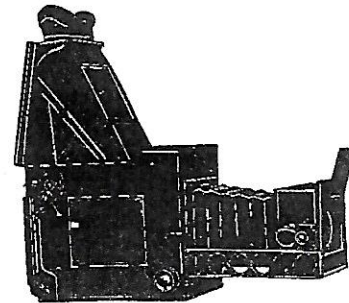


GRAFLEX HISTORIC QUARTERLY



VOLUME 3 ISSUE 2

SECOND QUARTER 1998

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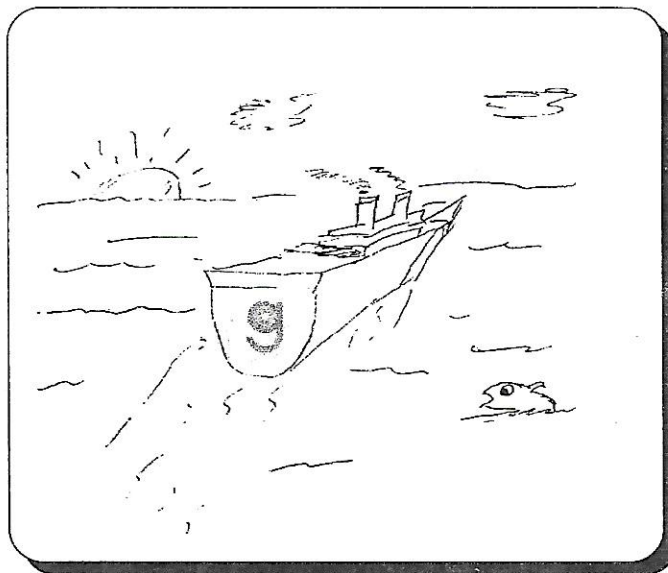
R

on it? If so, this is your LAST ISSUE unless you renew.
Each year's subscription is 4 issues. If you think the
notice is in error, please contact us. Address on back.
PLEASE RENEW NOW! This is your only reminder.

GRAFLEX AFTER 1973

by Mike Hanemann

In 1973 the Singer Company discontinued the Graflex product line. Did this spell the end of Graflex and its wondrous products? Well, the answer is both "Yes and "No!" Production did cease on the cameras (Speed and Super Graphics, XL's, etc.) However, this did not mean the end for many Graflex products. The flash equipment and the roll backs were manufactured and sold into the mid-1980's. Toyo tried to resurrect the Super Graphic in 1980-81.

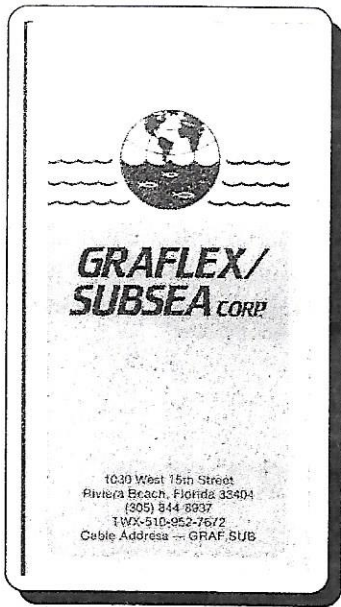


Did Graflex "Sail away into the sunset" in 1973?

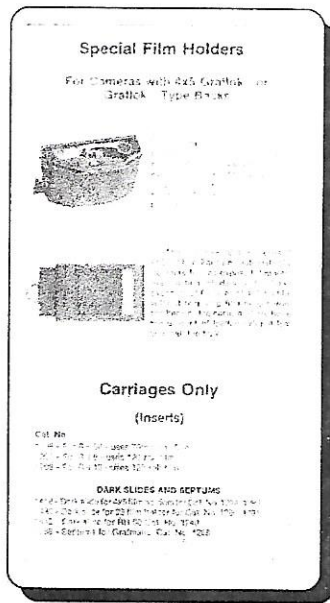
The trade name "GRAFLEX INC." originally the company's name from 1945 through the General Precision period, was revived as a part of Lenzar Optical Corporation in Florida in 1977. The name is now owned by a firm in Australia.

PART ONE: LENZAR Optics- Graflex Inc.- SUBSEA Corp

On December 7, 1977 the Business Briefs section of the Rochester, NY paper reported, "Singer sells product line to Fla. firm". The article reported the sole manufacturing rights and back stocks of roll film holders and accessories to Lenzar Optics Corp of Lake Park, Florida. It also reported that Lenzar had purchased rights to the Graflex



Subsea brochure. Note Florida address and continuation of Graflex product lines



I have located a letter to Lenzar from a local photographer asking about a part for a Strobomatic 500. The reply is a form letter from "GRAFLITE PHOTO PRODUCTS, Division of Lenzar." The letter is dated April 1975. 1976 price lists by this firm offered the Strob 250, 350, and 500 as well as Strobflash IV.

By form letter to the "Manager of Engineering:" dated January 1978, GRAFLEX INC., 210 Bryant road, Lake Park announced a full line of roll holders and accessories, prices and expected delivery dates. The bottom of this letter lists: GRAFMATIC, RITEWAY, STROBOMATIC, STROBOFLASH and SUBSEA products!

By January 1980, Graflex Inc had moved to 1006 W 15th Street, Riviera Beach, Florida, a few miles south of Lake Park. The 1980 list includes roll film holders, 4x5 film holders, and compact studio strobes. The compact strobes were made in 200, 40, and 800watt/second power sizes. A complete line of accessories was available for the studio strobes.

electronic strobe lights in 1974 and recently (1977) purchased the Graflex name from Singer. Lenzar Optics was located at 210 Bryant Road, Lake Park, Fla.

A March 1, 1984 catalog of the GRAFLEX/SUBSEA Corp, 1030 West 15th street, Riviera Beach, Florida offered Strob 250, 350 and 500 items, roll holders for 2x3 and 4x5, Grafmatics, and dark slides. They also added

Same product



GRAFLEX INC.

Since 1887
Quality Photographic Equipment

210 Brent Road - Lake Park, Florida 33403 (305) 844-8937 Telex 510 952 7672 - Lenzaropt

January - 1978

Attn: Manager of Engineering

Lenzar Optics Corporation is proud to announce the acquisition of the former SINGER-GRAFLEX line of roll film holders and related accessories. Graflex, Incorporated - wholly owned by Lenzar Optics - will manufacture and market both medium and 4 X 5 format roll film holders in eight, ten, twelve, and twenty exposure as well as the fifty exposure holder for 70mm film. The Grafmatic six exposure and the Riteway cut film holder will also be offered as well as the Graflok back and related accessories. We have enclosed the following information for your review:

- (1) Assembly diagram matrix with catalog numbers for 4 X 5 and medium formats.
- (2) Preliminary condensed specifications for all items.
- (3) O.E.M. pricing sheet for various quantities. (Note special price offer).
- (4) Approximate delivery availability for all items.


To introduce you to Graflex and our orderly establishment of production rates, and to motivate your immediate placement of orders, we are offering for a limited time, an introductory offer of an additional 5% discount off the enclosed price sheet for any quantity, subject to the following:

- (a) Orders must be received by Graflex on or before February 17, 1978.
- (b) Orders must allow shipments to be completed by August 1, 1978.
- (c) Delivery dates from Graflex are approximate and subject to revision.

Should you have any questions, please do not hesitate to contact us. If a custom modification is required, we will be happy to work with you.

We look forward to serving you in the future.

Very truly yours,


L.A. Salvo
General Sales Manager
Graflex, Inc.

lss
encs

GRAFLITE · GRAFLOK · GRAFMATIC · RITEWAY · STROBOMATIC · STROBOFLASH · SUBSEA PRODUCTS

*General sales letter
from "Graflex Inc."
[actually Lenzar
Optics]*

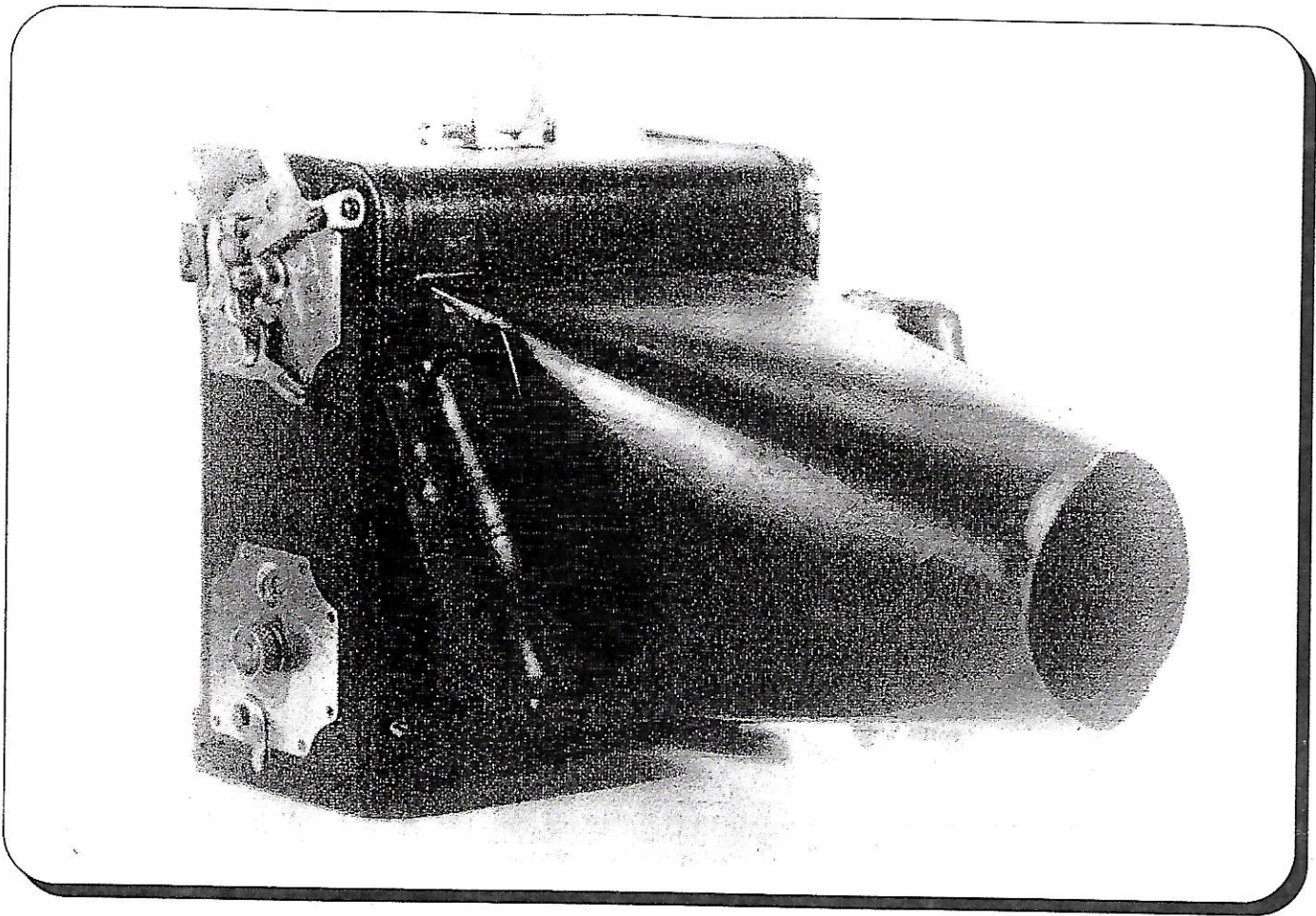
Videolights (VIDEOLUX), a Power Pack 200, and a Strob 600 Lamphead.

I have seen strobes and roll holders with the GRAFLEX INC. label. It is possible that we would have roll holders from six different Graflex producers: Graflex Div, Eastman Kodak, Folmer Graflex, Graflex Inc. (Rochester, NY), General Precision, Singer, and GRAFLEX INC. (Florida)

The Lenzar period saw the use of the GRAFLITE name on strobe equipment, while the Rochester period used that

name on the 1948 flash handle. Old standby names like Graflok, Riteway, Strobomatic, and Strobflash carried on.

I have not been able to locate information later than 1984 and don't know when the Florida saga folded. If any one has more information on the Lenzar-Graflex Inc. period later than 1984 I would appreciate hearing about it. I am also seeking information about the Super Graphic produced by Toyo in the 1980's and about the Australian connection. This will be shared in the next part of this series.



Unidentified aerial camera

Readers Asked for I.D.

The above picture was made of an odd and unidentified aerial camera built around a Graflex Focal Plane Shutter [5x7 size]. Inside the lens shroud the mystery deepens, as a 19" Goerz Artar was found - yet there isn't remotely nineteen inches between the lens and the film plane. Actually, there is nothing behind the shutter currently, so it may only be an assumption that film holders or magazines fitted directly behind that shutter.

The camera has fixed focus and handles typical of aerial cameras of WW-I vintage and later. A problem of all aerial cameras even from other countries is there has never been a definitive work on them.

Since there is no maker's name on any part of the camera other than the shutter and lens, it has been suggested that it is the product of a small independent contractor [for the

U.S. government] who purchased parts from various manufacturers, including Graflex.

Can any of our readers help with this?

Last Issue's Mystery Photo

Steve Church writes, "As to the contest....after reviewing Paine's invaluable book...Our Gang is using a 34 [sic] non-RB B. The little flap door is, of course, a B and no other B has such relatively large mechanism plates."

Correct, Steve, although the editors weren't sure it was a 3-1/4x4-1/4. Careful measurements and application of a formula for proportions using the child's head showed, however, that it probably was that size.

Flash Synchronization on Graflex Large Format SLRs

By Richard M. Park

Part II - A Solution to the Problem

In Part I of this series, a general review of the problem of providing flash synchronization on Graflex cameras was presented. To be described here is an improved, simple and reliable drop curtain flash synchronizer that has been successfully installed in a very old 4 x 5 R.B. Series B Graflex body. This synchronizer has been in use for the past twenty years and has proven to work very well indeed. An advantage of its arrangement is that all parts except the connection socket for a flash cord are mounted internally in the body where they are fully concealed, and are unlikely to be disturbed, and where, in the author's case, they have never needed any readjustment.

The general arrangement of the synchronizer is shown in Figure 1. The system consists of two miniature snap-action switches plus a suitable connector for the sync cord (not shown in Fig. 1), interconnected with insulated hookup wire. One of the switches is mounted on the left inner side of the camera body just in front of the mirror release lever where it is tripped by the forward part of the mirror latch arm. While the camera is at rest, these lower switch contacts remain open, but they are closed whenever the mirror release lever is depressed.

The other switch is concealed behind the upper mirror light seal strip near the top of the body. It has an actuating leaf that is bent downward so that its tip protrudes below the light seal strip. This switch is actuated by the edge of the mirror frame as it approaches its upward travel stop. These upper switch contacts are open until the mirror approaches its topmost position, at which time they close and remain closed until the mirror is reset. The upper and lower switches are wired in series between the pins of the sync cord receptacle.

In use, the sequence is as follows. Starting with the shutter curtain in its open ("O") position, mirror down and latched, shutter selector in the instantaneous ("I") position, and mirror release lever not yet actuated, both sync switches (and the flash circuit) will be open.

As the mirror release is depressed, the bottom switch closes just before mirror is released, while the top switch remains open at this point. Then the released mirror begins to rise, uncovering the film as it goes. When the bottom edge of the mirror clears the top of the lens, the film is completely uncovered, and as the mirror continues toward the top of its travel, the upper switch is actuated, completing the flash circuit. The flash will then fire. Note that due to a natural tendency to "squeeze" the mirror release, the photographer's

thumb keeps the mirror release depressed during the (brief) mirror rise time, so the lower switch will still be closed at the time the flash fires.

After the flash is over and the final upward travel of the mirror has released the shutter curtain and terminated the exposure, the photographer will remove his thumb from the mirror release lever. This is important, for it causes the bottom flash circuit switch to open and thus prevents the undesirable condition where closed synchronizer contacts can remain connected to the flash for an indefinite period of time. Electronic flash units often do not recycle properly if their trigger circuits remain shorted for very long after the flash has ended.

For those who might be motivated to undertake adding a synchronizer of this type to an older Graflex camera, some construction notes will follow. Only basic hand tools are required, but this project does require a moderate degree of manual dexterity and some basic skill at hand work. A few new parts will need to be installed inside the body where access is not always easy, and some careful timing adjustments will have to be made in locations that some might consider a bit awkward to reach. For these reasons it is very helpful if one has a good deal of patience while working with small mechanical and electrical devices. And if the wire connections are to be soldered, a little soldering experience and skill is desirable as well.

The miniature snap-acting switches used for this application are a fairly standard type, cost only a few dollars, and are readily available from electronics parts distributors (see Supplier Notes at the end of this article). Suitable snap-action switches with momentary (spring-return) contacts are manufactured by several different companies, but all share the following useful characteristics: compact size; low operating force; reliable snap action switching with generous overtravel; and a choice of available actuators. For this synchronizer it is best to obtain switches that have fairly long, flat leaf actuating levers that can be cut and bent to suit. The switches in the author's synchronizer are approximately 3/4" long x 1/2" high x 1/4" thick and have leaf actuators that were originally about 1-1/2" long. Installation details can be adapted for alternate switches, as required.

The lower switch location can best be accessed through the rear of the camera when the shutter curtain is in the open time exposure position and the mirror is in its up position. On some models it may also be possible to reach this area through the front opening when the lens is removed. The action of the mirror release lever should be studied, and the motion path of the lower mirror edge carefully examined, before determining a suitable location for the lower switch. The end of the switch actuating leaf has to be positioned where the mirror latch

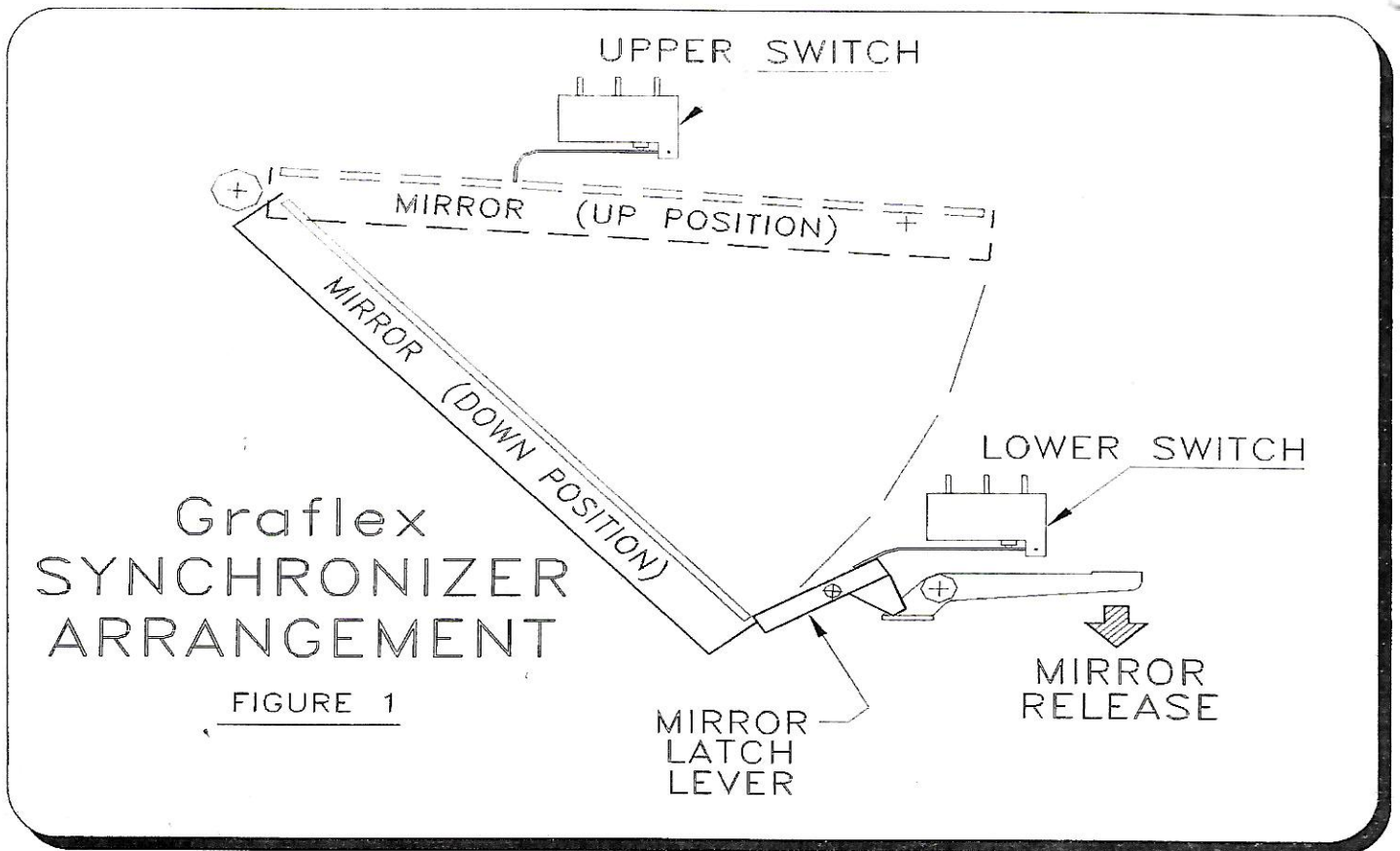


Figure 1

lever will lift it and close the switch as the mirror is being released. And of course the mirror edge must not strike the switch as it rises. In Fig. 1, the lower switch actuator leaf is shown with a single bend for clarity, but in practice, it may be necessary to make an additional upward offset bend at the end of the switch body in order to position the switch low enough to clear the mirror path.

When a suitable location is found, and the switch actuator leaf is bent and trimmed as required, the switch is fastened in place with two small wood screws. These screws must fit the mounting holes in the switch and must not be so long that they will poke through the side of the camera body. The final shape of the actuating leaf is then adjusted until the operational sequence is correct. The switching action is audible in these switches, which makes it easy to determine when the switch has been properly located and adjusted.

The upper synchronizer switch will be concealed behind the left upper light seal strip, which is found inside the camera body, at the top, immediately under the left edge of the ground glass. The light seal strip must be removed from the camera body in order to install the switch. It is held in place by two small flat head wood screws, and can best be accessed

by removing the focusing hood and top ground glass. While removing or replacing the light seal strip, the mirror should be down and latched to hold it out of the way.

The outer end of the upper switch actuating leaf should be bent 90 degrees downward. Then with the light seal strip removed, a suitable location for this switch can be determined. It should be mounted approximately as shown in Fig. 1. On the author's 4 x 5 Graflex, the bent leg of the leaf is located about 1-3/16" forward from the back end of the strip, but some careful trial and experimentation is suggested to establish an optimum location in another camera.

When a workable spot is found, the switch may be mounted to the side of the camera body. An appropriate clearance for it and its actuating leaf should then be marked out on the smooth back (or hidden) side of the light seal strip. A small recess or pocket for the switch is then cut into the strip where the marking was made. With the light seal strip repositioned over the newly mounted switch, the actuating leaf may be trimmed to length. On the prototype installation, the tip of the leaf protrudes about 5/32" below the bottom surface of the light seal. But, some careful experimentation and testing is once more recommended to establish an optimum length.

The upper switch actuating leaf should be trimmed or bent as necessary until the rising mirror causes the switch to close shortly before the curtain release is tripped. By maintaining enough finger pressure on the external mirror resetting lever to balance the mirror spring, the mirror can be caused to swing slowly through its range of travel while the sequence and timing of the several actions are carefully observed. It is also important to ensure that there is sufficient actuator leaf overtravel for the mirror to properly seat against the light seal. The entire mechanism should be slowly cycled in this way a number of times to be sure everything is working properly, in the correct sequence, and without binding or interference.

When the switches have been mounted and adjusted, the location for a suitable flash cord connector should be selected. The sync outlet may be of any type desired. On the author's Graflex, a miniature pc-type sync cord connector was fitted on the left side of the camera body. Super D Graflexes have a bi-post connector that is incorporated in the upper shutter and mirror control plate on the camera's right side. Any small 2-pin electrical connector would be suitable for this application as long as a mating connector cord can be obtained (or made). The location of the connector is completely arbitrary. These choices will be entirely up to the constructor.

After mounting the connector, the synchronizer is ready for wiring as shown in Figure 2. Miniature snap-acting switches generally have three terminals. There is a terminal designated "C" (common); another that is marked "N.O." (normally open), which makes contact to the common terminal whenever the switch is actuated; and a third one labeled "N.C." (normally closed), which remains connected to the common terminal except when the switch is actuated. The N.O. and C terminals will be used for this synchronizer and no connection will be made to the N.C. terminal on either switch. Only the "N.O." and "C" terminals are depicted in Fig. 2.

First, one side of the sync connector is wired to the N.O. terminal of one switch. Then, the other side of the sync connector is connected to the N.O. terminal of the other switch. Finally, a third wire is used to connect between the C terminals of the two switches. The lengths of the wires should be planned so they can be arranged neatly out of the way of any moving parts. After all the connections have been made, the wires should be carefully routed and secured as necessary in the desired position. As a last step, blacken any reflective surfaces that remain inside the camera body, where they could reflect unwanted light onto the film. Flat black paint and permanent black felt tip markers are useful for controlling such reflections. Once everything is in place, any parts that were removed from the camera can be replaced and

the usefulness of this new flash exposure capability can be tested and enjoyed.

In anticipation of a question that might be raised regarding the design of this synchronizer, it would be possible to eliminate the lower switch from this design, but that is not recommended because to do so would defeat one of the concept's advantages. As described, the synchronizer circuit will not remain closed after an exposure has ended. But without the lower switch, it would remain closed until the mirror was reset. Electronic flash units are often intolerant of such a condition and can fail to recycle properly until the sync circuit has opened.

Finally, the author of these articles would like to make it clear that whereas he would be willing to answer questions, discuss problems, and offer a reasonable amount of advice and assistance to those who might undertake the construction of a synchronizer of the type described here, he is not in a position to perform construction or installation work on anyone else's Graflex.

SUPPLIER NOTES: Newark Electronics (1-800-463-9275) Stock No. 23F4237 is a small snap-acting switch with a long leaf actuator as described above. Stock No. 23F4194 is an even smaller switch whose leaf actuator is a bit shorter. Radio Shack (with retail stores nationwide) catalog #275-017 is a small snap-acting switch, but leaf actuator is shorter and has a roller on the end. Catalog #278-1218 is a spool of insulated hookup wire.

User Tip

Steve Church writes: [in regard to Jerry Eisner's article on replacing the Graflex focal plane shutter] "Let us still not forget Charles M Stern of "LEATHER/CLOTH" at 1272 La Playa, San Francisco, CA 94122 with his rubberized curtain material at .0105" which matches the earlier Graflex material and can be spliced for even a 5x7." Steve is referring to ads placed by Mr. Stern which advise that readers can send him a SASE to get samples of leather for camera covering and material suitable for curtains. The editor can attest that the leather, which also comes in colors, is excellent for repair of damaged leather on post-war cameras, and/or recovering purposes.

Steve also writes [concerning last issue's RB Auto article ["Little Bertha"]], "...you need to mention ...that Weston did his *Nudes* and probably his *Cats* with an RB Auto."

WANT AD POLICY:

Any subscribers wishing to place a want ad selling or seeking Graflex-related items may send them to the GHQ for inclusion at no charge (at this time). The editors reserve final publication decisions.

WANTED: 3x4 Graflok back, FRAME ONLY that fits on body. May purchase parts camera to get. J.C. Welch, 1777 Lake Drive, Eugene, OR 97404. Email equinox@pond.net

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If anyone did not receive the previous issue of this newsletter, please contact the address below. Sometimes one goes astray!

Graflex Historic Quarterly

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