In this issue:

- Society of Photo-Technologists
- Job Openings
- Students in the News
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 thru NCRS Supply Department.

FLASH! ULTRA HIGH SPEED PHOTOGRAPHY
By H. Edgerton and J. Killian $6.50

PHOTOGRAPHIC OPTICS
Arthur Cox 5.75

PHOTOGRAPHIC OPTICS
Allan R. Greenleaf 6.00

PRINCIPLES OF OPTICS
Hendy and Perrin 9.50

YOUR CAMERA LENS AND SHUTTER
G. L. Wakefield 4.95

CAMERA REPAIRMAN'S HANDBOOK 5.95

HOW TO ORGANIZE AND OPERATE PHOTOGRAPHIC SERVICE DEPARTMENTS .50

PROFESSIONAL EQUIPMENT: USE, MAINTENANCE, AND REPAIR OF .50

CAMERAS: THE FACTS
W. D. Emanuel and Andrew Matheson 3.00

KODAK REFERENCE HANDBOOKS ea 4.00

MINIATURE AND PRECISION CAMERAS
S. J. Lipinsky 7.95

DICTIONARY OF PHOTOGRAPHY
A. L. M. Sowerby 10.00

PHOTO DICTIONARY
Margen & Morgan 2.50

FOCAL ENCYCLOPEDIA OF PHOTOGRAPHY 20.00

SUCCESSFUL SELLING OF CAMERAS AND ACCESSORIES
D. Lepper 2.95

KODAK GRAPHIC ARTS HANDBOOK 6.50

PHOTO-LAB INDEX
Henry M. Leslie and John S. Carroll 19.95

THEORY OF THE PHOTOGRAPHIC PROCESS
C. E. R. Mies 21.50

CONTENTS
FEATURES
Maytime Is Picture Time 4
'59 MPDFA Convention 4
The Pelicans Were Starving 6
Job Openings 6
Rochester Salon 8
Students in the News 8

DEPARTMENTS
The Director's Viewpoint 3
Reports from the Craftsmen 5
This ServiShops Business 7
Shop Shots 9
Society of Photo-Technologists 10
Visitors 11
Hi, There 12
Our Students Speak 13
Bellows 17

THIS MONTH'S COVER
Mr. Martin Shedd, of Eugene, Oregon, is pictured in his well-equipped shop. Mr. Shedd was one of the first to enroll with NCRS and we are all proud of his success

STAFF
Clair H. Schmitt Editor
Dorothy Hauptman Assistant Editor
Margaret Snyder Art Director
Frank H. Curtis Advertising Manager
William Hagerdorn Production Manager

COPYRIGHT 1958, NATIONAL CAMERA REPAIR SCHOOL, LITHO IN USA

CAMERA CRAFTSMAN VOLUME 4 NUMBER 5 NOVEMBER–DECEMBER 1958

Published for students, graduates and friends of the National Camera Repair School

THE CAMERA CRAFTSMAN NOV-DEC 1958 2
There are four reports, and discussions, elsewhere in this Camera Craftsman that may seem unrelated. Actually, the relationships are very close and offer opportunities for you that are tremendous.

Here are the four items: One, the beginning (much earlier this year) of activities for next spring's "Maytime Is Picture Time" promotion. Two, the first signs of healthy activity from groups of camera repairmen at local levels as chapters of the Society of Photo-Technologists, the national group sponsored by your School. Three, announcement of the National Master Photo Dealers' and Finishers' Association Convention at Philadelphia next March. And, the growing need for camera repairmen.

How are these related? Let's take the last item first. For every repairman entering the field, there seem to be several new calls for skilled people. Your School has been receiving more requests for repairmen (that it cannot fill) than ever before. Every activity in which we camera repairmen are engaged tends to repeatedly remind others in the photographic industry of the need for more and better service.

Any organization serves a purpose only through the members of that organization. The National Camera Repair School's offer to sponsor and sustain a group of camera repairmen operating upon a nation-wide or world-wide basis could mean nothing had not individuals from around the world responded, recognizing the need. In this issue appears the first formal section of the Camera Craftsman dedicated to a camera repairman's organization and its chapters. Whether or not a new chapter forms in your area, you are invited to participate in this news and technical section.

The industry-wide "Maytime Is Picture Time" is a tremendous opportunity for the Society of Photo-Technologists to demonstrate the impact it can have in helping the photographic industry put across a worthwhile venture. Start making your plans now and, just as important, report your ideas to the Editor so that your ideas can be put to work by your fellow craftsmen every where.
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 Mogni-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
7 2-3/4 14° 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 right eye only.

Priced $15.00 each

Use Kimwipes on your camera bench...

**SAFE!**
**SOFT!**
**CLEAN!**
**DISPOSABLE!**
**NON ABRASIVE!**

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 Postage paid with cash orders.
12 Boxes...$3.48

—GET OUT YOUR CAMERA
—LET US INSPECT AND CLEAN YOUR CAMERA

Work on the promotion of 1959’s MAYTIME IS PICTURE TIME activities are already underway. This year, as Camera Craftsmen, why not start the ball rolling far enough ahead of time so that there will be real benefits for your shop and for the dealers you service. The 1959 MAYTIME IS PICTURE TIME arrangements have already incorporated some ideas that you should think about. NCRS has pledged its full cooperation and is eager to act as your agent in developing ideas that will help you do more business in the spring and summer of 1959. One point suggested by NCRS and probably many others is incorporated this year in the use of sub-slogans under the MAYTIME IS PICTURE TIME theme. Some of these are suggested in the heading of this column.

Much of the work on the "MAYTIME" promotion will be climaxed at the 1959 Convention and Photographic Trade Show of the Master Photo Dealers’ and Finishers’ Association. This show will be held in Philadelphia, Pennsylvania next year on March 22, 23, 24, 25, 26. Repairmen will be able once more to join in a friendly dinner and discussion group, for which arrangements are already under way. You’ll be asked to plan early to attend and make reservations through the School.

‘59 MPDFA Convention and Photo Trade Show

Independence Hall where the Declaration of Independence and the United States Constitution were framed, is but one of the many historic attractions in Philadelphia, the site of the 35th Annual MPDFA Convention and Photographic Trade Show, March 22 through 26, 1959.

Start making plans now to attend the second annual dinner meeting especially arranged for camera repairmen on one of the convention nights. Definite time will be announced later, but keep these dates open.
Sorry I haven't finished a lesson lately. Business is so good that I just can't take time away from the cash register.

Louis Curl
Cumberland, Md.

I must say this machine (ServiShops Motion Analyzer) is quite amazing in getting an accurate picture of the actual shutter performance of any camera. So far I am well pleased with the machine.

Paul Briscoe
Ponca City, Okla.

I have contacted all the local camera dealers, outlining my camera repair service to them, and all have been most interested. Most of my jobs have come from one jeweler in particular who also has a branch store in a near-by town. A regular ad in the local paper also brings in work.

Next I'm going to try mail order repairs with ads in the papers of other nearby towns.

Gerald K. Hiscock
Corner Brook
Newfoundland

Tonight I performed my first disassembly, repair and reassembly on a camera even though it was a simple box reflex. It came apart quite readily, though it didn't fall back together quite as easily. Perseverance and exercise of judgment finally triumphed.

W. W. Peterman
Los Angeles, Calif.

You should advise your students that if they go after business too aggressively, as I did, the first thing they know they will have so much to do that the lessons suffer. I just have a heck of a time trying to even look at one. The Air Force Base are sending their cameras for maintenance here -- I have two newspaper maintenance contracts -- 22 drug stores and camera shops are sending cameras and projectors in -- to make a long story short, my annual vacation time was spent on catching up on the load of work in the shop. Please note -- this has been "passed on" advertising, from one customer to another prospect, etc. -- I haven't spent a dime on advertising yet. I have handed out numerous cards which I obtained from you but that's all. Please advise your students to that effect!

Harold W. Phelps
Little Rock, Ark.

---

UFT-OUT TRAY
Will fit at either end of top drawer. 16 compartments, each 1-13/16 x 1-13/16 x 5/8, provide filing space for small items.

Combining all of the convenience of a tool or die makers chest plus a new carrying concept, number 2020 presents a new concept in hand carried tool boxes. The drawer arrangement permits use in restricted area where space does not allow the opening of more conventional type boxes. Especially useful for the service mechanic. Suitable for the home workshop. Finished in dark brown baked enamel with contrasting tan on drawers.

STYLE NO. DIMENSIONS

2020 20 8 1-13/16
Top Drawer 18 8 1-15/16
Lower Drawer 18 8 2-13/16

NET WEIGHT SHIPPING WEIGHT

15 lbs. 17 lbs.

Top drawer has 13 permanent compartments
2 1/2 x 2 x 5/8 plus 2 removable partitions.

THE CAMERA CRAFTSMAN NOV-DEC 1958
THE PELICANS WERE STARVING TO DEATH 
along the beaches of San Diego. They clut-
tered the beach, causing a big headache for the 
Public Health Authority. The whole sorry mess 
had been started quite innocently. For years, 
the local fishermen had provided the fat and 
sassy birds with choice Pelican cuisine from 
the throwaway of the day's fishing catch. Then, 
rather suddenly, the fishermen had discontinued 
the practice. The San Diego Pelicans were left 
without a larder. Such a situation wouldn't have 
bothered the average Pelican a bit. But a whole 
generation of the San Diego Pelicans had grown 
up without once having been required to fish. 
They didn't know that Pelicans are born fisher-
men, didn't know how easy fishing could be with 
the scoped bill they have. So they stood on the 
beach until they starved and toppled over. Com-
municating with, giving them the facts of Pelican 
life, was impossible. Nobody in San Diego could 
talk Pelican. Then -- an idea. Some unspoiled 
Pelicans were brought down from Alaska. On 
the beach, they soon demonstrated the natural 
way for a Pelican to get his daily ration. The 
Stupid ones on the beach watched, slowly under-
stood, walked to the water, scooped and -- well, 
you know the rest. The Pelican Famine was 
over. The moral of the story? Could it be that 
some "Pelican talk" is in order right now? A 
whole generation has passed since we have 
really had to fish skillfully for work. Isn't it 
about time to dive into the waters of consumer 
resistance and do what comes naturally to Amer-
icans, that is --- sell?

---

JOB OPENINGS

Here's an excellent opportunity for an ex-
perienced Craftsman:

We have a request from a leading distributor 
for a first class repairman to take over the ser-
vicing of the equipment they handle. 

Good equipment (including a ServiShops Mo-
tion Analyzer), premises, lights, water, etc., 
will be at your disposal. A business of your 
own at 85% of all charges with 15% retained by 
the company for billing, etc. The sky is the 
limit and it can be built into a very fine business. 
Location is Memphis, Tennessee.

We also have requests from several shops 
on the West Coast that need repairmen. 

If you feel you can qualify and would like to 
apply, write to Louis Samuels, NCRS Placement 
Service, Box 174C, Englewood, Colorado.
Dear Mr. Schmitt:

In talking to dealers about camera repairs, one of the first questions that is asked of me is, do I have books that show the breakdown of the shutters in question, can I point out the point, and the spot that is not working right in the shutter's breakdown on paper, and if I took the shutter apart could I put it together again and would it work?

I know that when a shutter is being worked on we have a real thing to correct, and books will not put a shutter together again -- but first we have got to get the shutter to work with.

John H. Joyce
Royal Oak, Michigan

The best way that you can confront a dealer with an argument such as you have described may be as follows:

"You're perfectly right in insisting that anyone who does work for you is qualified. I think that now I understand why the National Camera Repair School is so insistent on the right kind of work on the assignments that they gave me when I was a student. There are many manuals put out by manufacturers, and in fact some of the NCRS texts quote from them and reproduce pictures from them. But no manual can tell everything that could possibly go wrong with a piece of equipment. I have been taught how to find out what's wrong with a shutter, whether or not the manual tells about that particular problem or not!

"Indeed, Mr. Dealer, I can point out quickly with sketches what is wrong with any shutter that I work on. I can describe to you in a way that you can understand, what needs to be done in order to make such a piece of equipment work properly. Sometimes, Mr. Dealer, a shutter is like a human body. If it isn't working at all, I may have to operate before I can tell you what's wrong! But most of the time I can do far better than that."

I think that with that trend of thought, along with what you really know (and you know a great deal), you can do a real convincing job on any dealer or camera user.
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 $0.60
Moly Lube $0.70

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 $0.75

Non-corrosive, resistant to temperature change, this Porpoise Jaw oil product stays at the point of lubrication
3/8 oz. bottle $0.75

ROCHESTER INTERNATIONAL SALON
The twenty-third Rochester International Salon of Photography is now under way. The Rochester Salon is not a contest. Its purpose is to enhance photography as a medium of artistic expression and to provide a place where the best efforts of any photographer anywhere in the world may be exhibited. It is an international photographic exhibition held annually in Rochester, New York. More information about the Salon is available from Mr. Ralph F. Watkins, Publicity Chairman, 124 Elkmore Drive, Rochester, New York, USA.

MAY A REPAIRMAN SELL UNEALLED-FOR CAMERAS FOR THE REPAIR FEE?
A number of states have special laws covering this subject specifically, so before making any move to sell a camera for the cost of the repair, it would be advisable to become familiar with the particular laws in your state.
Your police department or local chamber of commerce will advise you what steps to take, so you will not get tangled up with the law.

GET THOSE LESSONS IN
Over a period of the last few months, your School Instructors have graded an average of 1.38 lessons per active student each month. How many lessons have you completed in each of the last three months? Let’s all try to complete at least one lesson each month. Steady progress gives you the most wonderful feeling through your study program.

STUDENTS IN THE NEWS
At least two NCRS students made the news in September. The interesting thing about these two, perhaps, is that they appear in separate articles in the same magazine, the October issue of US CAMERA.
On page 34 is an article about the School and Dota Brown, operating the Brown Camera Service in California. It tells the interesting story of Mr. Brown's change in career. If you can't find a copy of this issue, write to NCRS for a reprint.
And on page 65 of the same issue of the same magazine is an interesting article written by one of the first NCRS students, Mr. Harold Leeper of Canton, Ohio. Called "Camera Check-Up" with a series of fine photographs and nicely written copy, the article is commendable piece of work.
NCRS is proud to be associated with these men and others like them who are establishing themselves in the world of photography.
HERE'S WHERE SERVISHOP CRAFTSMEN LEARN AND EARN
Made a change in your shop lately? Make a quick picture or two and send them in. Share your ideas.

Walter Lissey

Sarkis Emerzian
Waukegan, Illinois

R. J. Blesener
Minot, North Dakota

Clyde C. Smith
Omaha, Nebraska

Robert Blickenstaff
Nogales, Arizona

John Millerwise
Sebewaing, Michigan
CHAPTER NEWS

The first Chapter of the Society of Photo-Technologists has already been started in the Detroit area. If you're interested, contact Mr. John H. Joyce, 3316 Hunter, Royal Oak, Michigan.

Here's an excerpt from a School letter congratulating the group:

"The program is already under way. Your efforts to promote such a group on a local level is terrific. Your School will do everything possible to back you up. For example, the School magazine, THE CAMERA CRAFTSMAN, is already in existence as your own official organ. If you wish, and just as soon as the situation warrants it, one or more pages will be set aside for 'Organization Doings'. (Ed. Note: Here it is!)

"The National organization will soon gain speed since more and more students and graduates of NCRS are actively engaged in camera repair. You can depend on your School facilities to develop such things as an emblem, from your suggestions if you wish. We would also provide, and have been thinking of such things as: bumper stickers, decals to be placed in cameras that you repair, universal price lists and other literature that you can give to your customer at moderate cost. These and other service helps are part of the integrated idea that your School is constantly working on.

"With camera repair being as modest a field as it is, your School in fact is more than just a training agency. It's your coordinating body, your helping hand, your 'voice' to other members of the craft and the industry as a whole."

THE CLINIC

Q. Can you tell me the quality differences between American, German and Japanese lenses?
A. Your lens question is indeed an interesting one and would take one book or many to answer. Yet perhaps we can give you some hints that will help you further.

Modern lens design is taking big strides in this and every country. One reason is the use of new rare-earth glasses that make it possible to create more highly corrected lenses out of fewer pieces of glass. The unusual components that they're adding to glass compounds are making new glasses possible that never existed before. Until very recently but a few basic types of glass had been in existence and all lenses, good and bad, had been created from them.

Today, design is the big factor. German and American manufacturers make lenses in large quantities, using fancy electronic computers in order to evolve precision designs. Japanese manufacturers are doing almost as well in design. The Japanese have a strong advantage in this respect, however. They are being a little more aggressive with new design, in an attempt to out-do their American and German competitors. In many instances this is successful.

But aside from design there are other problems. Basically these are two in number: one, glass must be produced to fit the design specifications; and two, a lens must be manufactured from the glass.

The second problem, the actual manufacture of the lens, is dependent to a great extent on the technical (Con't. page 14)
Glenn Gale
Big Springs, Texas

Visiting Students

Charles Baughman
Salt Lake City, Utah

Frank Gillespie
Laramie, Wyoming

Orville Markham
Fort Collins, Colo

Mahlon Wood, Jr.
East Weymouth, Mass.

Bob Starkle
Bismarck, North Dakota

THE CAMERA CRAFTSMAN NOV-DEC 1958
You know, I kinda slipped behind time with my chatting with all of you this time, so I turned to Post Scripts to see if I couldn't find sumpin for you. A clever one on "Satan's Auction" and some goodies from Nuggets of Thought! Hope you like em --- see you later. OK?

Once upon a time Satan, growing old and weary, decided to retire from active work and move to cooler climes. So he offered all of his devilish inventory of tools for sale to the highest bidder. An auction was arranged, prospective buyers duly notified bargains were to be had.

When the bidders arrived, they found all the tools neatly arrayed -- quite a task when you think of their ugliness and misshapen contours. There were Envy, Deceit, Sensuality, Malice, Enmity, Thoughtlessness, and all the other devices which Satan wielded so expertly. Each was plainly marked, prices were surprisingly low. Except, that is, for one ungainly piece of much-used apparatus marked Discouragement. Its price was far higher than any other tool.

"Why, Mr. Satan," asked one of the bidders, "do you want so much for this tool?"

"My friend," replied the Old Tempter, "this tool has always been my most useful one. You can see that it has had more wear than the rest. It is used as a wedge to get into a man's mind when all other means fail. Discouragement, once inside the consciousness of a man, will cause him to do anything I want. Practically every human being has had this tool used on him, although very few of them know that I'm the one who is wielding it. So, even though it doesn't look it, Discouragement is the finest device that Hades, Inc. has ever owned, and it certainly should bring the largest price."

As it worked out, none of the shoppers could afford to pay the price for Discouragement that Satan demanded. Since he will not reduce the price one cent, he is still using it; and we can see the results every day.

Nuggets:

Who seeks a friend without a fault remains without one.

Every man should keep a fair sized cemetery in which to bury the faults of his friends.

Everything has been thought of before, the difficulty lies in thinking of it again.
Our Students Speak

Most of us just don’t take the time to thank people for doing a good job. You people at the School have been very prompt and friendly. Thanks.

That was a nice story about NCRS in the October issue of US CAMERA.
Mel Turley
St. Albans, W. Va.

More and more I am enjoying the course. You overwhelmed me with that package containing the power tools lesson. I can hardly wait to get at it.
Jack Ragazzo
Boston, Mass.

No questions this time, except to thank Bud Fowler for his encouraging comments in the previous lesson regarding the shutter on the Minolta Autocord.
John J. Kaser
Chicago, Illinois

I would very much like you to know that thus far I have found my work on this course quite interesting. Thanks to all at NCRS and I am looking to the future with high hopes.
Peter Dauphin
Trinidad, B.W.I.

Wish to comment on the Photography lessons as they are a complete reference data in themselves and are very complete as to up-to-date methods.
Arthur E. Sager
Appleton, Wisconsin

I’m sorry this lesson has been delayed so long. The reason is I’ve been so snowed under with cameras to repair. I’ve been doing strictly wholesale business for the local photo supply dealer and he has really kept me busy in my spare time.
Paul V. Briscoe
Ponca City, Oklahoma

AEROTRONIC INSTRUMENTS ON CONSIGNMENT
Model 103 Shutter Speed Tester
used 2 months $85.00
Model 303 Movie Speed Tester
latest model, used 2 months 55.00
Model 303 Movie Speed Tester
Older Movie Speed Tester 30.00
Only one of a kind. First come first served, See ad on Page 17.

SPECIAL TOOLS FOR YOUR SHOP

[K&D] DEMAGNETIZER
Double Form Var coil with aluminum cover, switch, four foot cord and detachable plug. For 110 volt A.C. current only. Base 3¾” x 2½”
Each $4.75

DEMAGNETIZER
Economical model. For 110 volt A.C. current.
Each $4.50

OILERS
Simply press Lubristyl’s point against spot to be oiled—oil is ejected under pressure enabling you to apply oil in hard-to-reach places. When pressure is released, excess oil is automatically sucked back into cartridge, giving you perfect control for every oiling need. Leakproof, easy to fill, easy to clean—complete with protective cap.
(The Clinic, con't.)

ability of the people who build the lenses. Per-
haps German and American manufacturers have
had greater experience in grinding, polishing,
and testing lens components. Perhaps it is pos-
sible for them to turn out an average lens which
is of better quality. This means that there will
be fewer lenses that pass their quality-control
system that are of inferior quality. Japanese
lenses, over all, have a slightly lower average
quality. This does not mean that the design may
not be as good nor that most of the lenses are
not as good. However, an occasional Japanese
lens may be of poorer quality than any Ameri-
can or German lens. German and American
lenses are very similar in this respect.

The other and perhaps most vital considera-
tion is the glass that is used in the manufacture
of the lens. It is impossible for any glass manu-
facturer to mix two batches of optical glass
having identical qualities. This means that al-
though a batch of glass may be made to certain
specifications, it will probably miss those speci-
fications slightly. Any slight "miss" can be
corrected in actual design of the lens. Now, a
batch of glass may be adequate for producing a
single element of a particular lens in fairly large
quantity. In a modern lens, having as many as
four or five different kinds of glass, slight vari-
atations in specification can be considerable when
they are all used together in one completed lens.
A large manufacturer, building hundreds or
thousands of lenses from the same "mix" of
glass, can bear the cost of correcting the de-
sign those slight amounts that will make it poss-
ible for the completed lens to be quite precise.
A small manufacturer, on the other hand, mak-
ing a limited number of lenses at a time, may
be forced to buy (because of the economics in-
volved) small quantities of glass for each run of
lenses having minor discrepancies that should
require him to change his lens design slightly.
However, the cost of correcting the lens design
for such a small number of lenses is exhorbitant.
Therefore, a small manufacturer may overlook
small variations and produce a lens that is not
as good as it could be.

Since many Japanese lens manufacturers
are in this category, it is not uncommon for
them to produce a second-grade lens in the nor-
mal course of events.

On the other hand, large manufacturers, be
they Japanese, American, or German, can make
these minor alterations and end up with a fine
piece of workmanship.

(Con't. page 16)
YOU’VE ASKED FOR THEM AND HERE THEY ARE...

1/4 Price!

Your TRANS-RAK (a $3.95 value) Costs you only $1.00 with any KIT order totaling $20.00 or more!

* 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

SPEING WIRE KIT
  3" each of sizes .011, .012, .018, .020, .022
  6" each of sizes .040 and .050 .................. $1.00

BELLOWS KITS WHILE THEY LAST
  15 Bellows in popular US sizes ............... $16.45
  10 Bellows in popular US sizes ................ $9.45

METRIC SCREW ASSORTMENT (400 pieces) ....... $7.50

MIRROR ASSORTMENT (6) ........................ $5.95

* When Trans-Rak is not ordered, these kits include a P201 Plastic tray for storing.
NEW
mirror
ASSORTMENT

CONTAINS 6 OF THE MOST FREQUENTLY USED MIRRORS FOR Rollei, Graflex, AND Exakta CAMERAS

SPECIAL SUBSCRIPTION RATES FOR STUDENTS

"Photographic Trade News"
"Photo Dealer"
Regular 1 year Subscription $3.00 each for only $2.25*

ORDER THEM NOW!

Also available at student rates*
"Modern Photography"
"Popular Photography"
"U.S. Camera"

* U.S. and Possessions only

In other words, judging from our own knowledge and experience, we would rate American and German lenses today of identical quality, with Japanese lenses being somewhat lower on the average. The largest lens makers in all three countries would probably produce lenses of similar quality. As you know from your training so far, the quality of a particular lens cannot be predicted; it is only possible to make individual tests on a series of lenses. Two lenses made by the same manufacturers to the same formula may be considerably different in actual quality. By the way, new test procedures are making electronic testing of lenses close to a reality. Many of the old concepts of resolving power may soon be scrapped entirely with 'acuity' or combination qualities being searched out more and more.

Q. How are lenses cleaned?
A. The cleaning of optics depends on who is doing the cleaning and where it is being done. Unmounted optics are often cleaned by actual immersion or scrubbing with liquids or chemicals that are not harmful to the glass. Mounted optics are generally cleaned very carefully by very light use of established cleaners (whose compositions vary according to the manufacturer) with due care being used to avoid moisture entering the mount or preferably without the use of any liquid, and with the use of either soft lens cloths, chamois, or lens tissue. We know of no manufacturer who recommends the use of a cleaning fluid on coated lenses.

Q. How are various types of lenses mounted?
A. Just about every lens design has its own peculiarities of mounting. The mounting of the lens is just as important a part of the lens design as the shape of the glass. The arrangement of the retaining rings, collars, shoulder tubes, etc., are carefully chosen, not alone for ease of manufacture and precision in production, but for the elimination of strain and the protection of the lenses in their mounts. In general, one reason why some lenses are inexpensive is due to the way in which they are mounted. A complex lens may have many elements which are difficult to produce but the mounting of the elements is fully as complex and costly as the actual grinding of the glass. Poor quality of lens mounts is probably equally prevalent among all manufacturers. Occasionally they simply slip up!
HAVE WE HEARD FROM YOU LATELY?

I have some news that ought to make you feel real happy and make the entire staff of NCRS feel justified for the labour they have expended in my training this far.

I have today delivered my first repair job; it was a ———— with a ———— shutter. The shutter blades were remaining open when the shutter was in the cocked position. I disassembled the shutter and found that someone must have tampered with it and in so doing, bent the tab on the inner release lever which engages a notch in the main lever when the shutter is cocked. Consequently, whenever the shutter was cocked the main lever was back-riding the inner release lever under the tension of the main spring and partially opening the shutter blades.

Nevertheless, can you guess for whom I did the job? It was for the firm that is agent for ———— in this country, and apparently I will be given all the repair work the Department has that I am capable to handle. This includes all their guarantee work which they now send to Germany. Now that is what I call good going and for this I thank the entire staff of NCRS with special emphasis on my instructor Mr. Schmitt, and you, Delphine.

Peter Dauphin
Trinidad, B.W.I.

I would like to tell you that your student Leslie Smith (US Navy) is a very apt repairman. I have had him working for me while home on leave. He has done approximately 40 repairs in the past week, including simple box cameras and shutters such as the ———— and a number of ———— which I gave to him since he is now studying your lesson on the ————. You might note on his record this fact. Also he has a job here when the Navy lets go.

Charles B. Carnes, Mngr
Baton Rouge, Louisiana

I received my Camera Craftsman today. I was never so surprised in my life as when I was

(Con't. page 19)
YOU CAN TEST PHOTO EQUIPMENT IN A MATTER OF SECONDS

Boost Your Earnings In Less Time

Because your Analyzer requires fewer adjustments to make a test, you'll save time and steps on every test you make. You'll actually need up to 50% less time than you'd use on even a single, high cost special purpose instrument. You can go from test to test with no complications - and without worry about calibration or accuracy! Savings of time and an increase in accuracy guarantee you higher earnings. The most expensive thing you own is your own time! Make a shutter or synch adjustment with half the testing time and you double your earning power! Your ServiShops Analyzer means more money for you!

NATIONAL CAMERA REPAIR SCHOOL

Send for Free Booklet Now
Bellows (con't)
thumbing through the pages and came upon the 'New Craftsmen' and read the announcement of our new baby girl. She was born on April 9, weighed 6lbs, 11oz, and we named her Bonnie. She is red headed just like her brother and two sisters. But what I would like to know is how you found out what you did about her birth? But just as I have experienced right along, NCRS is made up of real people. If I never did become a Camera Repairman it would be worth it all to have known the friendship of the folks at NCRS.

Tom Watson
Heber City, Utah

We have a baby girl at our house now, the first for us. Name's Cecilia Eileen. Now I can study and walk the floor too.

J. L. Stites
Pocatello, Idaho

I enjoy your camera course very much for there is so much in it. I have been taking technical courses and going to technical schools for the last twenty years. All I have is praises for your wonderful camera course. Any money spent on this course is money well spent.

Noel J. Wright
Coachella, Calif.

I have expanded my business by taking care of three towns. So you see my course is beginning to pay.

William D. Justice
Miamisburg, Ohio

I am learning more about "Millie" all the time and she is wonderful, she already has me another camera shop to service and I'm sure she will get me more as soon as I have time to show her off which I really like to do.

Doyce E. Croy
Comanche, Okla.
You get the nationally advertised $94.50 Cole Portable. Professional writers like Quentin Reynolds and Kenneth Banghart choose Cole above all other portables only because Cole has all the features they demand in a typewriter.

**YOU GET AT NO ADDITIONAL COST**...

*FREE! A beautiful two drawer, Cole Steel desk.*
*FREE! A matching Cole Steel desk chair... folds out of sight.*
*A dramatic Desk Lamp, approved by Underwriters’ Laboratory.*
*FREE! A Desk Lamp exclusively yours. Ideal for Mom or Dad.*

Mr. Oscar Schuven
US6-6-22-5-4
Ms. Oscar Schuven
t 10603 Camarillo St.
North Hollywood, California

888-6-6-22-5-4

Form 3547 Requested
Return Postage Guaranteed