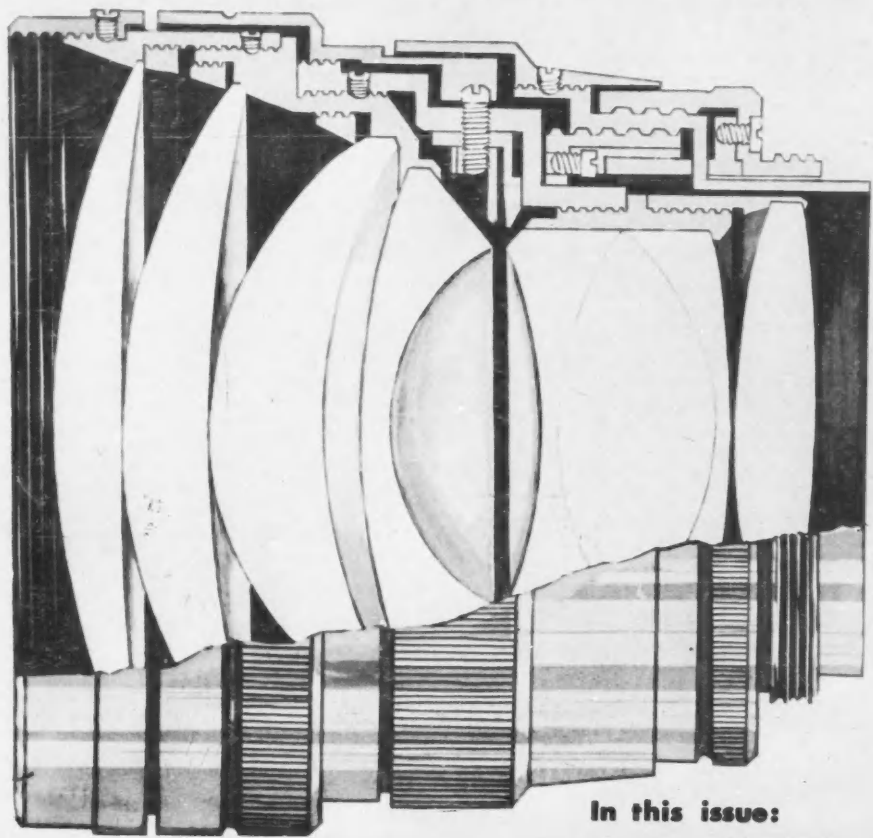


VOLUME 6
NUMBER 2
Mar-April 1960

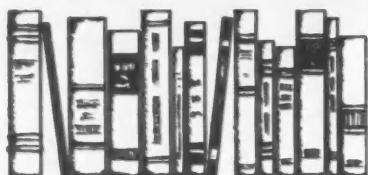
the
**CAMERA
CRAFTSMAN**



In this issue:

DEADPAN DICTIONARY

NCRS BOOTH IN ST. LOUIS



BOOK SHOP

Here are useful additions to your library of technical material. This department will regularly offer suggestions for new books you may wish to acquire. Any reference books, whether or not here listed, photographic or otherwise, will be located for you and may be purchased through the NCRS Supply Department.

FLASH! ULTRA HIGH SPEED PHOTOGRAPHY By H. Edgerton and J. Killian	\$6.50
PHOTOGRAPHIC OPTICS By Arthur Cox	5.75
PHOTOGRAPHIC OPTICS By Allen R. Greenleaf	6.00
PRINCIPLES OF OPTICS By Hardy and Perrin	9.50
CAMERA REPAIRMAN'S HANDBOOK	5.95
KODAK REFERENCE HANDBOOKS	4.00
MINIATURE AND PRECISION CAMERAS By S. J. Lipinsky	7.95
DICTIONARY OF PHOTOGRAPHY By A. L. M. Sowerby	10.00
PHOTO DICTIONARY By Morgan & Morgan	3.50
KODAK GRAPHIC ARTS HANDBOOK	6.50
PHOTO-LAB INDEX By Henry M. Lester and John S. Carroll	19.95
FOCAL ENCYCLOPEDIA OF PHOTOGRAPHY	20.00
THEORY OF THE PHOTOGRAPHIC PROCESS By C. E. K. Mees	21.50
SOUND BASICS By Alexander Efron	1.25
LIGHT BASICS By Alexander Efron	1.50
BASIC ELECTRONICS By Van Valkenburgh, Nooger, Neville, Inc. 5 vols. \$2.25 each Hard bound edition	set 10.00 11.50
HOW TO INSTALL AND SERVICE INTERCOMMUNICATIONS SYSTEMS By Jack Dorr	3.00
HOW TO SERVICE TAPE RECORDERS By C. A. Tutbill	2.90
ABC'S OF CAMERA REPAIR By S. L. Love	3.95
BASIC ELECTRICITY By Van Valkenburgh, Nooger, Neville, Inc. 5 vols. \$2.25 each Hard bound edition	set 10.00 11.50
PHOTOGRAPHIC LENS MANUAL By C. B. Neblette Paper bound	1.95
Cloth bound	3.50

the

CAMERA CRAFTSMAN

VOLUME 6
NUMBER 2

MAR-APRIL 1960

The Periodical of Photo
Technology for Camera
Repairmen

COPYRIGHT 1960, NATIONAL CAMERA REPAIR SCHOOL, UTHO IN USA

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THIS MONTH'S COVER

KONICA HEXANON 60 mm f:1.2

STAFF

Clair H. Schmitt	Editor
Dorothy Hurrel	Assistant Editor
Margaret Snyder	Art Director
George Norberg	Assistant Art Director
Frank H. Curtis	Advertising Manager
Robert Montoya	Production Manager

A Point to Ponder

By SAMUEL L. LOVE



SUCCESS Webster's Dictionary defines success: "degree or measure of . . . attaining one's desired end"; "favorable termination of a venture; often, specifically, the attainment of wealth, fame, etc."

There has probably been as much said about success as any other human desire. Having quoted the dictionary meaning, probably the most often repeated is the most fitting: "a dictionary is the only place where success comes before work."

Success is pretty much synonymous with attainment -- giving or gaining something. Almost everyone has his own idea about what he wants, but the method of succeeding escapes all but those who are successful. Henry Ford said, "Nothing is particularly hard if you divide it into small jobs."

Success is a state of mind. "Prince" Michael Romanoff resents people who ask, "How does it feel to be a success?"

"I was a success when I was sleeping on a park bench," he tells them coldly. "You are confusing success with comfort."

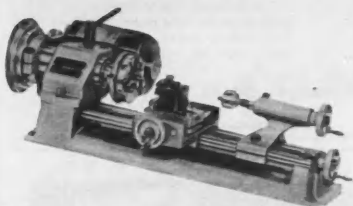
Cyrus Eaton, in Phillips magazine, is quoted: "To succeed, be your own psychoanalyst. Ask yourself, 'What do I like doing?' Then keep on doing what you like and you'll go to town."

In Korea, in late afternoon, a doctor emerged from the operating room, tired, with beads of perspiration on his forehead. His lips were almost purple with strain and his hands began to tremble with fatigue. He was asked by an onlooker how much he would have received for such a delicate operation, in America. "Perhaps \$400," he replied. Then came the question, "How much will you receive from this Korean woman?" The doctor hesitated, then replied, "Nothing but her gratitude and the Master's Smile."

Success means many things to many people. In an article, *The Improvement Era*, Florence Pennock said that successful men are those who work the hardest and try to give the greatest service; they do more than they get paid for; they go the second mile. And yet you needn't do a huge job to succeed. There are many small jobs which no one has succeeded in completing. You can work all day and achieve success in the small time
Cont. page 4

UNIMAT

Unimat is a precision tool designed for technicians and engineers. It's readymade for Camera Craftsmen. No bigger than a typewriter, Unimat is a combination of 10 tools in 1, operating on just one base. Widely acclaimed as the finest tool ever developed for machining small parts made of metal, wood or plastic, Unimat is a rugged, portable machine that will provide a lifetime of satisfaction.



Basic unit consists of the precision lathe and all components necessary to set up drill press, milling machine, tool and surface grinding machine, hand drill, grinding and polishing machine. Also includes motor, upright steel drill press post, universal 3 jaw (reversible) self centering Cushman type lathe chuck, 3 jaw Jacobs type 1/4" capacity drill chuck, pivoting tool post, 2 dead centers. Face plate, lathe dog, grindstone arbor, Allen wrench, easy to follow instruction manual. Unimat basic unit comes handsomely packaged in sturdy wood storage chest. Complete basic unit, priced \$129.50

Items 1 through 5 are included in the basic unit. Items 6 through 9 are accessories. Write for illustrated literature and price list.



Attachments and accessories that turn Unimat into a complete machine shop: 1. Lathe 2. Drill Press 3. Tool and Surface Grinding Machine 4. Milling Machine 5. Polishing and Grinding Machine 6. Big Saw 7. Turret 8. Circular Saw 9. Indexer and Divider.

Use Kimwipes
on your camera bench...

DISPOSABLE WIPES

SAFE!

SOFT!

CLEAN!

DISPOSABLE!

NON ABRASIVE!



3 x 9" Wipes
240 wipes per carton

Kimwipes special design captures grit and dirt in the crepe pockets to protect such highly polished surfaces as camera lenses and binoculars.

4 Boxes...\$1.35
12 Boxes...\$3.45

3-D
Binocular
Magnifier

New available
for
Camera Repairmen



You will work better when you see better with this new Binocular Magnifier. May be worn with or without eyeglasses. Leaves both hands free to work. Fine tolerance and precision work can be done easier, faster and more accurately using this equipment. With the Magni-Focuser you see an object in third dimension greatly magnified - with depth and clarity. It reduces eye-strain and prevents squinting - thereby saving time, increasing accuracy and minimizing the chance of errors and accidents. The head-band is adjustable for your comfort. Normal vision may be resumed by slightly raising your head.

Model No	2	magnifies	1-1/2	times at	20"	Price	\$10.50
	3		1-3/4		14"		10.50
	7		2-3/4		8"		10.50
	10		3-1/2		4"		12.50

No 13 and 17 are the same as No 3 and 7 with an auxiliary lens attachment which gives magnification of 4-1/4 and 5-1/4 respectively, with the fold eye only.
 Priced \$15.00 each

A ServiShops PRODUCT

4 THE CAMERA CRAFTSMAN MAR-APRIL 1960

Point to Ponder cont. from page 3

between dinner and bedtime. There is probably no surer pathway to success than through efficient use of your spare time. Using your time effectively, in learning or in improving, provides you with a valuable habit. The habit of effective time-use can be a most bountiful one. The habit cannot help but spill over into all your life, making attainment of any goal easier.

At age 25, a man has about 100,000 hours of work ahead of him before his retirement at 65. How much he broadens his scope of knowledge and ability through the years reflects his degree of success.

And this completes the circle. If attainment is success, then you need only set your goals and follow the rules set down by learned philosophers through the ages. The path between where you stand and the goal you seek is beset with barricades and distractions. Work to overcome each barricade, each individually. As each slip by in accomplishment, the small successes will accumulate into larger and larger achievements, regardless of your goal.

The Professional Photographer

Without a question, the professional photographer in the United States is an important part of the community. Certainly he is important to you, the camera repairman, both as a customer and as a friend. Unfortunately, the professional photographer is sometimes underrated and even belittled since pictures can be made by almost anyone without having the training, experience and facilities of the professional.

The Professional Photographers of America (PPA) carries on a regular public relations campaign aimed, among other things, at public education. One recent step in this campaign, in a light-hearted manner, is the publication of a delightful little booklet entitled "What Makes a Professional Photographer?"

This is a 16-page, bright two-color booklet just printed as a public service by the Association. It's in cartoon form, easy reading and convincing. It tells the story about professional photography and its many facets. It describes the status of the professional photographer, what his background and training involves, what he is able to provide for the public and the variety of services that he renders.

The booklets are available for distribution from the Professional Photographers of America, Inc., 152 W. Wisconsin Avenue, Milwaukee 3, Wisconsin. You may have a free copy on request, and information about distribution through your studio, store or shop.



Reports

FROM THE CRAFTSMEN

Letter to Bud Fowler, Chief Instructor

Now that I am nearing the end of my home study work please let me personally thank you and all the wonderful staff at the School for the complete and untiring service and help you have given me.

When I started taking the work a year ago last August, I had no idea what I was starting into. To date I have had over six hundred jobs over my bench, (and no outstanding accounts receivable) completely repaid myself for my course. Paid for all my equipment and tools and an extra buck now and then. Bud, all this has come in spare time after my (regular) work.

The only advertising I have done is with my hands and your training. Word of mouth seems to get results from satisfied customers.

I do have some good drug store accounts. But on my retirement which is not too far off, I will drag in some outside accounts.

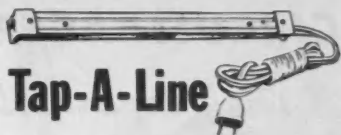
I do not want to sit around and feel sorry for myself. I want to be occupied -- and that I will, thanks to you and the others. I am looking forward to it with much enjoyment.

Alan T. David
Lapeer, Michigan

A customer brought me a camera and flash unit which fired only occasionally. The flash contacts closed very briefly and since I did not have a Motion Analyzer at that time, I could not be sure the contact was actually being made. The flash gun fired when the cord contacts were shorted so I decided that the contacts in the shutter needed cleaning or adjustment. After spending the time to open the shutter and visually check the contacts and their operation, I found that they were in perfect condition. After a more thorough examination of the flash unit, I found a broken connection that occasionally made proper contact and was the source of all the trouble. The purchase of the Motion Analyzer has completely eliminated this type of wrong diagnosis.

Glen E. Gale
Big Spring, Texas

I have received my Unimat and it is great. I have made several pieces on it already.
Robert E. Burcham
Albany, Georgia



Tap-A-Line

IN YOUR WORKSHOP: Tap-A-Line permits you to plug in soldering irons, test lamps, flex shaft, other equipment. Has them all ready and available for immediate use.

IN YOUR STUDIO: Tap-A-Line is convenient for portable lights, flood lights, spot lights.

On Your Test Bench: Tap-A-Line will permit you to plug in all types of flash cords and have them at your finger tips.



Model TL 1 foot

\$2.00

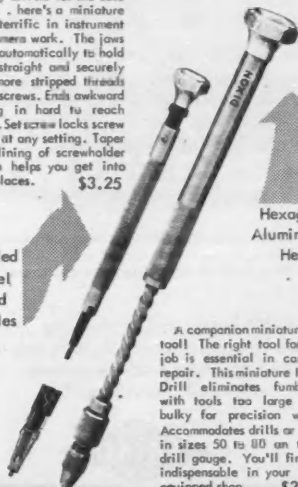


Dixon Miniaturized Tools

You've seen handy screw-holding drivers for the auto trade... here's a miniature that's terrific in instrument and engine work. The jaws adjust automatically to hold screws straight and securely -- no more stripped threads or lost screws. Ends awkward groping in hard to reach places. Set screw locks screw holder at any setting. Taper streamlining of screwholder section helps you get into tight places. **\$3.25**

Knurled
Nickel
Plated
Handles

Hexagon
Aluminum
Heads

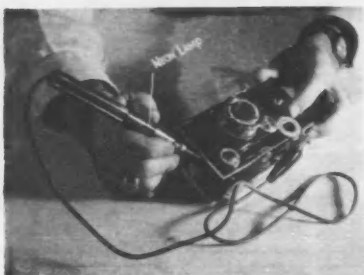


A companion miniaturized tool! The right tool for the job is essential in camera repair. This miniature Hand Drill eliminates fumbling with tools too large and bulky for precision work. Accommodates drills or taps in sizes 50 to 80 on twist drill gauge. You'll find it indispensable in your well equipped shop. **\$2.75**

A **ServiShops** PRODUCT

CIRCUITRACER

*A small dependable
rugged tester*



An easy to use, inexpensive electric circuit tester especially adaptable for camera repair work. It is capable of locating and identifying dead or live circuits of any voltage, fast.

- Checks electric photo-flash circuits
- Analyzes breaks and high resistance joints
- Tests flash wiring for breaks or bad connections

Put this handy unit into your carryout case or pocket for quick tests anywhere. Tested and approved for camera repair by "National ServiShops"

\$4.50

A ServiShops PRODUCT



Samuel L. Love, President of the National Camera Repair School, calls on Colonel Converse Harwell, Confederate Air Corps., at the Colonel's Headquarters in Mobile, Alabama.

THE CONFEDERATE AIR CORPS

The National Camera Repair School doesn't miss a bet when it goes after new business. President Samuel L. Love recently called on Colonel Converse Harwell, Confederate Air Corps at Mobile, Alabama.

Actually, the "Confederate Air Corps" is an honorary organization composed of "men of distinction", regardless of whether they live north or south of the Mason Dixon Line, whether they are "rebels" or "damyankees!"

The Confederate Air Corps was organized by two young US Air Force officers at Maxwell AFB, Alabama, close by Montgomery, the "Cradle of the Confederacy", some years ago during a period of "duty boredom".

There are now two divisions of the Confederate Air Corps: the first, as already stated, is for "men of distinction" and membership in this group is limited to persons who have distinguished themselves to the extent that their achievements are called to the attention of the Confederate Air Corps Recruiting Officer with Headquarters at Atlanta, Georgia.

Colonel Harwell attained distinction as the author of numerous publications used by the US Air Force, particularly in the photographic field, in which Colonel Harwell has a background and experience of forty-five years!

Congratulations TO NEW NCRS GRADUATES

Graduation time represents the culmination of studies completed over a period of from one to three years. In many cases this achievement was made under heavy pressures from regular job and family responsibilities. All of these NCRS graduates deserve the highest praise for the diligent attention and unflinching work that went into their course of training.

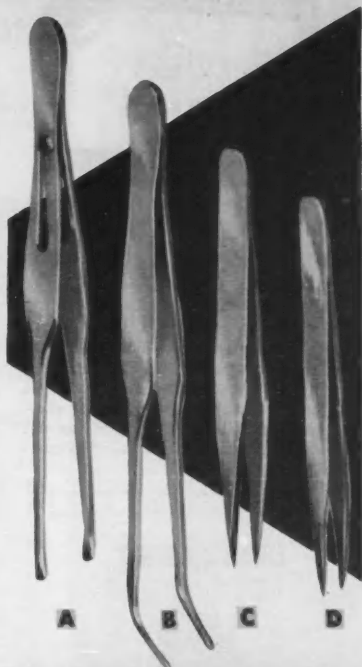
Charles Attaway
Newton P. Armstrong
Keith E. Neuneker
James O. McDaniel
Fred Weller
William J. Cummins
Major M. Owens
Robert E. Burcham
Delbert F. Reed
Dean Strempeke
Ray Dodge
Chris Bosh
Jesse W. Shelton
Joseph Stark
Floreman Bomeline
D. R. Cole
Byron Webb
Walter C. Reedy
Joseph Ludrof
Joseph A. Parris, Jr
Jesse W. Edwards
Glen E. Gale
Ed Tarbell
C. L. Wilson
Eldon Hanson

Arizona
California
California
Colorado
Colorado
Florida
Florida
Georgia
Illinois
Iowa
Kansas
Louisiana
Minnesota
Minnesota
New York
New York
Ohio
Oklahoma
Pennsylvania
Pennsylvania
Tennessee
Texas
Texas
Texas
Wisconsin

These men received Certificates of Completion
Douglas Eastoe Saskatchewan, Canada
H. N. Haggblom California
Robert C. Kobel Illinois
Booker T. Washington Illinois
Lee Ridge Indiana
Joseph J. Wadsworth Massachusetts
Robert Pullen Michigan
Walter Zolna Pennsylvania

When nothing seems to help I go and look at a stonemason hammering away at his rock perhaps 100 times without as much as a crack showing in it. Yet at the 101st blow it will split in two, and I know it was not that blow that did it, but all that had gone before.

Jacob Riis



RENARD TWEEZERS

Designed for working with small parts in tight places, Where you can't use your hands. Swiss made, long lasting, chrome plated.

A-Soldering	-----	.85
B-Clock	-----	.58
C-Assembly	-----	.85
D-Work	-----	.30

All Sizes Available

A ServiShops PRODUCT



Now packaged in convenient 7 cc applicator guns, NCRS Supply has two of the finest instrument lubricants available. Use All-Temp Lube for sliding levers and similar friction points. Use Moly Lube on motion picture camera springs.

All-Temp Lube _____ .60
Moly Lube _____ .70



SHINO Polishing Cloths
Two cloths - one with jewelers' rouge, the other for final polishing. Comes in cardboard box.
11-1/2" x 14" size. Each _____ .75



Non-corrosive, resistant to temperature change, this Porpoise Jaw oil product stays at the point of lubrication
3/8 oz. bottle _____ .75

MORE THAN 850,000 NEW HOME-STUDY STUDENTS IN 1958

There were over 850,000 new enrollments in private home study schools in the United States in 1958, according to a compilation made by the National Home Study Council. As in the past several years, this number exceeds that of the new enrollees in the Nation's colleges and universities during the same year.

WORTH THINKING ABOUT

Advertising people particularly should follow this advice given by Editor Thomas Dreier in the "Fitchburg Papers," house magazine of Fitchburg Paper Co., Fitchburg, Massachusetts.

An old story is about a traveler who noticed in his path a dry, shriveled leaf. Picking it up, he was amazed at the perfume it exhaled.

"Oh, you poor withered leaf," he exclaimed. "Whence comes this exquisite perfume?"

The leaf replied, "I have lain for a long time in the company of a rose."

Those of us who are going to and fro, mixing with all kinds of men and women, have learned that when we associate with fragrant, joyous, wholesome, lovable persons, we ourselves partake of the benefits of those splendid qualities.

When we associate with people who are hateful, we ourselves unconsciously, perhaps, become hateful, or at least have an extremely difficult time to keep on being lovable.

On the other hand, if we make it our business to associate with people who are generous, who are helpful, who like to add to the joy and beauty in the world, we, too, make those same qualities our own.

Quoted in The Reporter of Direct Mail Advertising

MIS-USE OF SERVISHOPS NAME

There have been reports from manufacturers and repairmen that the Servishops name is being used by other than franchised persons.

There are only twelve franchised shops operating at this time.

Signs bearing the words "Authorized Agency" may be displayed by dealers and repairmen who are authorized to accept work which will then be relayed to a Servishops for repair. However, use of the name "Servishops" which might in any way mislead the public is forbidden by law.

Any such use of the Servishops name by persons or organizations not believed to be a franchise holder should be reported to the National Camera Repair School so prompt action can be taken.



study shots

HERE IS WHERE NCRS STUDENTS LEARN

These are pictures of students in the shops they have set up for their training in camera repair.



Sing Siong Huan
Holic City, Philippines



Thomas L. Jones
Wilton Manors, Florida



Richard Gibson
Visalia, California



Dennis Parra
El Cajon, Calif.



Harry A. Kusch
Ft. Smith, Arkansas



George Wulff
Orange, Calif.



Robert L. Livingston
APO 953, San Francisco



E. H. Hylander
Malaga, Spain



Binwet Quinn
Detroit, Michigan



THE SOCIETY OF PHOTO-TECHNOLOGISTS

The KONICA F Shutter

The Konica F is a new 35mm single lens reflex camera having a unique focal plane shutter mechanism. Here is a brief description of its operation.

The shutter is composed of two sets of two rigid, metal blades operating vertically. As shown in the figure 1, in each set the thin blades A and A' telescope into the thicker blades B and B'.

Through a system of levers (figure 2) cams at each end of the cylindrical main lever control the movement of the blades. Both blades in each set are moved simultaneously by pins working in slots in the blades. Blade A' telescopes into blade B' as it moves downward to open the aperture. After the desired slit width is obtained, blade A starts moving out of blade B at the same time B starts downward, because of the double action of the blades, the rate-of-travel is doubled. This cuts the exposure speed in half for each slit width. Thus the same slit width necessary for a speed of 1/1000 in a conventional self-capping focal-plane shutter will deliver a speed of 1/2000 in the Konica F shutter.

The doubled rate-of-travel also makes synchronization at a higher speed possible. For instance, the top speed for X synch in the conventional shutter is 1/60 since this is the speed at which the slit is as wide as the focal plane aperture. In the Konica F the exposure at this slit width is 1/125th.

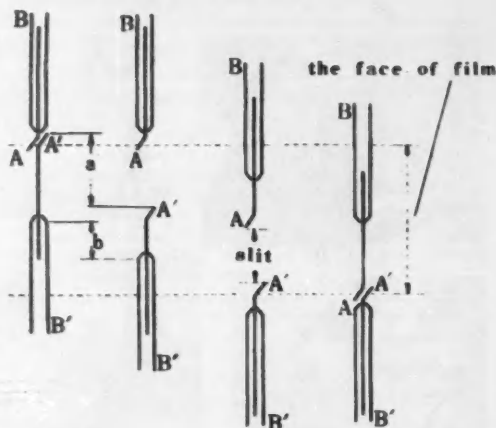


Figure 1

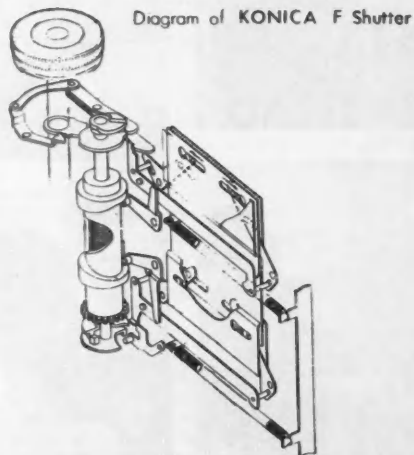


Figure 2

NCRS Booth in St. Louis



The NCRS booth at the MPDFA Trade Show in St. Louis was a busy place. Among the hundreds who stopped in were many students, graduates, Cont. page 20

Handy PLASTIC BOXES

These crystal-clear boxes, 8-1/4" x 4-1/4" x 1-1/4" are molded of clear polystyrene, a light hard plastic which retains its polish well. Very handy for storage of nuts, bolts and even fishing tackle.



3 for \$2.00
75¢ each



A.



B.

Please designate type desired.

MASTER MECHANIC STAR SALESMAN SKILLED AIDE

Here's the triple-threat test instrument that will be equally at home in your shop, store or lab. This investment is planned to earn you profits. Use the prestige-building

ServiShops Motion Analyzer

for fast, high-precision tests on all photo equipment. You'll find it easy to operate, easier to understand and easiest to demonstrate!



Write today for complete, free information.

NATIONAL CAMERA REPAIR SCHOOL

Drawer CC Englewood, Colorado

Excerpts from MAURICE RICKARDS' DEADPAN DICTIONARY

Aperture

On the simpler camera there is only one of these, but in the more advanced types there are many. In order to avoid the bother of taking out one aperture and putting in another, a device has been perfected which will produce apertures of almost any size, shape or color. The larger apertures are very useful for photographing large objects, e.g. elephants, mountains, wedding groups, but for most work a middle-sized aperture will suffice. There are one or two small ones available that prevent any light from entering the camera at all, but these are very rarely used, and should be regarded as spares. Numbers are fitted to most apertures to enable the operator to distinguish one from another. If the photographer lights on a good number early, it is advisable to stick to this instead of confusing the camera with mathematical calculations beyond its reach. It should be remembered that "full aperture" on one lens might be a miserable affair on another, and no great faith should be placed in this expression. The letter "f" in front of the number is designed to keep away evil spirits.

Bellows

This is a device for making the fire burn.

Camera Shake

When a camera is not functioning properly, a preliminary diagnosis -- if not a cure -- may be effected by holding it to the ear (in the manner of a watch) and shaking it.

Camera Stand

This is a device for filling up the gap between the camera and the ground. Here again, there are many types, depending on the nature and shape of the gap. Almost all camera stands are supplied with a wide assortment of screws, cranks, ratchets, tilts, etc., all of which are calculated to make the business of taking a photograph easier, but longer. With the aid of a really good camera stand the studio can be made awe inspiring. Wheels of various sizes are available for the alteration of height, angle, swivel, twist and these may be operated by an impressive looking crew, the whole team being under the control of the photographer, who contrives to bring about the right relationship between camera and target before giving the order to fire.

Then there is the tripod (which was introduced by a witch in the eighteenth century). The swinging cauldron is now omitted, but the genealogy is still apparent. In order to prevent the legs of the tripod from slipping when the apparatus is used on such surfaces as ice rinks, mirrors, etc. it is possible to fit suction cups to the feet, thus making it practically impossible to move the camera to another site after the exposure has been made. Small charges of explosive in the legs will overcome this difficulty. The telescopic tripod is much used nowadays, making it possible to carry the thing in the vest pocket until the last moment, when it may be produced with a careless flourish and attached to the underside of the camera. It is advisable to extend the legs before letting go of the camera. If it is desired to photograph objects on or near the ground a small slit trench may be dug to accommodate tripod and operator thus bringing the lens of the camera appreciably nearer the subject. This technique is used for photographing things like ants, dandelions and spats.

Double Extension

This sort of thing only happens on very important cameras, and is used to make the camera look much longer than it really is. It is very impressive when it is handled by an expert.

Focal Length

This means that if you move a lens between a source of light and the back of your hand you are liable to burn a hole in the back of your hand.

Focusing Device

This takes various forms ranging from none at all to Critical. The none at all kind is the easiest. We should first understand what is meant by focus. This is best understood by describing out-of-focus. Out-of-focus is the technical expression for a soft image. If it is not soft it is all right. The degree of softness may be changed at will by varying the relationship between (a) the distance of the subject from the lens and (b) the distance of the lens from the back of the camera. If the image is soft it will be found helpful to vary the distance of the subject from the lens, moving it (or her) backward and forward through ever diminishing distances until the mushy appearance is removed. The image is now Critical. Many cameras overcome this difficulty by providing a device for moving the lens away from or nearer to the back of the camera. This is most ingenious and involves knobs and ratchets, and a kind of telescope thing to insure that the front and the back of the camera remain connected with each other. This is important because without such a device there would be nothing to screw the lens into.

Lensboard

A piece of wood with a hole in the center which is attached to the lens. It is used to insure that the camera remains connected to the lens, and also to support the maker's name plate.

Mirror

This only happens in one or two types of camera and is a device which insures that at the moment of exposure the operator is prevented from seeing what is going on in front of the camera. It is very treacherous and may result in only half a picture and/or seven years bad luck.

Rising Front

This makes the front rise. It is used in photographing things like steeples, telegraph poles and chimney stacks. The chief disadvantage in a rising front is its tendency to fall suddenly. This can be overcome by pushing pieces of matchstick or folded paper between the rise and the front.

Spherical Aberration

The average photographer is not likely to have any of this.

Shutter

This, as its name implies, is a shutter. It is a thing that opens in front of the lens. It can be operated by a sort of lever on the side of the camera, or by a long piece of rubber tubing with a bulb on the end, or by a thin black thing with an in-and-out thing on the end. The shutter should also close again after the exposure. If the cable or rubber tubing is knotted or trodden on during exposure it is likely to lose its closing action, and will result in what is termed Over Exposure. Another way of dealing with the whole problem of exposure is to place a hat or some other article of clothing in front of the lens and remove this when it is desired to expose. The danger here is that suspenders, etc., are inclined to become entangled with the camera at the moment of removal and this is very hard on the garment. If the hat is used it is best to make certain that the label inside is of sober design, as the lettering, etc., may be visible on the finished photograph. Yet another method of exposure much favored by those having no shutter is to switch off all the lights in the studio, remove the slide, and suddenly switch on the lights, leaving them on for roughly two or three seconds; switching them off again when it is felt that the camera has had enough. This method takes the camera completely by surprise, and involves no levers, buttons or other devices. Care should be taken that in going to and from the camera in the dark no articles of equipment, electric cables, etc., are allowed to cross the path of the operator. It has been found advisable to screw down furniture before using this method.

Uprights

In photographing architecture, for example where uprights have a tendency to be upright, it is desirable to reproduce this tendency in the picture. This is impossible. Efforts have been made to tilt the top of the building forward by jacking it up from the rear, but the photographer should not attempt this without the assistance of the builder. An alternative is to utilize the rising front (see Rising Front) or to correct the distortion in the enlarger by tilting practically everything. This method will put at least two stories on any building.

Zygophyllaceae

The serious photographer is unlikely to be worried much with this kind of thing.

KENNEDY *all steel tool kits*



Positive spring stop prevents accidentally pulling drawer all the way out of cabinet. Spring catch can be released for quick removal of drawer.

The Kennedy line offers outstanding economy and value when fine tools are to be stored. Solidly built—reinforced by inside walls, which ensure rigidity and also support the drawers. The Model 520 has seven drawers sized to fit a wide variety of small tools. Compound drawer slides are equipped with positive stops which prevent spilling. Patented spring catches make it easy to remove drawers. All drawers are completely felt lined and can be drawn out their full length for a clear view. Slides work easily and smoothly without sagging even when heavily loaded. Adjustable partitions in each drawer except the bottom one.

Front panel slides underneath drawers when box is in use — friction catch holds it there. Fits outside, holding drawers closed for carrying (locks with lid lock). Bright zinc plated fittings make attractive combination with brown ripple baked enamel finish. Dimensions: 20 x 8-1/2 x 13" Weight 27-3/4 lbs.

Till in Top	20 x 8-3/8 x 3-3/4
Four Drawers	8-5/8 x 7-1/2 x 1
One Drawer	8-5/8 x 7-1/2 x 2
One Drawer	18-1/4 x 7-1/2 x 1-1/2
Bottom Drawer	18-1/4 x 7-1/2 x 2-1/2

MODEL 520 \$31.95

The #620 chest has the same rugged construction and time-saving convenience features as the #520 described above. Equipped with three drawers — top one has four adjustable partitions. Dimensions: 20 x 8-1/2 x 13" Weight 26 lbs.



MODEL 620

\$25.95

Till in Top	20 x 8-3/8 x 3-1/4
Top Drawer	18-1/4 x 7-1/2 x 1-3/8
Middle Drawer	18-1/4 x 7-1/2 x 2-3/8
Bottom Drawer	18-1/4 x 7-1/2 x 3-1/4

A ServiShops PRODUCT

BOOK REVIEW

In each issue of the *Camera Craftsman*, we'll try to review a classic or new text that is of value to camera repairmen. If you have some particular book which you'd like to see reviewed here, please ask for it.

Basic Electronics by Van Valkenburgh, Nooger, Neville, Inc., presents an ordinarily complex subject simply and clearly. (These books would make a handy companion set to the Basic Electricity volumes reviewed here in the last issue.)

Over 25,000 Navy trainees have learned Basic Electronics this easy "picture book" way—it's made to order for those who believe in "self education". Sponsored by the Navy to turn out trained technicians in record time, the course presents basic electronics in a simple way that everyone can grasp—regardless of previous education.

Each page has at least one big illustration to fully explain the idea on that page. These "teaching pictures" make up over half the entire course. At the end of every section, there are review pages that highlight the important topics just covered.



The five volumes in this set are: 1. Introduction to Electronics; 2. Introduction to Amplifiers; 3. Video Amplifiers; 4. What a Transmitter Is; 5. Introduction to Receivers.

Individual volumes: \$2.25. Soft cover: five volumes, 550 pp., \$10.00 per set. Cloth bound: All five volumes in a single binding: \$11.50.

All books reviewed are available from the National Camera ServiShops Supply, Box 174CC, Englewood, Colorado.

NCRS STUDENT TO BE ON SULLIVAN SHOW
"The Great DeLage," billed as America's fastest magician, will open the Ed Sullivan TV show July 31st.

Mr. DeLage and his lovely wife Margaret have given up their world tours and plan now to remain in the United States.

Always interested in photography, Mr. DeLage recently enrolled with NCRS to learn the "tricks" of camera repair.

This ServiShops

BUSINESS . . .

By Clair Schmitt



The NCRS booth at the MPDFA Trade Show provided a wonderful opportunity to talk with hundreds of people, all interested in the same thing --- service for the camera owner.

Since everybody was interested in the same subject, the problems discussed were common to all. They covered nearly every phase of the repair business -- how to disassemble particular equipment, how to charge for labor, when to refuse a repair, how to explain a higher estimate than a customer expected, how to charge for parts, what is a fair shop rate, is a retail or wholesale shop best, what about parts and parts lists, etc., etc. Both general and specific questions came up. Some may have simple, direct answers, others are more complex and can only be answered in generalities.

This was only a small percentage of the many dealers and repairmen in the world but it would be reasonable to assume that they were a good representation.

Here at NCRS, similar questions, problems, come up every day, but only the inquirer gets an answer. So here's the deal. From now on, this column will attempt to answer any and all questions sent in by readers.

Okay, so I'm sticking my neck out -- twice! First, because to know all the answers is an impossibility, and second, because there is only so much space in this little magazine. However, I've got a couple of aces in the hole. Probably some where, some time, some body has found a solution to a similar problem (all I have to do is find him). The second ace is a sure thing, if necessary, extra pages can be added to the magazine, the biggest complaint by readers has always been that it is too small anyway.

There will be no restrictions except that questions must deal with the Camera Repair business. Don't be bashful. There is really no such thing as a "stupid" question. If you don't know about something, the cheapest way to find out is to ask questions. It can be a waste of time and money to "experiment" with something for which there may be a known answer.

Cont. page 18

HELP WANTED

A card to NCRS Placement Service will bring more details about these opportunities. Include code number listed for opening that interests you

00114 Photo dealer in Greenville South Carolina needs graduate.

0329 Alhambra, California Photo Dealer considering repair department. Wants graduate to open a Franchise in the area. Space in store for shop. Other dealers also to service.

9815 Hollywood, California store wants advanced student or graduate to work into established shop. Must live in Hollywood area.

983 Established repair shop in expanded camera store in Nashville, Tennessee, needs a good, experienced man.

9111 Photo Supply Dealer operating in Ohio towns would like graduate to operate shop to service Company stores and others in area.

9930 Repair shop in Columbus, Ohio needs advanced student or graduate for camera repair. Full time. Salary open.

0322 New York City Photo Dealer has good opportunity for graduate.

991 Erie, Pennsylvania Camera Store wants experienced camera repairman.

9814 Camera Repairman wanted for photo shop in Pittsfield, Mass. Pay and working conditions excellent.

9918-2 Lakewood, Ohio repair shop is in dire need of a good repairman.

0325 Large Photo Supplier in two Ohio towns needs graduate to service two stores.

9924 Rapid City, S. Dakota photo shop is looking for a reliable repairman.

Dealers --- Repairshops --- Service Departments

When you need repairmen, send details to NCRS Placement Service. Your needs will be listed here. Applications of interested repairmen will be sent for your consideration.

EXPERT
CAMERA
REPAIR
SERVICE

Authorized agency
NATIONAL CAMERA
ServiShops



© GAZER CAMERA CRAFTSMAN
Aurora - Chicago - Englewood, Colorado

This colorful sign will tell your customers that you want their camera repair work. The sign is done in eye-catching yellow, blue and black on white background. The size is 11" by 14".

A sign for every purpose. Standard heavy board, standard heavy board with enamel, and paper that can be taped to any window.

Price each in quantity	1-4	5-9	10 up
Paper	.90	.70	.50
Board	1.00	.80	.55
Board with enamel	1.10	.90	.65

May be assorted for quantity price. One sign is FREE, 25¢ in cash or stamps for handling and postage. No handling charge for your free sign if you order more than one.

NCRs
Lesson
Binders



Now you can keep all of your texts neatly in order. Each text is held securely and the binder may be opened to any page in any text, yet each is instantly removable! Seven inches wide, your binder holds forty texts ready for immediate reference. This is a fine way to preserve your Camera Craftsmanship lesson books.

Price only \$7.75

A ServiShops PRODUCT



HI THERE!

Over the heads of the local brass I think I'll take my troubles to you students. Our working conditions are a fright! Any of you who have come visiting lately know this, so it's not news except to the rest of you!

We have this little lake right on the other side of the fence, see. And there are fish in it. And on the few warm days that we have had, there are boys out there with home-made fishin poles, and they do look happy! Or at least peaceful!

And on the most recent pleasant day that we had, there was a small-sized boat out there. It was going slowly so its own backwash wouldn't bounce off the near wall of this small-sized lake and capsize it. But it did look like fun!

And the only way we can see what goes on over there is to sort of peek by standing on tippy-toe and then sigh and turn back to the grindstone. I know what's the matter with me --- you may have heard of Spring Fever? Yeah. Have I got it bad. Fever and rash and all the symptoms. So Lucille brought me a plant in a little hanging pot that I can have on the post right by my typewriter. So there is something green in the world --- looking around an office, you wouldn't guess --- until you look at my vine! Dorothy brought some plant food and we are going to measure how it grows, from one day to the next. It had better be good!

Yep, today is Clair's birthday (April 1st) Seems as if we've always pulled some kind of a funny on his birthday that we that we'd surprise him more this year by being just plain ole good kids and serve him his favorite cake.

But alas, the joke was on us. Clair got sick at noon and went home before we had our party. Last year he had the joy and/or letdown of slicing into this beautifully iced cardboard cake, see. So maybe he still remembered that and thought he'd be better off playing hookey. Ha! (He really was sick.)

Oh boy! The goings on that do happen round here!

Till next time,
Delphine

Our Students Speak



Your course, and most of all, the people at NCRS have been extremely helpful and cooperative. The knowledge I've gained from it so far has helped me in my association with my fellow employees and my company. I'm sure that in the future it will begin to be a profitable association.

W. M. Ruth
Arcadia, Calif.

I would like, at this time, to express my sincere appreciation of your friendship and interest in my problems. To you, and to all the others at the School, I say "Thank you."

E. Leslie Allen
Kenmore, New York

This flexible shaft machine is sure a dandy tool. I've already notified Student Service about the purchase of the loan kit.

Clyde H. Monson
Gunnison, Colorado

I have found one. . . . shutter in my studio. By following the texts, I had no hardship to disassemble and re-assemble it. It has little variations from the text but the principle involved is the same. Thank you very much for your close guidance and wonderful lesson texts.

Sing Siang Huan
Iloilo City, Philippines

I would like at this time (although the time is late) to express my appreciation for the courtesies extended me on my visit to the School last June. I enjoyed the visit very much and felt that it was very helpful to me. Please extend my thanks to Mr. Love and to the rest of the staff.

Keith Neuneker
Concord, California

SPIRAL SPRING BELTING

Furnished in 3 test lengths complete with coupling. Runs smooth and noiseless.

No. 11-120

Each \$0.50



PLASTIC FUSIBLE BELTING

Ends fuse when heated to form endless belt.

No. 11-174. $\frac{1}{8}$ " diam.—Per Ft. \$0.15
No. 11-175. $\frac{1}{4}$ " diam.—Per Ft. .15
No. 11-176. $\frac{1}{2}$ " diam.—Per Ft. .15



RUST REMOVER

4 oz. bottle\$1.70



H-R Rust Remover is non-acid, absolutely harmless to the polished finish of fine parts. You may leave parts in this rust remover overnight. You may dip parts directly into the wide mouth 4 oz. bottle.



HARD ARKANSAS MOUNTED STONES

Length	Width	Each
3 1/2"	1"	\$3.00
4"	1 1/2"	7.50
5"	1 3/4"	9.00
6"	1 3/4"	10.50

HARD PENKNIFE PIECES
(Approx. 1/2 the thickness of regular stones)

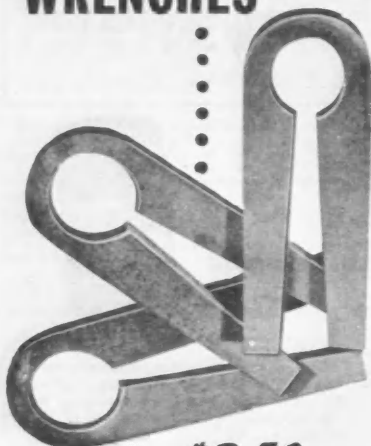
3" 1" 1.50

SERVISHOPS HEADQUARTERS ARE YOUR SPECIALISTS

ServiShops Headquarters advertising is beginning to appear in National magazines. Rely on your Headquarters Shops to back up your own work. For example, electronic specialists and complete facilities here can take care of your repairs on sound equipment, electronic flash and other specialized photographic machinery.

Send repairs direct to ServiShops Headquarters, Box 174 ER, Englewood, Colorado.

Nat Line:
Flexi-Clamp
WRENCHES



T 751-12P \$3.50 ea.

THESE WRENCHES are very effective tools for removing Lens and Retaining Rings that do not have built in Spanner Slots. You will not mar fine finishes or damage delicate lens mounts when you have a set of these wrenches in your kit. Available for any size diameter job. SIZES IN STOCK to fit:
 EASTMAN KODAK LENS CELLS
 POLAROID LENS CELLS
 LEICA View and Rangefinder caps
 OTHER sizes available on request
 PLEASE state size or purpose required when ordering.

Popular sizes: 7/16, 1/2, 21/32, 3/4, 1-1/8, 1-1/4, 1-1/2, 1-3/4

A ServiShops PRODUCT

National Camera Repair School
 Englewood, Calif., U.S.A.

WITH APOLOGIES TO ABE LINCOLN
 "Two score years ago," wrote Anon, "our fathers brought forth upon this nation a new tax, conceived and dedicated to the proposition that all men and their income are created fair game."

"Now we are engaged in a great mass of calculation, testing whether the taxpayer, so confused and so impoverished, can long endure. We are met on the battleform of that calculation - 1040. We have come to dedicate a large portion of our income to a final resting place with these men, who spend their lives that we may part with our money."

"It is not altogether fitting that we do this. But in the legal sense, we cannot evade, we cannot underestimate this tax. The collectors who have computed here have gone far beyond our poor power to add or subtract."

"Our creditors will little note, nor long remember what we pay here, but the Internal Revenue Service can never forget what we declare here."

"It is to us, then, to be dedicated to the great task before us, that from these vanishing dollars we take increased devotion to the few that remain, that we highly resolve that next year will not find us in a higher bracket."

ServiShops cont. from page 15

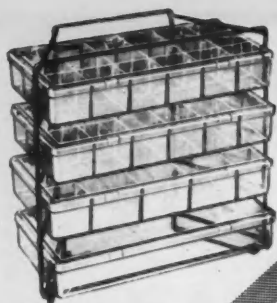
So fire away! All questions will be answered in the column. No personal replies will be sent. Normally, names will be printed but they will be withheld on request. Some questions may take a while to find the answer, so please be patient if you don't see your question and answer in the very next issue.

If you have found a better solution to a problem, send it in -- if you don't agree with an answer given -- write!

When you send in more than one question, please put them on separate sheets. Address all questions to This ServiShops Business, c/o The Camera Craftsman, Box 174, Englewood, Colorado.

A mother of our acquaintance was reporting the other day on her two sons. One, the mother said, tended to be bookish and studious; the other was outdoorsy, athletic and - in her words - "all man". It did not seem wise to mention it, but it occurred to us that the great difference between man and gorilla is less in muscles than in intellectual power. We admire physical prowess as much as anybody, but we wonder if the common expression "all man" is not more apt when applied to the student than to the athlete.

Chicago Daily News



(a \$3.95 value)

~~Kits
Kits
Kits~~

You've asked for them and here they are!






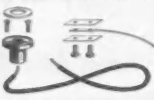







**KITS NOW
AVAILABLE:**

* When TransRak is not ordered, these kits include a P 201 Plastic tray for storing.

- *RIVET ASSORTMENT _____ \$7.50
- *WIND ASSEMBLY ASSORTMENTS
 - For Box Camera _____ \$6.95
 - For Popular Priced Folding Camera _____ \$6.95
- *SYNCH INSTALLATION KITS
 - External (Connectors, Insulators, etc.) _____ \$9.75
 - Internal (Replacement Parts, contact material, etc.) _____ \$15.50
- *SHUTTER BLADE ASSORTMENT _____ \$6.95
- FLASHCORD ASSORTMENT (6 cords) _____ \$9.90
- SPRING WIRE KIT
 - 3' each of sizes .011, .012, .018, .020, .022 _____
 - 6" each of sizes .040 and .050 _____ \$1.00
- METRIC SCREW ASSORTMENT (400 pieces) _____ \$7.50
- MIRROR ASSORTMENT (6) _____ \$5.95

**1/4 PRICE! YOUR TRANS-RAK, SHOWN ABOVE,
COSTS YOU ONLY \$1.00 WITH ANY ServiShops
KIT ORDER TOTALING \$20.00 OR MORE.**

SYNCHRO CONTACTS P.C. 3mm			Price
	to be inserted into shutter	SCR 1	.75
	metric shutter thread M4 contact pin 1/2" long	SCR 2	.75
	for Compur, Prontor, Prontor and Vario shutters spring 1/2" long metric screw M 1.6	SCR 3	1.45
	for Quattro shutters etc. spring 1/2" long metric shutter thread M4x05 metric screw M 1.6	SCR 4	1.25
	for small and large Compur shutters spring 1/2" long metric shutter thread M4 x 05 metric screw M 1.6	SCR 5	1.25
	for Rollei-Automat etc. spring 1/2" long wire 4" long metric screws M 1.6 black leather plate	SCR 6	2.10
	for Rollei-Kodak, old Rollei-Kodak, etc. spring 1/2" long with 2 insulating plates wire 4" long metric screws M 1.6 black leather plate	SCR 7	2.10
REPAIR PLUGS			
	to be glued by acetone or benzol. Contact pin silver plated. Directions for use added.		
		End	Prontor
	● P.C. 3 mm male	black	SCR 13 .30
		ivory	SCR 14 .30
	● P.C. 3mm female	black	SCR 15 .75
		ivory	SCR 16 .75
	double prong (US household plug)	ivory	SCR 17 .45
REPAIR LEADS			
	P.C. 3 mm 12" long, ready for mounting		
		End	Prontor
		black	SCR 18 .35
		ivory	SCR 19 .35
	double prong (US household plug)	ivory	SCR 20 .35

A ServiShops PRODUCT

National Camera Repair School
Englewood, Colo., U.S.A.



PETER HORN POLAROID DEALER OF YEAR

Cameras were clicking and flash bulbs were popping everywhere at the Trade Show in St. Louis.

One shot taken at the NCRS booth caught Peter Horn of Horn Photo Shop, Fresno, California, as he watched a ServiShops Motion Analyzer demonstration.

Mr. Horn was chosen Polaroid Dealer of the year for 1959 and is one of the increasing number of Dealers who recognize the importance of Service to their customers.

On their way home, Mr. and Mrs. Horn stopped at NCRS for a visit, and a check on the progress of the repairman trainee sponsored by Horn Photo Shop.

NCRS Booth cont. from page 11

and photo dealers who are sponsoring students in order to add a repair department to their stores.

The ServiShops Motion Analyzer received the most attention (as usual) but the opportunity to meet and just chat was not overlooked.

Some, like Louis Curl of Cumberland, Maryland; William H. Schaffner, Burlington, Iowa; Mr. Horn of Horn Photo Shop, Fresno, California; and Mr. Crick of Crick's Camera Shop in Kansas City, ordered their Mark III Analyzers.

Among the other students who were at the show were Carl Krebs of Downey, California; Gene Bauer of Sheboygan, Wisconsin; Wolfgang Gruber, Indianapolis, Indiana; David P. Wilson, The Travel House, Mission, Kansas; Bob Piedot, Neenah, Wisconsin; Pat Marmion, Granite City, Illinois; John Garrett, Dayton, Ohio; and Louis Besse of Lansing, Illinois.



BELLOWS

Have we heard from
you lately?

My experiences with National Camera Repair School up to now have been very enjoyable. Every one has done more than their share to make me feel at home.

I've enjoyed my first three lessons, believe me I've learned so many things that I'm going to review all three lessons over again. I've sold and talked cameras for almost ten years but after completing "Optics" I'm ashamed of how little I knew. If I never become a good repairman, this I know, I'll be able to talk and sell cameras with more confidence.

William Haines
Wilmington, Ohio

I find it extremely difficult to improve on the artists at NCRS. Layouts, designs, the modernistic styling are perfect in my opinion. The words ServiShops - Precision Care, etc., are great. I have received numerous compliments on the name and design of the business cards and letterheads.

Wm. J. Cummins
Pensacola, Florida

I have received my Camera Repairman's Handbook and the ABC's of Camera Repair. I really think these books are the best help, reference and explaining devices I have come across in the photo field. You might even say they are "Packages of knowledge".

So far I am pleased with the School, my studies, and yes, even the confidence I have received from you that makes me feel I'm going along well. I am sure that when I get Stateside things will go even better.

Vince Fleury
APO New York

I have one suggestion pertaining to the operation of the Analyzer that might help: Many camera backs do not fit "light tight" while resting on the photo cell unit; especially the Graphloc back. Consequently the extra light coming in Cont. page 22

RECENT CONSIGNMENTS ACCEPTED ON SERVISHOPS ANALYZERS

There are never any trade-ins accepted on purchases of ServiShops Motion Analyzers. However, it has been NCRS Supply policy to take instruments on consignment. That's good news for those of you who would like to make an especially good "buy" on a used test instrument.

Is there some particular machine in which you are interested? Place a request. When an instrument of the type you want comes in, you'll be told. You can even name the price you'd like to pay, if you wish. The plan makes available shutter testers, synchronization testers, contact testers and others by such manufacturers as Aerotronic, Heiland, Hickok, and NCRS.



Here are the approximate prices you may expect to pay for different makes and models of used test equipment:

Gardner Sychrotimer	\$195 to 300
Heiland SychroTester	80 " 120
Aerotronic (Synch)	60 " 85
Aerotronic (Shutter)	50 " 75
Rush	50 " 75
Hickok	50 " 75

This also gives you some idea of the amount you will be paid for an instrument you now own, when buying a ServiShops Motion Analyzer.

Lindstrom PLIERS



FLAT NOSE PLIERS

Size _____ 4" 4 1/2" 5"

Bright finish Cut jaws \$1.00 \$2.00 \$2.25

Bright finish Sm. jaws 1.00 2.00 2.25



HALFROUND NOSE PLIERS

Size _____ 4 1/2" 5"

Bright finish Smooth jaws \$2.10 \$2.20



END CUTTING NIPPERS

Length _____ 3 1/2" 4" 4 1/2" 5"

Bright finish \$2.25 \$2.25 \$2.50 \$2.50



ROUND NOSE PLIERS

Size _____ 4" 4 1/2" 5"

Bright finish Sm. jaws \$1.00 \$2.00 \$2.25



CHAIN NOSE PLIERS

Size _____ 3 1/2" 4" 4 1/2" 5"

Bright finish Cut jaws \$1.00 \$2.00 \$2.25

Bright finish Sm. jaws 1.00 1.00 2.00 2.10



SIDE CUTTING NIPPERS

Size _____ 3 1/2" 4" 4 1/2" 5"

Bright finish \$2.75 \$2.25 \$2.50 \$2.00



A ServiShops PRODUCT

22 THE CAMERA CRAFTSMAN MAR-APRIL 1960

Bellows cont. from page 21

will activate the photo-tube enough so that it will not trigger the sweep when a shutter is being tested. This trouble is not apparent under ordinary room light, but it really shows up during the daylight hours when there is a lot of sunlight present. Once I found out what was causing the Analyzer to malfunction, it was simple to find a cure. All that was needed was a square of 1/2" foam rubber large enough to overlap the edges of the camera with a hole about one inch in diameter cut in the center of the rubber. Net results: a perfect sweep every time regardless of how much light the Analyzer is being used in.

Art Dawson
Omaha, Nebraska

This has been a fine course and I have found each lesson a challenge which brought a little more knowledge. I have spent the past 15 years in various phases of photography but it took this course to make them all jell. I can assure any one taking the course that it will pay for itself many times over. Thanks a lot.

Ed Tarbell
Burkburnett, Texas

I believe this is my last lesson, and I want to say that your help and extraordinary patience is deeply appreciated. It is an excellent course, and well worth every cent it cost. You have done your part in pushing me through when I balked, and now it is up to me to make the knowledge you pounded in pay off for me. Thank you again.

William J. Cummins
Pensacola, Florida

I was very happy to have been offered a full or spare time job, as I wish, before I had even started my first lesson with your school, with a very progressive photo dealer.

He was very enthused when he learned that I had enrolled in your school and expressed the wish that I keep in touch with him and be sure to notify him when I was ready for camera repair.

I am very happy and grateful with this repair course although I realize I have only begun.

Kermit J. Thingvold
Barton, North Dakota

YOUR VOTE IS YOUR OPINION

You have a right to form an opinion and a right to vote. You also have a duty to vote -- so doesn't it follow that you also have a duty to form an opinion?

WEDDING BELLS

I was married on the 26th of December so there are a few more responsibilities added to my daily routine.

Donald R. Ferren
St. Clairsville, Ohio

Our Assistant Editor, Dorothy Hauptman, was married February 6, to a fine repairman, Vernon Hurrel.

These people have our best wishes -- What is it about camera repairmen that is so attractive to the girls?

Birth Daze

Announcing the birth of Tina Marie, December 29, 1959, to Jennie and Bill Pomeroy. A cute little girl and a pleasant surprise after 10 years of marriage.

William B. Pomeroy
Traverse City, Michigan

My wife and I were blessed with a baby girl on the 7th of February. I don't know of any women camera repairmen, but maybe I can at least teach her to do all of my bookwork. (ha)

Jerry Guyton
Reno, Nevada

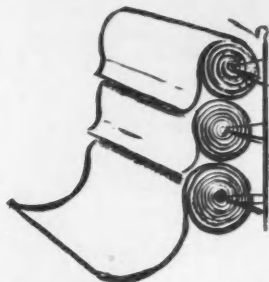
Picture from Bob Stickney, Hudson, Ohio, of their daughter Anne Marie, now a ripe old five months. He says with no more 2:00 am feedings, maybe he can get more lessons in. Good enough!

Catherine Elizabeth is new to the household of Bill and Donna Ziebolz in Colorado Springs. Born January 26.

Hi! Just a note to let you know of our new arrival, a son, Leonard Scott, born February 5. Weighed 6 lbs, 12-1/2 oz. This is our second son.

Leonard J. Kuhnlein
Canoga Park, California

BELLOWS & SHUTTER MATERIAL



"Outer" 36" wide \$2.20 yard
"Inner" 36" wide \$2.00 yard
Discount: 1 to 4 yards - 20%
5 to 10 yards - 25%

FOCAL PLANE SHUTTER MATERIAL
42" wide \$6.00 yard
Discount: 1 yard - 20%
2 to 4 yards - 30%; 5 to 10 yards - 40%
Minimum Order: 1 yard
Over 10 yards, write for special discount

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751-1

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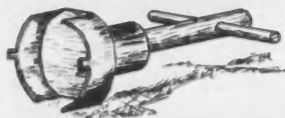
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