we have flood light available. However, in the hands of the amateur the auxiliary flash is of the greatest value imaginable. Even with photoflood lights, the amateur is always faced with the problem of inadequate light. Rarely will the amateur use more than a half dozen flood bulbs at one time, yet this is barely sufficient to build up the general lighting level to the desired intensity to make instantaneous exposures possible.

At the same time, the complaint with flash from some beginners is that flash lighting is both flat and harsh. (A queer combination, but the criticism is almost universal.) (Please turn to page 190)

Contra-light picture made by Synchro-sunlight method with a SUPER IKONTA A, Kalart Synchronizer, Superpan Press, and the ZEISS Lx32 Filter. The exposure was 1/100 second at F:16 with one Superflash No. 2 Bulb.



Flash portraits
by
HERBERT C. MCKAY



Hunt with Your Camera

FRITZ SCHLANZE

(Continued from the July Issue)

BUT LET'S GO "big-game hunting." We do not have to go to the African or Borneo Jungles to "bring them back alive." The ideal "hunting" for our CONTAX will be found right here in the national parks and forests of the United States. If you make your annual vacation trip to one or more of these, besides finding enough scenic beauty and unspoiled natural splendor to interest you, you will be able to go "hunting" with your camera. These national parks and forests are the largest wild-game refuges in the world, and today you will find within their boundaries an undisturbed wilderness inhabited by more wild game than our pioneer fathers, or even our friend the Indian, ever saw in a like area. Game alive, full of action, in natural surroundings and with their own characteristic expressions recorded permanently for future pride and joy, constitute the camera hunter's "bag." As all firearms are strictly forbidden in national parks and forests, there is no danger of getting in the way of a stray bullet. No special licenses are required, and the rangers or naturalists will assist you and give you all the information wanted. Each park and forest has its own variety of species.

Black bears and members of the deer family are found in nearly every one. They are most frequent and become so accustomed to the tourist that they are almost a nuisance. Every one meets the black bear, the clown and highway robber, holding up cars and often causing

traffic tie-ups. A mother bear with two or three cubs is always amusing to watch and photograph. As the fur is very dark in color, a full or twice-normal exposure is needed to secure detail in your negative. Like all mothers, the she-bear is always ready to defend her young; always regard bears as wild animals, do not tease, molest, or feed them from your hands, and be sure to keep your distance. The cubs are born during hibernation and are two or three months old before taken out of the den. They stay with the mother during the following hibernation and the second summer, but then are forcefully told to rustle for themselves. When following their mother or wrestling each other they are surely worth recording with your CONTAX. Grown-up black bears in great numbers will be found at the bear-feeding stations where the visitor is kept at a safe distance to watch the show. The SONNAR F:4 135 mm Lens, or one of even greater focal length, will bring the animals closer and is to be recommended.

"Silver Tip," the imperial grizzly bear, much larger and stronger than the black, is found today only in and near Yellowstone National Park where about 260 of these noble animals roam. They have typical humps between their shoulders, their claws are not fitted for climbing, and they are the most powerful mammals in this country. Unlike the black bear, they do not enter camp sites and molest the garbage cans, and they are truly the monarch of the forest. Near Yellowstone Canyon there is a feeding ground where every evening during the summer a group of grizzlies (I once counted sixty-four) in company with a few black bears entertain the tourist. A strong wire fence safely separates



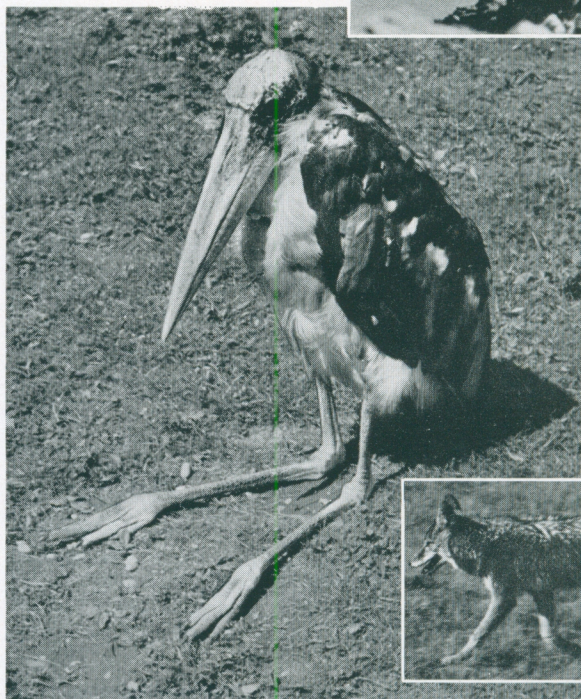
man from bear, and it is a question which side should be called the spectators. Fast pan film and a fast lens is essential to secure a photograph at this late hour of the day. The park ranger stationed here will give you information and advice. The grizzly bear is inoffensive if not molested, but he is hard to find in the wilderness of the vast forest.

Another true American, the bison or buffalo, like the grizzly, was slaughtered so extensively not long ago as to nearly vanish from the earth. All existing buffaloes are descendents of a few animals saved and cared for in Yellowstone National Park more than thirty years ago. It is remarkable that this prairie animal fares so well in such a mountainous country. They roam over wide territories in the park, well off the beaten track and highway, as wild as the explorer found them generations ago. Park visitors seldom see the animals except for an enclosed herd show. To get close to the wild herds you will have to travel overland on horseback with a guide. The CONTAX with its SONNAR F:4 135 mm Lens should be carried around your neck in its Eveready Case, set for shooting from the saddle. I have an elastic strap with snaps fastened around my back; this holds the CONTAX tight against the chest, keeping it from bumping and flying up and down while riding, yet it is quickly loosened for action. Under fair light conditions with fast shutter speed (not less than 1/200th of a second) shots from horseback are successful even with the telephoto lens. At closer range the 50 mm lens can be substituted easily and rapidly on account of the bayonet mount. The ALBADA Sport Finder will enable you to compose your subject with both eyes open and to "follow through" with the camera — always important when both you and the subject are moving.

Deer are without doubt the most graceful of all animals. They are found all (*Please turn to page 190*)



All photographs
by
FRITZ SCHLANZE



Zeiss Ikon Loan Exhibitions

(Continued from page 173) with some knowledge of the maker's thoughts concerning the picture, a better basis on which to discuss and criticize it themselves. Print lectures by the following outstanding American workers will be completed by the first of October:

EDWARD ALENIUS, F.R.P.S.: one of the leading salon contributors of recent years, a master of the Fresson Process, and a well-known photographic teacher, Mr. Alenius' discussion of the composition and technique in each picture will be of unusual interest.

WALTER ENGEL: a leading commercial, sports, and advertising photographer, Mr. Engel's lecture will consist of seventeen prints accepted for publication by the same number of different magazines with a full discussion as to the background and value of each of the prints.

JOHN MULLER: a well-known salon exhibitor and professional photographer, Mr. Muller is a "straight" worker. His work is noted for its simplicity and generally strong dynamic quality. Photography remains his hobby as well as his profession, and he is very active in club work.

DEVER TIMMONS, A.R.P.S., F.R.S.A.: the top ranking salon exhibitor of the world for the last two years in point of prints accepted, Mr. Timmons is noted for the variety and scope of his work.

M. U. WALLACH: a master of night and theatrical photography, Mr. Wallach excels in securing a quality and gradation in his work that is achieved by few in this difficult type of photography. The lecture will contain fifteen of the original prints to be reproduced in his book on this subject which will be published this fall.

The One-man Shows available in the past will be increased by the addition of several others of equal quality and interest. Generally, these shows consist of fifty prints and are accompanied by catalogs in any quantity that the sponsoring organization might desire. All of the prints are mounted under standard 16" x 20" white mattes with only the name of the maker and the catalog number on the face of the mount. On the front of the catalogs is reproduced one of the pictures included in the exhibition, also the name of the organization sponsoring the exhibition, the place where it is shown, and the hours and days it will be open to the public. On the inside is given the titles of the prints, the lens and exposure data, and the process. On the back is a picture of the maker of the prints and a brief story of his photographic interests. One-man Shows are only available to those organizations able to permit the general public viewing it sometime during its showing. They are of great value in permitting a detailed study of the style of some of our leading American workers.

One-man shows are available by the following already described above in connection with the Print Lectures:

EDWARD ALENIUS, F.R.P.S.

WALTER ENGEL

JOHN MULLER

DEVER TIMMONS, A.R.P.S., F.R.S.A.

M. U. WALLACH

In addition there are available One-man Shows by the following workers:

HELEN T. FARRELL: The only member of the fairer sex represented in the series of One-man Shows, Miss Farrell's work leaves nothing to be desired either pictorially or in the remarkably fine quality of her prints.

REX HARDY, JR., & CARL MYDANS: Hardly a one-man, this two-man show by these two well-known *Life* Staff Photographers presents dramatic human-interest pictures of high merit and good technical quality.

GEORGE E. KIDDER SMITH: an architectural show that is noted for its fine pictorial quality. Both the architectural student and the photographer interested in architectural photography will find it of great interest.

BOB LEAVITT, A.R.P.S.: Mr. Leavitt brings to the field of advertising and illustrative photography a high degree of pictorial ability; his pictures have also a strong human-interest and story-telling quality.

MICHAEL WISHENGRAD, A.R.P.S.: a dramatization of the life and scenes of New York City, this show is a fine demonstration of the wealth of pictorial material available in our large cities.

RICHARD WURTS: Students of architecture will find Mr. Wurts' dramatic rendering of the scenes and the new and unique buildings designed for the New York World's Fair of great interest, while those photographers who plan to visit the fair next year will receive an advance glimpse of the pictorial possibilities that await them.

The ZEISS IKON Camera Club Exhibit has now been traveling for a year, but the demand for it is so great that it will be continued for awhile. It contains fifty-seven prints by some of the leading pictorial photographers in this country. Its diversity of schools, subjects, and processes make it of great interest, and it has been well-received wherever it has been shown. The demand for this exhibit is so great that it can only be shown by advance reservation, and in writing concerning it, please give an alternate date in the event that the one requested is already engaged. It is available to any camera club, school, museum, or similar non-commercial organization for either private or public exhibition.

Of special interest to ZEISS DEALERS are the exhibits of prints selected from among the prize-winning pictures in the national monthly competition of ZEISS MAGAZINE. The prints are mounted under standard 16" x 20" white mattes, and they have been divided into sets to meet the needs of the particular dealer. Because the demand for them is so great, they can only be secured by reservation for a period of two-weeks showing. Practically all the available sets are scheduled now until next year, but a new supply about the first of October will permit the making of additional reservations after that time. In writing for one of these sets, please state the approximate date on which it is desired and the quantity of prints that can be placed on exhibition. The greatest effect from these prints will be obtained by exhibiting them as a unit either in the store or in the show window.

In addition to the foregoing exhibitions, many hundreds of prints by well-known photographic workers have been divided into sets of varying quantities. These are available for the use of camera clubs, schools, museums, and similar organizations, also ZEISS DEALERS, for either private or public showings. All are mounted on standard 16" x 20" mounts which bear the lens and exposure data and the name of the photographer on the front. In writing for one of these exhibition sets, please be sure to specify the quantity of prints wanted, date, and length of exhibition. In general, a two-week period is suggested as most effective, although in some instances they may be retained as long as four weeks.

There is no charge for the use of ZEISS IKON Loan Exhibitions, the only obligation being that they be placed on exhibition where they will be seen by interested photographers. All of the shows planned for the coming season are not included in the foregoing; only those on hand or promised for a given date are mentioned. As additional shows are added from time to time, due mention of them will be made in the *Notes & News* of ZEISS MAGAZINE. Meanwhile, camera clubs, ZEISS Dealers, and others falling in the classifications mentioned are cordially invited to make use of such of the shows as are available to them.



The Olympian Wreck

Custer Creek, Montana

JUNE 19, 1938

All photographs by WARREN B. JONES with CONTAX

These photographs are reproduced through the courtesy of the photographer's father — William E. Jones, Assistant General Counsel of The Northwestern Mutual Life Insurance Company — and Al Klein, one of the collaborators in *Arriving at the Optimum* commencing on page 182. All concerned are members of The Shorewood Camera Club, Milwaukee, of which Mr. Klein is president. The difficulties under which Mr. Jones worked can be best appreciated when it is realized that the picture showing the headlights of the relief train above the wrecked car was taken at 4:00 a.m. and the last picture was taken before he left for Miles City at 8:30 a.m. ZEISS MAGAZINE is pleased to note that these pictures, as well as those recently reproduced in *Life*, were from negatives exposed in the CONTAX — the dependable miniature camera.



ARRIVING AT THE OPTIMUM

(Continued from page 183) and while this is not exactly a straight-line relation, the density is approximately inversely proportional to the readings. These readings were used as a guide in making both the six diameter and the fifty-five diameter enlargements. The variance of the range of evaluations shown in Chart B from those shown in Chart C is caused primarily by the difference in the set-ups photographed.

(To be continued in the September Issue)

Chart A—DEVELOPING TIME IN MINUTES AND TEMPERATURE FOR EACH FILM IN EACH DEVELOPER

	Edwal 20 70° F.	Champ- lin 15 70° F.	Ultra Fine 65° F.	Edwal 12 70° F.	Agfa 17 65° F.	E. K. D-76 65° F.
DuPont Superior	18	20	20	15	13	20
Eastman Super-X	22	24	22	18	15	22
Eastman S.S. Pan.	18	20	20	15	13	20
Agfa Superpan*	18	16	20	15	13	20
Eastman Panatomic	18	19	20	15	13	20
DuPont Parpan	18	16	20	15	13	20
Agfa Finopan	15	11	16	12	8	16
DuPont Micropan	9	13	16	8	8	16
Agfa Plenachrome	18	20	20	15	8	20

*Old style.

THE MONTHLY COMPETITION

(Continued from page 170) being a part of it. The technical data: SUPER IKONTA B with TESSAR F:2.8 8 cm. Lens with exposure of 1/200th second at F:5.6.

Music to the Skies by Paul Kozak, Jr., receives second prize because of its bold and striking pattern plus a fine technique in print making. Placing the sharply-etched white lines against the background of very dark tone cannot fail to be impressive; when in addition to fine tone contrast, the pattern is based upon what might be called a curvilinear radiation, we usually have a successful composition. Starting at the base of the statue at the left, the largest arch—describing a graceful curve through the sky—sets the motif for the design. This curve is then repeated in a continually diminishing form, accentuating the pattern in a variation of light and dark shades of gray and making for harmony and emphasis. The statues at each end, representing vertical line, help by breaking up a possible monotonous feeling caused by too many curves. The whole pattern is so powerful in itself that the human interest, the symphony orchestra, is of very little importance to the composition as a whole, the figures being so small that their real value consists of acting as a base for the downward movement of the curved lines. To make this picture Mr. Kozak used a CONTAX fitted with a TESSAR F:2.8 50 mm Lens with exposure by meter.

The best light available to a photographer is still that of the sun. One of the great advantages of sunlight is that it strikes the subject from one direction only, whereas the use of too many lights indoors quite often distorts the face. A light coming from one source makes for a feeling of sincerity and vitality. While not always the most flattering form of light, it is most apt to give the best likeness of a person. A good likeness, plus expression, is the true test of a real portrait. These two qualities are easier to obtain when our attention is centered on the subject rather than worrying about our equipment.

Ordinarily, we would advise the beginner to take his outdoor portraits in the shade, not in direct sunlight, as the question of contrast may prove a bothersome problem. But Mr. Ross, no doubt, wanted to use the full strength of a brilliant sun to carry out more convincingly the outdoor spirit. Turning the face toward the sun while aiming the camera towards the shadow side of the face has resulted in a Rembrandt lighting, giving strong modelling to the front features but leaving the cheek and ear in a darker tone. This lighting also gives a

brighter touch to the outline of the hair, enhancing the loveliness of the blond locks. The upward tilt of the head, the sweep of the hair, and the happy expression of the wholesome lass, together with the strong sunshine, combine to make this a splendid portrayal of the outdoor girl. Taken by Mr. Ross with a SUPER IKONTA C with TESSAR F:4.5 10.5 cm lens, the exposure was 1/200th second at F:11 with the G-1 Filter.

FLASHLIGHT PHOTOGRAPHY

(Continued from page 185) an auxiliary sun which can be used under all conditions when additional light is needed. It is properly called a "sun" for its intensity is such that at ten feet it actually surpasses the average intensity of midsummer sunlight. Because of this all, degrees of balance between the sun and the flash can be obtained according to the effect desired.

(To be continued in the September Issue)

HUNT WITH YOUR CAMERA

(Continued from page 187) over the United States. During the winter they will stay permanently near settlements. The CONTAX "hunter" will find no difficulty in making close-ups and may study the deer with leisure. With the help of bread, crackers, or apples you can lead one or more of them to places where light conditions, composition, and background will suit you. At night, flashlight pictures are not difficult, and they will have an added touch of mystery. A small pocket flash torch can be used to set the range and framing of the picture.

(To be continued in the September Issue)

THE STORY BEHIND THE PICTURE

(Continued from page 176) cameras that a new school of photography is being built today. All of us can be ready to record such instants and such subjects, and as our perception grows through practice and study, we will become more proficient in doing so.

For those who are interested the data is given. The negative (Agfa Superpan Film) was exposed in a SUPER IKONTA B with TESSAR F:2.8 8 cm Lens for 1/50th second at F:11 without a filter, developed in aged D-76 for 14 minutes at 68° F., and enlarged on P.M.C. No. 10 developed in D-72. Although the sun was not shining, a lens shade, always a "must" with me, was used during the exposure.

GOOD PICTURES

(Continued from page 179) First step is to see a picture before you attempt to make it. Most really good pictures are made first *without* a camera. The exposure is a second or third step. Seeing a picture means much more than recognizing the existence of an interesting subject. Something in that subject appeals to you. It gives you an idea because it means something to you. It may be only a worm-eaten, cast-away block and tackle to everyone else, but to you that very texture tells the same story of hard seasons "on the Banks" as a fisherman's storm-beaten face. You could photograph it in five or six different ways all of which you thoughtfully consider. You finally reject all but one or possibly two. First, you decide to tell the story of its texture which calls for a certain lighting. Next, you want to convey some conception of the importance that block and tackle played at sea. That suggests a low angle to make it loom up in proper importance. It needs nothing else to tell the story so nothing else is included. With a clear mental image of the kind of print that will show the softly weathered texture, the quiet repose of its retirement, you determine the

sort of negative that will produce such a print, choose a filter and shutter speed to give just that density and color rendition. (To be continued in the September Issue)

TEACHING GOLF WITH PICTURES

(Continued from page 175) camera as indicated by the line. In taking tips on putting from this line, remember the putter face should be at right angles to the line from the ball to the hole and the player should be relaxed and hit through the ball.

In picture No. 17 we have a lasting study of the points where the hands come in contact with the club. The black spots indicate the main points of contact and pressure in gripping the club. If you could so mark your fingers and then put your hands on the club, seeing that the main points of pressure correspond to those dots on Horton Smith's hands, you will come pretty close to having a perfect grip.

In Pictures No. 11 and 12, taken from a very different angle about twenty feet below a thick plate glass, we indicate the line of flight by the white line. Note in No. 11 how the club is on that line in addressing the ball with the club face at a right angle to the objective. In No. 12 the club has started back. Note that it stays on the line for quite some distance back and is not lifted from the ball by independent hand action, being swung away by the turn of the left hip at the start of the swing. This is to get a wide arc and to generate more power for the full swing. The picture clearly indicates the beginning of the left hip turn when the club head has traveled only a short distance on the back swing. This means that the club head has not been picked up by independent hand action. You can see by comparing the pictures that the left hip has started to turn away before the club head on the start of the back-swing.

Picture No. 13 of Mr. D. H. Tweedie is quite evidently the finish of a very good shot, as can be seen by the full body turn and relaxed finish. Note that the weight has been transferred over to the left heel; in my opinion correct, as you can always be in balance and hit hard with the weight on the heels and not on the toes.

In Picture No. 14 of Mr. M. B. Reach—a man past the fifty mark—we see that one doesn't have to be young to develop a good golf swing. The picture shows that the player has made a well-controlled swing rather than a big, slashing swing, keeping well within his own power which is very important. As in Picture No. 13, the weight has been transferred to the left heel and the player is in perfect balance at the finish of the swing. Judging from the direction on which all eyes are focussed, the ball went down the middle of the fairway—which it really did. This picture was taken at 1/200th of a second at F:5.6 at the Glen Oak Country Club, Chicago, where I was the professional for seven years.

Picture No. 15 of Jimmy Thomson, golf's Babe Ruth and mightiest hitter, shows what takes place when a golf ball is hit squarely. Note that the club head is well past where the ball had rested, yet his head is still down. The weight has shifted over to the left foot, and the left hip has turned out of the way to clear the path for the hit straight through onto the line of flight. The right and left arms are stretched out in a straight line. The club head is following through on the line. This action

was stopped at 1/1000th of a second at F:4 on a bright day. The picture was taken at the Bellaire Country Club, Los Angeles, while we were making a Pete Smith Short.

Picture No. 16 of Jack Davidson shows force and strain being used just before striking the ball—1/1000th of a second stopped everything but the shaft of the club. Note the left hip turned away to allow the club head to come through on the line of flight. The weight is just about to be moved over to the left heel. The head is down, eyes on the ball, left arm straight, and right hand about to put in the punch.

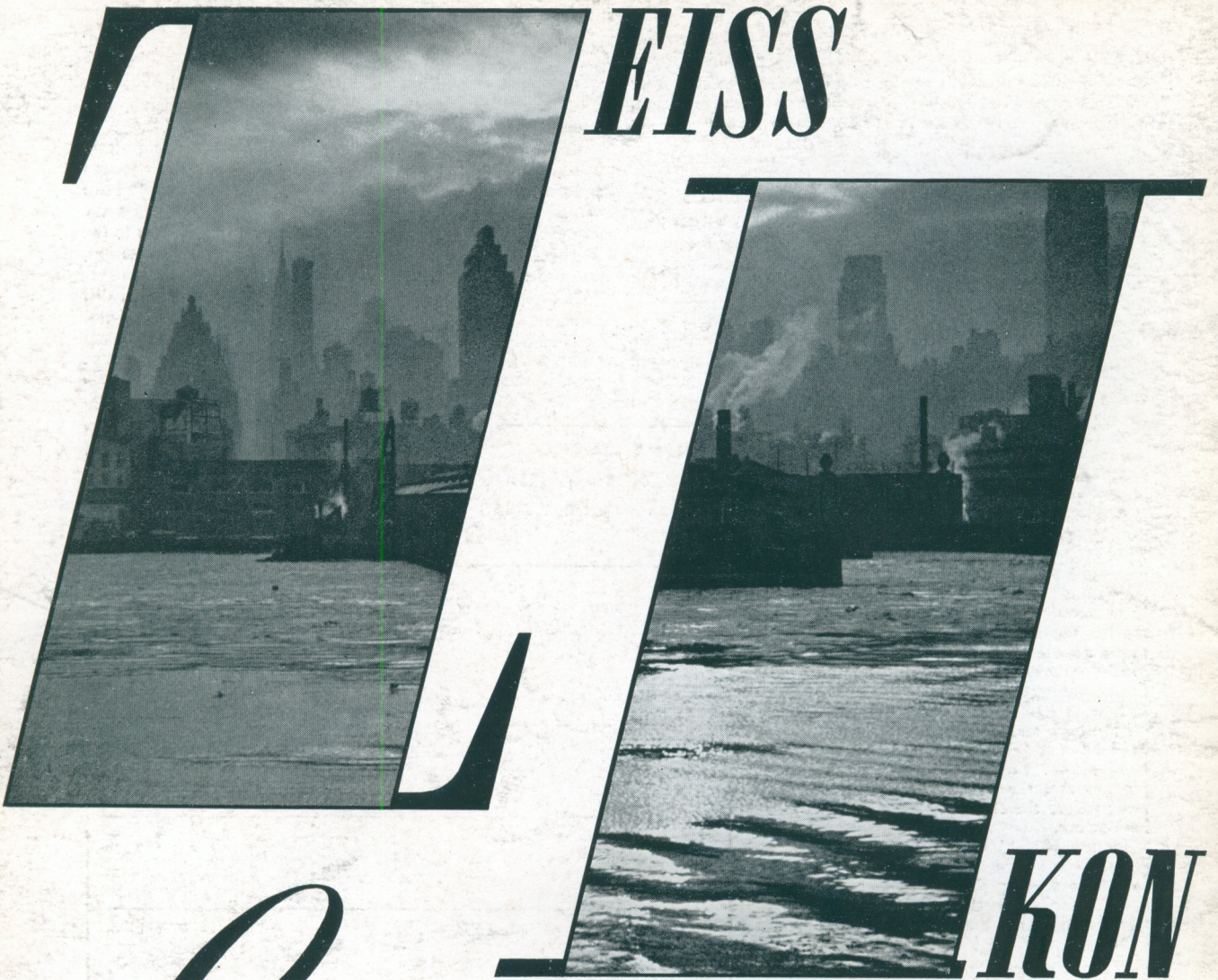
In these pictures I have shown what can be done with a still camera as an aid in teaching golf. In taking a set of pictures, be sure to take at least twice as many as you think you will really need, as there is always something that shows up. Take them from all angles, although directly facing the pupil is the best place to see what goes on at all times during the swing.

Chart C — ORELUP NEGATIVE INTEGRATOR (Density) READINGS OF THE ARTIFICIAL LIGHT EXPOSURES OF THE VARIOUS FILMS DEVELOPED IN THE DIFFERENT DEVELOPERS*

	Weston Exposures	Edwal 20	Champ-lin 15	E. K. Ultra Fine	Edwal 12	Agfa 17	E. K. D-76
DuPont Superior	40 20 10 5	130 90 55 20	85 65 30 12	65 40 20 10	50 30 16 7	70 50 25 11	60 30 18 10
E. K. Super-X	40 20 10 5	145 100 60 30	160 100 70 30	90 65 30 18	75 50 20 14	105 80 50 25	80 45 20 14
E. K. S. S. Pan.	40 20 10 5	180 130 80 30	160 120 70 27	115 80 50 20	95 70 40 12	145 95 65 22	100 75 40 20
Agfa Superpan	40 20 10 5	130 100 75 40	180 140 100 70	— 70 50 25	90 75 50 20	160 115 75 40	115 75 40 20
E. K. Panatomic	24 12 6 3	150 100 65 20	190 145 90 55	80 50 22 12	65 42 20 10	130 90 65 30	90 65 30 12
DuPont Parpan	24 12 6 3	180 145 90 25	160 115 70 25	100 70 35 12	90 70 30 10	200 135 80 25	145 90 50 15
Agfa Finopan	20 10 5 2	220 160 90 40	270 200 135 75	— 90 65 20	100 75 60 30	225 160 90 45	130 80 40 20
DuPont Micropan	20 10 5 2	160 110 65 20	100 70 30 8	50 30 11 2	70 40 16 6	100 70 30 9	90 50 15 3
Agfa Fine Grain Plenachrome	20 10 5 2	— 160 100 50	200 130 80 40	90 65 50 25	130 85 50 19	250 180 130 70	170 115 70 25

*The higher the Integrator reading, the lower the density; while this is not exactly a straight-line relation, the density is approximately inversely proportional to the readings.

ZEISS



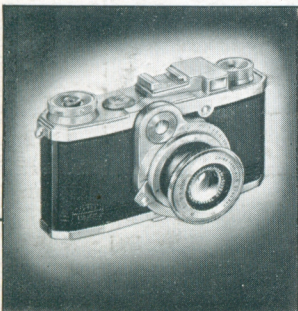
KON

Cameras

Combine an unequalled experience and tradition of seventy-six years in the manufacture of precision cameras with the foremost advancements in camera design and construction to produce a complete selection of cameras of all types that are leaders in their respective fields for accuracy, dependability, and ease of operation.

ZEISS
IKON CARL ZEISS
JENA

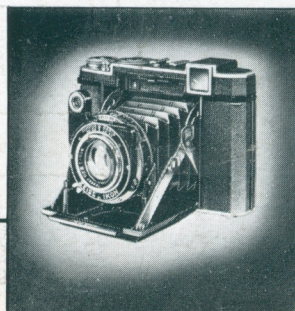
Nettax



Contax III



Super Ikonta B



Super Ikonta A

