Editor: Al Doyle Subscription: \$15 Per Year \$22 Per Year International

THE SUBMINIATURE TIMES

The Subminiature Times is published monthly by Doylejet, P.O. Box 60311, Houston, TX. 77205 (713) 443-3409 Supporting 110, Tame, 9.5mm, 8mm, 4mm, 1mm, Microdot, & Electronic Still Photography.



ANOTHER SUBMINIATURE NEWSLETTER was published during the 1950's. "The Mec-16 SB News" was a beautiful four-color production, 21 pages in length. It had the expected photos of young models holding a Mec-16 SB, plus contact strips with enlargements, helpful discussions on the inner workings of the camera, and instructions for (then) new accessories.

Copies are slowly coming on the market, possibly from a single source, at prices ranging from \$8 to \$15 apiece.

STEKY OWNERS RUN don't walk to the nearest phone. The Edlie Standard C-mount 16mm/f1.6 achromat is now on sale for \$29.95. Edlie Electronics, 2700 Hempstead Tpke., Levittown, LI, NY 11756-1443. Catalog #53-1706 1-800-645-4722.

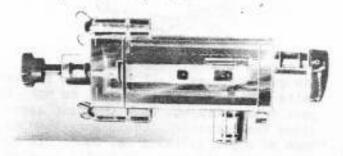


CCD COLOR CAMERAS AVAILABLE IN PAL Elmo Manufacturing has introduced three PAL versions of the popular TSN270 CCD color camera. These feature image capture at 2-lux lighting levels, with more than 330 lines of horizontal resolution. Nine electronic shutter speeds vary from 1/100 to 1/10,000 of a second. Auto-iris lenses and conventional CS- and C-mount lenses are offered. Elmo Manufacturing Corp., CCTV Div., 70 New Hyde Park Rd., New Hyde Park, NY 11040.



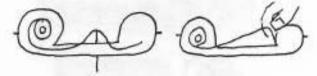
WATCH FOR THIS COUPON in your Sunday newspaper. Discount, no limit, go for it!

THE MINOX UNDERWATER HOUSING mentioned briefly in newsletter #48 had controls for speed and focus, but most pictures were taken with universal focus (red dot) \$75.00. Last known source (1958): Walter Gray Panorama, 2005 Hollywood Blvd., Hollywood, FL.



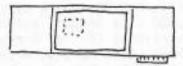
HOW TO RELOAD 110 CASSETTES TOOLS RQD: 1 TOOTHPICK

Shoot a roll of 110 film. After the last exposure don't advance the film. Take your camera into the darkroom and prepare your processing tank.



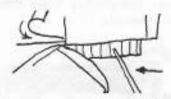
In total darkness push a toothpick into the cassette's back window. Slowly pull the film and backing paper together out of the takeup spool.

The film will suddenly pop free. Stop pulling! Let the paper dangle. Put down the cassette and load the film into your processing tank, then turn on the light.



Tear the paper backing at about frame 7, and tape a short piece into the film track on the inside of the cassette. Make sure it's long enough to cover the live area and the viewing window.

The goal now is to push the fresh film into the supply side of the cassette. tape it to the paper roll, and put the cassette back into the camera. To start this procedure you'll have to wind some paper back into the cassette. The reason you tear it at frame 7 is because if you get this right you'll be doing it so much the end of the roll will become frayed. You want as much paper as possible without limiting the amount of film you can put in. If it gets too crowded you'll get scratches. Starting at frame 7 allows you to respool this same cassette about 20 times. Then lint in the takeup chamber becomes a problem.



To get the paper roll back into the cassette use your left thumbnail to hold the gear from slipping. Push the gear teeth using the toothpick. Leave more than an inch of paper sticking up. Don't let the end go into the spool or you'll have to start over with another cassette.

IN TOTAL DARKNESS

Cut a 6" length of your favorite 16mm emulsion. Push it into the supply side of the cassette until there is only a 1" piece sticking out.



If you have a problem getting any film at all to go back into the aperture it's because there's a little ledge in the cassette.



Wiggling the film helps. Or curl the leading edge. Sometimes the film won't go in at all depending upon the emulsion, in which case you'll have to perform surgery on the cassette to remove the ledge. If you've gotten all your film in, with a little piece sticking out, turn the light on.



Tape film to paper, and take up more slack using thumbnail and toothpick. When you've done the best job you can, load the camera.

Your camera's winder will take up the rest of the slack, but the stop mechanism may engage too soon, or if you use unperforated stock it won't engage at all. Make at least three exposures.

Unload the camera in the dark again. Process the film and analyze your work. You'll see how many more exposure you could have gotten, and how many throws of the winder = 1 frame from the point at which you loaded the camera. Hold a Pentax to your thigh to make blank exposures every other frame to prevent frame overlap. Also avoid using anything other than ISO 100-200 cassettes. The Pentax won't 'read' Ektachrome cassettes. We'll cover cassette upgrades, and system overrides if there is any interest.

This method is a field repair, because there's a more involved method which we'll describe next month. It requires a microdrill. Dentists love it.

The whole thing is a 5 minute process start to finish. You can do it.

AS REALLY GREAT MICROFILMS are discontinued, replacement emulsions are often sold in quantities that most of us can't afford. However, along with the new films, older emulsions will remain on our updated film list (next month) because of the surplus market. There's always the chance of finding an old favorite at bargain basement prices.

One example is Eastman 7277 TRI-X Reversal, rated officially at D400, T320.

P.I.s talk glowingly about its ability to reach into the shadows when processed in Diafine.

Eastman lists 7277 'Discontinued'. Brent Esse currently has surplus 16mm x 100' rolls in stock for \$5 ea. We tested a sample (below). This isn't T-grain technology. It's an old school thick film with a heavy film base-plus-fog density. Speeds of D2000, T800 were easy with HC-110 Dilution E (23 mins. @ 73°F). Dilution B produced film speeds far off the meter.

An interesting feature of this film/developer combination is that if you shoot in daylight in an emergency, and your camera can't get up to the equivalent of f/16 @ 1/2000th sec, whatever exposure you use (within reason) will produce printable negatives. Brent Esse (713) 528-6295.

Camera: Yashica Y-16

Film: 7277

Exposure: f/5.6 a 1/100 Developer: HC-110 bil E







FREE CLASSIFIED

FOR SALE 110 Kodacolor II ISO 100 12 Exp \$1.09, 24 Exp \$1.29 ea. FREESTYLE, 5120 Sunset Blvd., L.A. CA. 90027 (213) 660-3460

FOR SALE MEC-16 SB News \$10 ea. All SEASONS CAMERA, 5 Harvard Ve., Box 111, Hastings-on-Hudson, NY 10706, (914) 478-0931.

WANTED "Small Minox Big Pictures" by Rudolf Kasemeier. Ervin Brewer (310) 271-6691
WANTED Strobe adaptor for the Minolta-16
MG-S subminiature. David C. Wertz, D.D.S.
2615 Dodge St., Dubuque, IA. 52001.



WE'RE VERY IMPRESSED

Shooters can print "Any 17.5mm, 110, 16mm, Minox, 8mm, watch/cam, or ring/cam color negative film"

SPYING WITH A CAMERA is continued from last issue. The reprint was from "Popular Photography", July, 1940. Submitted by Steve Kesslar, Burbank, CA.

When Miss Hoffmann was arrested, she had a roll of bills in her purse which she explained had been given her to purchase spy pictures. The G-men learned that the spy-masters had been paying well



Above: Erich Glaser (left), Johanne Hoffmenn and Otto Herman Voss, Nazi camera-spies, received sentences respectively of two, four, and six years. Rumrich (right), turned government witness.

for photos—Lonkowski having drawn as much as \$2,000 for his negatives.

The investigators learned much of the activity of the spies, including the full story of the mission on which Lonkowski was engaged when he ran into trouble.

Lonkowski was a German mechanical genius, an authority on airplanes — and cameras. During the weeks before he appeared on the Hudson River pier with his violin case, Lonkowski had been living in Buffalo, N. Y., where he had been passing many pleasant hours in the company of an old friend, one Werner George Gudenberg. Curiously, Gudenberg was employed at the Curtiss-Wright airplane factory, where a number of secret military planes were being built.

From time to time, Gudenberg had access to plans for the secret planes. That is, he knew how he could borrow them for a few hours without arousing suspicion. At that time, the plant was working on a neat Curtiss scout homber for the Navy. One day Gudenberg learned that he could get his hands on the plans for this ship.

With trembling hands, he lifted them from their hiding place and stole out of the factory to a room where Lonkowski was waiting with a camera and copying hoard. The photographer worked quickly, making seven negatives which covered the whole series of designs, and Gudenherg returned the plans to the factory before they could be missed. Lonkowski

packed the negatives into his violin case and headed for New York.

photographed plans of secret U. S. eirplanes, escaped and fled to Europe.

He boarded the German ship to deliver the negatives, as he had done before, to a paid courier. But the courier had reason to suspect that he was under surveillance and he refused to touch the film. So it was that Lonkowski was forced to walk off the boat and into the arms of the Treasury agents. When Lonkowski beat his retreat to Berlin, Gudenberg joined him.

(Continued next month)

LETTERS

Dear AL,

Your newsletter is very informative but slanted toward home processing..as if you don't think commercial processing is comparable.

R. V. Whitten Miami, FL.

Dear R.V.,

I have the highest respect for commercial processors, but I don't always want a print of every exposure in a bracketed set. For portraits I'll want a developer with a soft edge. For copying I want added contrast and acutance. For landscapes I want very high resolution and long tonal scale.

Since I'm an amateur I assume that more advanced photographers make finer distinctions than I do. Even if you don't have an

enlarger I'll always encourage you to process your own work (which can be done out of a shoe box) and then send your best negatives out for printing. Most of my photography is done in black and white because most of my cassettes are hard to come by. I wouldn't send them out.

All of my color work is done by commercial labs.

TO A RECENT CALLER per the best of my research, the fastest lens on a 110 pocket camera was the 25mm/f1.9 on the Kodak Extramax, which sold for \$57.95 in 1980.

AERIAL PHOTOGRAPHY with a subminiature usually means hit or miss results with more misses than hits. The KnightHawk is a quick-build UAV that can solve a lot of problems including real-time video.



This Go-Anywhere, Do-Everything, High-Tech Airplane Will Be Your Favorite!!! Go Tactical!!!



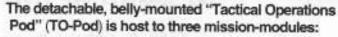
We've put a TOP SECRET ingredient into every KnightHawk kit - and we spell it F.U.N. Order your KnightHawk today and tell your "favorite" airplane to step aside! This tough airplane flies



like a dream, and it performs missions you've always wanted to fly. KnightHawk gives you quick and simple access to the power of your five or six-channel radio with the exciting 50 cubic inch Bomb-Bay or the awsome Aerialphoto Recon Module. Dial in the Flaps, strap



on the Long-Range Tanks and fly crosscountry! Switch from Nose Gear to Taildragger in minutes at the field! Whether you're a novice or an experienced pilot, KnightHawk is destined to become your





Aerial photo-Recon Module (ARM)" for single-shot disposable cameras or 35mm motorized models (available for under \$50) allowing up to 36 shots per flight without landing or re-loading! Floating-mount system insures super-sharp pictures, even at full Viviter PS44 Carriers, Hodek 400 Print File, 1000' AA, A



Bomb-Bay Door Module (BBDM) creates over 50 cubic inches of payload bay area in the TO-Pod. Load action figures with parachutes for para-rescue missions, flour sacks, candy or eggs for precision bombing, fill the sky with confettl or streamers, or tie on a drogue chute for slowing KnightHawk down when landing 'hot'.



All-Weather Module" (HIWIND) permits stable flight in winds up to 25 mph. When the HIWIND module is loaded with the prescribed amount of weight, KnightHawk can taxi, take-off and land with ease when other planes have difficulty just making it to the пытичау.



Long Range Tanks System (LRTS)" - Add standard 12 oz. tanks to the included LRTS Bracket and expand fuel capacity from 8 to 32 ounces - up to 90 minutes of flying with a range of over 80 miles.

Additional Standard Features

Quick-Built, Fold & Fly Construction Pre-Decorated HIVIS Markings Super-Tough, AirCore® Material



Power Cartridge" (PC) slide-in tray

KnightHawk Specifications

Type - AWSUMM, Wingspan - 64", (752 sq. it.) Length -43", Training Wt., HTF - 5.75 be. Mission Wt. - varies with peyload up to 9 bs. Radio Required - 4-channel minimum (rudder, elevator, throttle, alterone), TO-Pod features require additional dedicated (adio channel. ARM and BBDM each require dedicated servo. Plaps require additional dedicated radio channel and 2 additional servos. Engines - 40-50 beli-bearing 2-stroke or :50 6-stroke: Engine, Radio, Cam-era, 12 oz. sux. tenks for LRTS and wheels are not supplied and must be purchased separately.

Acquisition Data

Available from quality hobby dealers worldwide. For the location of a dealer near you please call or write. VHS Video Catalog

4576 Claire Chennault, Hangar 7 Dallas, TX 75248 214-250-1914

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1-800-336-0602

YOU LIKED THE CAMERA YOU'LL LOVE THE KIT

All it takes is a screwdriver, a smidgeon of curiosity, and two hours to kill before dinner.

Before more rational minds can intervene, you put a screwdriver to that little bolt that needs tightening, but instead of tightening it, you take it out, and several others.

The next time you try to find your reassembly notes (if you took notes) may be the third time some member of your family asks what you intend to do with that pile of junk. And it's time to admit that you've done the unthinkable, trashed your subminiature camera. The good that comes of this is that you now have a pool of spare parts for your replacement camera. Or, understanding the phenomenon in advance, you can profit from someone else's curiosity and buy a 'kit' of your favorite picture maker.

It can be an insurance policy against the day when replacement parts don't exist. Here are 'kits' we found among the bargains for this month. Resist the temptation to further dismantle the pieces, Bunky.

Minolta 110Z nds work	\$39	В
Minox B 'parts' in box	\$59	В
Minox projector/nds switch	\$79	B
Minox shutter n.g.	\$69	В
Rollei-16 'parts'	\$39	В

THE SUBMINIATURE TIMES QUICKFINDER 3/93

Bolsey 8	\$189	A- Minox	В	\$200	C	Potenza 110	\$29	В
Canon 110 ED kit	110	A	В	169	-	Robot Recorder	1250	
Crystal	29	Α,	EC		1000	Robot II	225	
GaMi	495	В	EC	170117515750		Robot Star II	199	
KGB cig Pac	1350	В	EC		10020	Rollei-16S	149	
Micro-16	119	В	LX Black			Scat	195	
Minicord Dev tank	49	В	LX Black			Sept+2 cass.	225	
Minolta 110 MK II	165	K				Slimax-Lite/ltr	149	
110Z	109	K	Copy stand			Steky	125	
110Z	89	A	Copy stand			Pale Carl Manager	80	
MG-s	99	A				Stylophot	150	

A All Seasons Camera, 5Hvd Lane, Box 111, Hastings-on-Hudson, NY 10706 (914) 478-0931

B Brooklyn Camera Exch., 549 E 26th St., Bklyn, NY 11210 (718) 462-2892

C Cambridge Camera, 7th Ave., and 13th St., NYC, NY 10011 (212) 675-8600

K KEH Camera Brokers, P.O. Box 94065, Atlanta, GA 30377 (404) 892-5522 W Woodmere Camera, 337 Merrick Rd., Lynbrook, NY 11563 (516) 599-6013

FOR SALE Expo watch/cam w/chain and lens cover, film cassette. Price negotiable. Don Allen, P.O. Box 8111, Gdn Cty, NY, 11530. (516) 481-7255. THANKS FOR YOUR PATIENCE. We've reissued newsletters #1 to #5 with all the reviews, the projects, and pictures that brought us so many smiles in the early days of this publication. Here are the topics:

THE SUBMINIATURE TIMES 1989

- #1 "Whatever Happened to the Subminiature Craze?" Modern tests the Pentax 110. About the Editor, Al Doyle.
- #2 Super Matchbox, the Mamiya Super-16. Roll your own, how to load your own subminiature cassettes. Film list (part 1). Motion picture black and white and color negative print films.
- #3 How to get better pictures. Developers: D-76. Film list (part 2), daylight balanced color-slide films. How to process subminiature film. Cassette repair, from minor breaks to missing parts.
- #4 Depth of field, examples and depth of field scale for 25mm lenses. Prescriptions for curing scratches, a "Popular Photography" reprint.
- #5 LETTERS. Topics: depth of field, panning, camera choices, photos from a TV screen or monitor. Minolta-16 color models. Kodak RAR 2479 developed for 53 seconds in hot D-76. Film list (part 3) new color print films. Project: How to light up a football field with a Minox, make low-budget slave light trippers.