GRAFLEX Journal

SHARING INFORMATION ABOUT GRAFLEX AND THEIR CAMERAS

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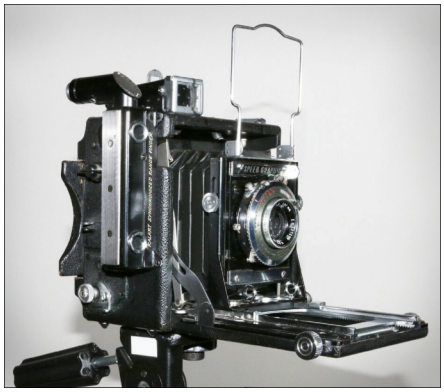
MINIATURE SPEED GRAPHIC, GANDDADDY OF MY 2¼ X 3¼ GRAPHIC CAMERA COLLECTION

By Jim Hurtle

The Miniature Speed Graphic camera often is the *least favorite of the Graphic collector and user. Its lack of a Graflok back* and easily interchanged 120-roll film backs reduce the versatility. 2¼ x 3¼ sheet film supply has varied and has faced extinction and rebirth several times in the last decade. The Miniature Speed Graphic is often passed over at camera fairs and can be bought cheap. Far more preferential are the somewhat rare Graflok-equipped 2¼ x 3¼ Pacemaker Speed/Crown Graphic cameras or the simplified and last-manufactured Century Graphic camera. These cameras are easily adaptable to Graflok roll film backs, which are quickly swappable with the ground glass focusing panel. There are still lots of different color and black & white 120-roll film varieties (possibly as many as 20-30 from Freestyle Photo alone).*

I have always preferred sheet film in 2¼ x 3¼ to roll film. Due to the sporadic nature of my photography hobby, I can shoot just one or two photos and process them immediately. There is never an issue with film flatness or curl in the camera or the enlarger. If I want to shoot with ISO 125 film and switch to ISO 400, I don't have to wait until the roll runs out. I perfected my processing technique of sheet film many years ago by processing on stainless steel hangers in ½-gallon open-top hard-rubber tanks in total darkness. I agitate the films by the lift-and-tilt method taught to me in high school in 1969 and never have been plagued with uneven development or streaks. I tried daylight tanks from FR, Yankee, and Nikor (stainless insert for 2x3 sheets in an 18-oz. tank), and all of these resulted in streaking or uneven development. Fortunately, there are four 2¼ x 3¼ films currently available in black & white. Freestyle Photo stocks Ilford FP4+ and Ilford HP5+, as well as their house-brand "Arista EDU" in ISO 100 and 400.



I've owned the Miniature Speed Graphic for 20+ years and never use it. I bought the camera at a camera fair in Cincinnati 15 years ago. My Century Graphic cameras, especially the one with the Schneider Xenar f/3.5 lens, was always my first choice. I decided last spring to shoot some Ilford FP4+ film and see how the photos turned out. My Miniature Speed Graphic (serial number 381442) was built in 1944; however, the Ektar 101mm f/4.5 was built in 1946 with a Flash Supermatic shutter. I installed an external shunt wire from the rightmost flash sync post to the shutter frame to shunt the internal "Kodatron" resistor so that the shutter would fire a modern electronic flash. The

internal resistor (10k ohms) was a feature that allowed a Kodak Kodatron electronic flash to fire, but not a flashbulb. unless the synchronizer was cocked. This prevented the waste of a flashbulb, if one failed to cock the synchronizer on the Flash Supermatic shutter. Most modern electronic flash units (including my old Vivitar 3900) require a direct contact closure (0 to perhaps a few ohms) to fire the flash, hence the reason to install the shunt wire to bypass the "Kodatron" resistor. I always wanted to test the Miniature Speed Graphic with a #31 focal-plane, long-burn flashbulb using the back focal-plane shutter but never wanted to sacrifice one of these somewhat rare lamps.

* In 1949, two years after the Miniature was discontinued, Graflex introduced the Graflok back. It could be retrofitted to the Miniature, but this configuration is very rare.

The photos themselves are not remarkable; however, the camera proved capable. The photos are as follows:

"Crystal and Garrett" a flash (Vivitar 3900) snapshot of our daughter and her boyfriend.

"Closed for Business," a photograph of an abandoned general store in Elliston, KY.

"Rabbit Hash Shed," a photograph of the storage shed next to the Rabbit Hash, KY, General Store.

"Big Bone Methodist Church," a photograph of a historic Methodist church on the edge of the grounds of the Big Bone Lick (KY) State Park.

Above photos were taken on Ilford FP4+ film, developed in open hangers in HC-110, Dilution B. Negatives were scanned as color transparencies on an HP4050 flatbed scanner. They were converted to monochrome, inverted, and converted to .jpg in Adobe Photoshop Elements™.

"Author and Camera" photo taken with Canon EOS DSLR.

THE CIRO 35 AND CIRO-FLEX CAMERAS

By
Thomas Evans

In October of 1951, Graflex, Inc. acquired the tools, dies, inventory and rights to manufacture the Ciro 35 and Ciro-flex cameras from Ciro Cameras Inc., of Delaware, Ohio. Graflex did not buy the company, which continued to operate as a small manufacturing company working on castings, stampings, and so forth. Graflex was aware of the popularity of 35mm and twin-lens reflex cameras and saw this as a quick way to enter the growing amateur market. Cameras continued to be shipped from Ohio under the Graflex name, while production facilities in Rochester were prepared.

Ciro Cameras, Inc.

Ciro Cameras had been making the Ciro-flex twin-lens reflex camera since 1941, first in Detroit, Michigan, and, from 1947, in Delaware, Ohio. This camera has a simple design and is sturdy, the body being constructed of welded steel sheeting.

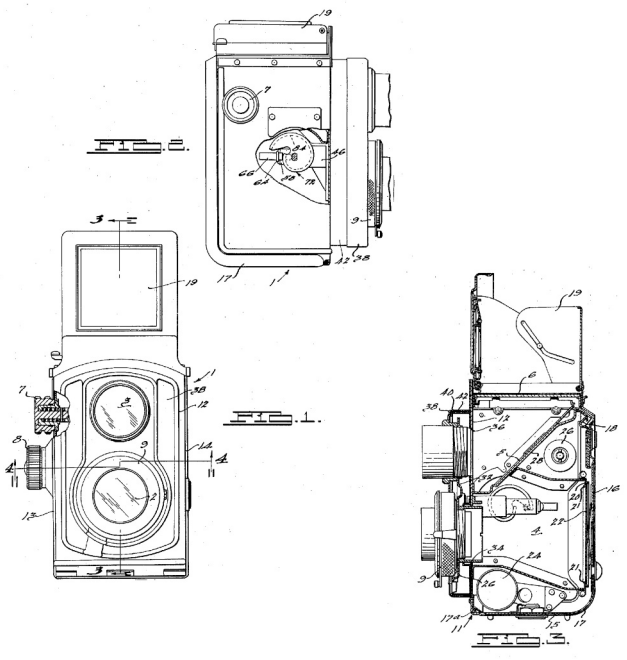
The Ohio History Connection - Ohio's camera website provides this information: "Ciro Cameras was founded in 1941 by a former Ford engineer and French immigrant, Rodolphe Stahl, in Detroit, Michigan. The new company was approached by Sears and Roebuck to create a TLR camera for sale in their stores. Stahl produced the Marvel-flex for Sears and simultaneously released the nearly identical Ciro-flex through his own company. Dubbed the 'working man's Rolleiflex,' the Ciro-flex benefited from US production during WWII, affordability, and aesthetic simplicity. If not for the stuttering flow of exportation from Germany during and after the war, Ciro-flex may never have existed."

"Ciro Cameras relocated to Delaware, Ohio, in 1947. This move was prompted by Stahl, because he felt that the rural atmosphere and the nearby college made Delaware, Ohio, an ideal place to live. The camera company moved into a former chicken processing warehouse at 425 S. Sandusky and continued its growth. At the company's peak, Ciro Cameras employed 136 Ohioans and produced 100 cameras per day."

The Camera Wiki website provides this information about the first Ciro-flex: "The earliest model A's were built in Detroit, Michigan, (the factory was at 112 E. Atwater) and 'ciro-flex' appears uncapitalized on the nameplate. Post-WWII production resumed with the models B (with an Alphax shutter) and C (Rapax shutter)."

Ciro Cameras made six models, designated A through F, equipped with differing taking lenses and shutters. The viewing lens of each model was a coated 85mm f/3.2 Wollensak Anastigmat. The 1946 Instruction Manual stated that the taking lens used was the Wollensak Velostigmat, while the 1948 Instruction Manual stated that the taking lens was the Wollensak Anastigmat, and so it appears that a switch was made during 1947 or 1948 (somewhere between serial numbers 55827 and 82966).

Model A was discontinued when the move was made from Michigan to Ohio. Models B and C were added in 1942 with some mechanical improvements. Model B had a self-cocking, Alphax shutter with limited range of shutter speeds, and Model C had the more capable Rapax shutter. The first models that incorporated flash synchronization, D (Alphax Synchromatic shutter) and E (Rapax Synchromatic shutter), were added to production in 1948. Model F, with the Fully Synchromatic Rapax shutter, was added in 1950.



Figures from U.S. patent 2,495,355, awarded to Rodolphe Stahl on January 24, 1950.

Stahl Rodolphe applied for a U. S. patent on an improved focusing device for twin-lens reflex cameras on August 30, 1946, and patent number 2495355 was granted on January 24, 1950.

Accessories for the Ciro-flex included the Ciro-flash gun, Ciro-pod tripod, a genuine cowhide Everready case (above), Ciro cable releases in 7- and 12-inch lengths, and a very nice pressed-steel dual lens cap (above), which sported the 'Ciro-flex' name. A compact sunshade and filter holder was designed to use Series V filters, and the lenses accepted other 32mm diameter slip-on filter adapters and lens shades.

Ciro-flex Models, Ciro Cameras, 1941-1950.

A 85mm, f/3.5 Velostigmat Automatic Alphax, 1/10th to 1/200th second, T & B.

B 85mm, f/3.5 Velostigmat Automatic Alphax, 1/10th to 1/200th second, T & B.

C 85mm, f/3.5 Velostigmat Set & Release Rapax, 1 to 1/400th second, T & B.

D 85mm, f/3.5 Anastigmat Alphax Synchromatic, 1/10th to 1/200th, T & B. With M-F.

E 85mm, f/3.5 Anastigmat Rapax Synchromatic No.1, 1 to 1/400th, T & B. With M-F.

F 83mm, f/3.2 Raptar Rapax Synchromatic, 1 to 1/400th, T & B. With M-M-FX.

Automatic Alphax shutters, with a more limited range of shutter speeds, were cocked and released in one motion of the single lever. The Rapax shutters, with shutter speeds from one second to 1/400th second, were set with one lever and released with another. The Ciro-flex never had a body-mounted shutter release.

Models A, B, and C were not fitted with built-in flash synchronization, while Models D, E and F were. Models A, B and C could be used with a flash, either using the B (Bulb) setting (opening the shutter, setting off the flash, closing the shutter) or by fitting a solenoid to release the shutter while at the same time triggering the flash.

Models D, E and F had an ASA bayonet flash sync connector fitted to the left side of the camera body. The Alphax and Rapax Synchromatic shutters, designated M-F, permitted the use of Class F flashbulbs (5 millisecond delay) in synchronization with all shutter speeds, while restricting the use of Class M flash bulbs (20 millisecond delay) with the shutter speed of 1/25th or slower. As a reminder of this restriction, shutter speeds 1/25th and slower are marked with red on the shutter.

Fully Synchromatic Rapax Shutter on a Ciro-flex F. A second, PC, flash sync has been added to this camera.

The Rapax Fully Synchromatic Rapax shutter on the Model F was adjustable to fire Class F, Class M and electronic flash units at any shutter speed. In 1950 Ciro Cameras promoted the Ciro-flex Model F as the only twin-lens reflex on the market that could be used interchangeably with flash bulbs and 'speedlight' electronic flash, without the use of accessory synchronizers. Synchronization adjustments were made with a simple lever (Time Delay Indicator) to select the proper time delay. Class M flash bulbs (20 ms) were synchronized with the quicker shutter speeds (1/100th, 1/200th and 1/400th, marked in black) by selecting the white M. To synchronize Class M bulbs at other shutter speeds (marked in red), the red M was selected. Class F bulbs (5ms) were synchronized by selecting the red F. To synchronize electronic flash, the X setting was used. There was also an OFF setting for disconnecting the flash sync circuit.

Ciro Cameras made the Ciro-flash gun for use with the Ciro-flex, Models D, E or F, which had a unique fitting to attach it to the camera. The Ciro-flash came with an adapter so that it could be used with either the medium Edison screw-mount or smaller bayonet-mount flash bulbs. The Ciro-flash held three D-cell batteries and had an outlet for an extension flash unit.

Ciro Cameras, Inc.

The Camera Corp. of America, of Chicago, started in 1938 as the Candid Camera Corp. of America. From 1949 to 1950, they made the Cee-Ay 35, a 35mm camera equipped with an f4.5 or f3.5 Wollensak Anastigmat. They sold their design and tools to Ciro Cameras, Inc. sometime in 1949. Ciro Cameras made minor changes to the Cee-Ay 35 and rebranded it the Ciro 35. The Ciro 35R was fitted with an f4.5 Anastigmat, and the Ciro 35S was fitted with an f3.5 lens.

Graflex continued the production of the Ciro 35 after pur-

Ciro 35 S with Graflash, original box and Everready case.

chasing its design and tools in 1950. The Ciro 35T, with an f2.8 Anastigmat, appears to have been added to production after the move to Rochester, NY. The Ciro 35 camera would continue to be made by Graflex until September 1954. It was substantially redesigned to become the Graphic 35 camera.

1938 Rolleicord II and ca.1942 Ciro-flex C.

Franke and Heidecke - Rolleiflex

Many camera manufacturing companies noticed the success that Rolleiflex was having with their innovative twin lens reflex cameras and developed their own versions. Rolleiflex had developed the TLR in 1929 as an evolution from the Rolleidoscope Stereo Camera, which used roll film rather than glass plates or sheet film, and which had a third lens between the stereo pair that projected the image onto a ground glass on the top of the camera by reflecting the image from a 45-degree mirror. 300,000 Rolleiflex TLR cameras had been sold by 1938.

In 1933 Franke and Heidecke introduced the Rolleicord camera, a TLR that was simpler in construction than the increasingly more sophisticated Rolleiflex, and so could be sold at a lower price. The Ciro-flex TLR appears to have been modeled after the Rolleicord of 1937–1938, as these cameras share many features. Film advance was by knob rather than by the rapid winding crank of the Rolleiflex Automat. The fold-up viewing hood could be converted into an eye-level, direct-view frame-finder. A depth-of-field scale was mounted over each camera's focusing knob. The shutter of both had rim-set shutter speeds and were released by lever, or by release cable screwed into the shutter body. Both had f3.5 triplet (three-element) taking lenses, the Zeiss Triotar on the Rolleicord and the Wollensak Velostigmat on the Ciro-flex. The Triotar had a 75mm focal length, while the Velostigmat was 85mm, and this would have allowed the Velostigmat to perform well even if it were cheaper to manufacture, since the image was formed by a more central area of the lens's coverage. Originally, neither shutter was provided with flash synchronization. In 1941 the Rolleicord sold for $76.00 (model I) - $98.50 (model II), while the Ciro-flex Model A sold for $42.50. The Rolleiflex Automat sold for $175.00 in 1941.

Graflex, Inc.

Graflex, Inc. purchased Ciro Cameras, Inc. in October 1950, and "sponsored" the Ciro-flex camera from 1951 to 1952. The camera was then redesigned and became the Graflex 22, which was in production beginning November 1952. The Graflex Ciro-flex cameras were made in several models, as before, but the models were eventually equipped with different lenses and shutters than were used by Ciro Cameras. The camera itself was essentially the same as the original Ciro-flex.

The Ciro-flex cameras made before the company was purchased by Graflex were equipped with a Wollensak 85mm, f3.5 Velostigmat or Anastigmat lens (coated, at least by 1946) in Alphax or Rapax shutters. According to the July 1952, Ninth Edition of Graphic Graflex Photography, Graflex installed Graftar or Optar lenses in Century or Graphex shutters on the Ciro-flex, although I have yet to see a Ciro-flex camera with any of these lenses or shutters. In an April 1952 brochure, Graflex states that the Models D and E Ciro-flex were fitted with the Wollensak Anastigmat, and not the Graftar, and it appears that the Anastigmat actually continued to be utilized. The Graftar and Optar lenses in Century and Graphex shutters did make their appearance with the Graflex 22 camera in November 1952. All of these lenses and shutters were still made by Wollensak.

Perhaps the best way to understand this list is that it represents what Graflex intended to do with the Ciro-flex line in 1951, and what they actually accomplished with the Graflex 22 the next year.

Ciro-flex Models made under Graflex, Inc., October 1951–October 1952. (As of the 1952 Ninth Edition of Graphic Graflex Photography)

B 85mm f/3.5 Graftar Century, 1/10th to 1/200th second, T & B.

C 85mm f/3.5 Graftar Graphex, 1 to 1/400thsecond, T & B.

D 85mm F/3.5 Graftar Century, 1/10th to 1/200th, T & B. With M & F Sync.

E 85mm f/3.5 Graftar Graphex, 1 to 1/400th, T & B. With M & F Sync.

F 83mm f/3.2 Optar Graphex, 1 to 1/400th, T & B. With M-F-X sync.

The M & F automatic flash synchronization would synchronize Class F (SM and SF) flash bulbs at all shutter speeds, and Class M (GE 5, 11, 22; Sylvania 25, 0 & 40) at 1/25th second or slower (Shutter speed marking in red).

The Graphex Full Synchromatic M-F-X shutter synchronization was adjustable for all classes of flash bulbs and electronic flash, at all shutter speeds, by selecting the appropriate setting.

The Graflex serial number book does not list the Ciro-flex or Ciro 35 cameras, and so it seems reasonable to think that they continued to be made at the facility in Delaware, Ohio.

Graflex 22

The Graflex 22 was manufactured in Rochester, New York, and was available to the public in November 1952.

The Graflex 22 serial numbers are listed in the Graflex serial number book, beginning with 600,001, lot number 48121 of 5000 cameras, dated August 29, 1952. The last Graflex 22 listed is number 629,600, in a lot of 200 cameras, dated September 4, 1956. It appears from the listing that 29,600 Graflex 22 cameras were made, in three models.

Model 200 had an 85mm, f3.5 Graftar lens in the self-cocking Century shutter, which had shutter speeds from 1/10th to 1/200th second, plus Time and Bulb. The Model 400 used the same taking lens, in the more capable Graphex shutter, which had shutter speed from one second to 1/400th second, plus Time and Bulb. And the Model 400F had the slightly faster 83mm, f3.2 Optar lens, in the Graphex Full Synchromatic shutter, which could be adjusted to synchronize Class F, Class M, and electronic flash at any shutter speed.

The Graflex 22 was essentially the same camera as the Ciro-flex, now available in a 'Silver Gray' or black finish, with the addition of an Ektalite (Fresnel) field lens under the viewing screen. Another significant addition was the hot-shoe 'wired accessory clip' to the left side of the camera. The hot-shoe was designed to be used with the Graflash flash gun, which could be simply slid into position without needing to deal with sync cords. The BC Graflash incorporated a condenser inside, and used the compact 22½-volt battery (Eveready No. 412) to charge the condenser. The PL Graflash had no condenser and used two ordinary, penlight AA batteries. Both Graflash units accepted bayonet-based midget flash bulbs such as the GE #5.

The Graflex 22 could also be used with the standard Graflite flash guns, and so gain a great deal of flexibility in choice of flash bulbs, and the ability to use multiple flash guns. A sync cord (the 'Universal Shoe Cord' or 'Cat #2723 Unicord') was available that slid into the hot-shoe and could be plugged into the Graflite.

Besides the Graflash units, accessories included a specialized lens shade that would accept Series V filters, the gray leather Eveready case, and a choice of two, 'All Metal' tripods (Senior and Junior sized). The pressed-steel dual lens cap was also continued, now sporting the 'Graflex 22' name.

Graflex 22 Model 200
With lens shade and Graflash. With Graflex 22 lens cap.

Graflex 22 Cameras, in production from November 1952 to November 1956

200 85mm F/3.5 Graftar Century, 1/10th to 1/200th, T & B. With X-F-M Sync.

400 85mm f/3.5 Graftar Graphex, 1 to 1/400th, T & B. With X-F-M Sync.

400F 83mm f/3.2 Optar Graphex, 1 to 1/400th, T & B. With M-M-F-X sync.

The Century and Graphex X-F-M shutters synchronized zero delay electronic flash when the black-colored shutter speed was set, 5 millisecond delay Class F SM and SF flashbulbs when the green-colored shutter speed was set, and 20 millisecond delay Class M flashbulbs with the red-colored shutter speeds.

The Graphex Full Synchromatic shutter on Model 400F could be set to properly synchronize with various flash sources. When the shutter was set at 'F-X', electronic flash could be used at any shutter speed, and Class F flash bulbs would synchronize at the red-colored shutter speeds. Class F bulbs could be used at the faster shutter speeds by setting the edge of the indicator lever just touching the red-colored M. Class M flash bulbs would synchronize with the slower red-colored shutter speeds when the indicator lever was set at the red M, and with the faster black-colored shutter speeds when the lever was set at the black M. Intermediate delays could be set. The lever could also be set at the 'Off' position, disconnecting the flash sync; however, if this were done with a bulb in place, the bulb would fire. Also, it was necessary to move the lever from Off to a sync setting prior to cocking the shutter. The Graflex 22 400F was discontinued in 1954 due to insufficient sales.

By the middle of the decade, Japanese-made twin-lens reflex cameras were available in the U. S., had more features, and were less expensive than the Ciro-flex. It appears that Graflex recognized that they had been outcompeted and discontinued production of the Graflex 22 in 1956.

By 1958 Graflex was selling the Japanese-made Kalloflex Automat K-2, which was described as: "A top quality twin-lens reflex. Features unique coaxial winding and focusing arrangement for lightning-fast shots. Makes standard 2 ¼ x 2 ¼ pictures on 120-roll film. Accessory mask for framing super slides (42mm x 42mm). All controls visible from above… click stops on diaphragm… XFM shutter to 1/500 second… outstanding Prominar 75mm f/3.5 lens." The shutter synchronized with electronic flash, Class F and Class M flash bulbs at any shutter speed. The Kalloflex also had some Rolleiflex-like features, such as a winding crank to advance the film and cock the shutter, automatically spacing the exposures on the film, preventing double exposures, and the lenses were fitted with bayonet mounts to accept filters.

Graflex 22 outfit with rare GRAFLEX CUSTON CASE, Catalog number 8013.

Nameplate of a Ciro-flex Model D, marked as made by Graflex, Inc.(serial number 125095). This may indicate that Ciro-flex was made in Rochester. Or, Graflex could have just changed the nameplate.

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THE PACEMAKER SPEED GRAPHIC MODEL 1000

By Ken Metcalf
with Scott Clark

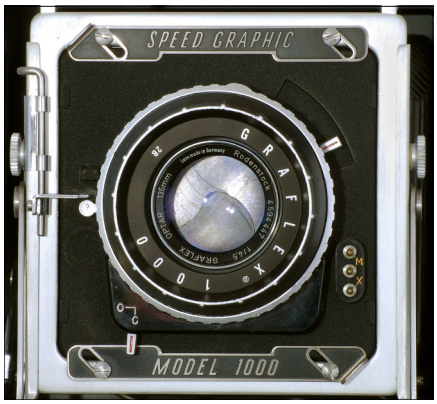
Graflex marketed the Pacemaker Speed Graphic Model 1000 as a combination of their new fast Model 1000 shutter and their reasonably priced Pacemaker Crown Graphic camera. Although theoretically an ideal camera for use today, given the problems with the shutter, and the lack of a qualified repair person, in my opinion, it is a camera for collectors, not users. The camera shown in this article (serial number 948437) was in a batch of 1600 Pacemaker Graphics scheduled for production in November 1961.

Marketing

Because Graflex apparently believed the Crown model was well-known, their marketing primarily focused on the shutter:

1. Action stopping ability with "...more light in less time....and at all apertures."[1]
2. "Orbital action cuts more accurate, sharper 'slices of light'...images are sharper – from ghosting, color fringing and distortion. Ability to use flash, either full of fill-in without ghost images at all speeds."[2]
3. "Large conveniently located press-focus lever which opens both shutter blades and diaphragm leaves."
4. Shutter speed selection either before or after cocking, using the O-C lever.
5. Built-in lens shade and filter holder, and other convenience features.[2]

The Shutter



Bill Inman, Graflex employee and historian, wrote[3] that after fifteen years of research, in 1960 Graflex introduced a between-the-lens leaf shutter with a maximum speed of 1/1000th. This speed was achieved with close tolerances, precision plastic moldings, and extremely thin magnesium shutter blades. Features included M-type flash sync through 1/750 sec, electronic sync through 1/1000, and easy-to-use controls. The shutter was manufactured in three models:

2A for the Super Speed Graphic, with 135mm and 270mm lenses.

2B for Pacemaker Crown Graphic, with 135mm and 270mm lenses. (the shutter used on the Model 1000 camera)

3rd for the graflex xl camera, with a 135mm lens.

4th was being considered for the xl with a 80mm lens (Only one test model remains.).

The shutter was used with a 135mm f/4.5 Optar and a 270mm f/5.6 Rodenstock/Optar.

One Archie H. Gorey was issued seven patents for the shutter and shutter syncing starting with an application in 1949 (patent number 2,593,873) and ending with a final patent in July 1961. As patents are issued to individuals, and all of his patents were assigned to Graflex, Inc., it is reasonable to assume he worked for Graflex.

On the back of the lensboard are the stamps "H4, CX and F2G." The last stamp, according to Tim Holden,[4] means a June 1962 7th revision of the lens. No record was made of the nature of revisions, except for three made in 1960, "40, KOB, and MOC." Although the lag time between the serial number book date of November 1961 and the lensboard date of June 1962 seems too wide, Journal editor Les Newcomer believes they are consistent with production in the 1960s.

The Camera

The Graflex naming convention was that Speed Graphics had a focal plane shutter, and the Crown model did not; however, with this camera, using the Crown body, it was called a "Speed" Graphic. If the focal plane feature was not the reason for the Speed designation, but rather a high shutter speed, then maybe a Crown with a 1/1000th shutter was a "Speed."[5]

On later Graflex cameras, a code was stamped showing the date of manufacture and revision number. On Pacemaker Graphics, it was on the bottom of the bed yoke. This camera's code B9B, means February 1969, revision 2, which is at odds with the serial number book.

Evolution

According to material in the dealer publication, Graflex Trade Notes[6], in September 1960, due to the success of the shutter, there were "innumerable" requests for the shutter to be fitted to Pacemaker Graphic 45 cameras. This could be done by purchasing the all-new Model 1000 Speed Graphic with a 135mm f/4.5 Optar (Catalog number SG-9542, $379.50), or the shutter/135mm lens combination could be purchased for any 4x5 Pacemaker for $189.50 (Catalog number 542). A no. 3011 cam was required with this option at $2.00.

By November 1960, based on the hesitation of "many thousands" of Pacemaker owners who did not want to trade in their cameras for the Super Speed because of the long remaining life of their camera...or probably the cost, Graflex came up with another reason to retro-fit their present camera. You could even upgrade your Super Graphic to Super Speed status with this $189.50 offer. Bill Inman notes that, given you had a Pacemaker 45, it was a cheap upgrade versus paying $312 for a Super Speed Graphic. Bill also notes that if the lens was fitted by Graflex, the nameplates were changed, but if done by an independent repair facility, the new nameplates may have been omitted.

In the Graflex Dealer Catalog dated November 1962, three purchase options were shown.

1. SG-9542	camera with Graphic Rangefinder Graflite bracket (2755) 135mm Graflex f/4.5 lens in model 2B shutter	$432.85
2. SG-542	SG-9542 camera outfit 3-cell Graflite with 5" reflector (2735) solenoid with mount and release arm (2535) shutter Expand-O-Cord (2810) solenoid Expand-O-Cord (2809) and cord clip (2711) (The solenoid was used for tripping purposes only, as flash synchronization was accomplished through the built-contacts within the shutter.)	$NA
3. SG-542D	SG-542 camera outfit without solenoid	$465.40

Note: With all options, this note was added, "Although 6-3/8" equals the diagonal of 4x5 negatives, the greater angular coverage and depth of field of the 135mm lens is often preferred, the diaphragm being closed down to make the corners sharp."

The 2B shutter (and the Model 1000 camera) was discontinued in 1963 and the 2A in 1969[3], due to lack of demand or mechanical problems, or both.[5] Tim noted that when the No. 540 shutter [the 2B] "on order shipped, little interest in the 'conversion program'," [5] in July 1960.

Production

As with the National Graflex, the company decided to set aside a block of serial numbers for camera models, and like the National, they did not get going until some cameras had been produced and numbered. In the case of the 4x5 Crown Graphic, the block was 950,000 through 999,999 and this camera was 948,437. Also, prior to the block system, Speed and Crown batches were not differentiated, nor was the Model 1000. That said, around 8,000 Crown Graphics were scheduled for production in 1961 through 1962, but few have surfaced with the Model 1000 configuration. If you have this model, please let me know the serial number.

Based on advertisements, this model was first sold in 1960, but the end date is harder to determine, as the shutter was discontinued in late 1963, but Graflex had a habit of selling discontinued items on special order.

Footnotes:

[1] Subscriber Scott Clark analyzed their claim: I guess in a purely technical sense this is true, if you are comparing it to an FP shutter...because a leaf shutter exposes the entire image at once, and a Speed Graphic type FP shutter "scans" the image, there is more light on the negative at any given point in time. And it is in less time, since a leaf

shutter opens and closes so much faster than the mechanical limits of the huge FP shutter will allow. It really would be superior at stopping action, and given that it's a stop faster than other leaf shutters available at the time, I suppose it's a claim they can fairly make. There's a big dose of marketing in there, but if you boil it down, this would be a better camera for action photography.

[2] Again from Scott: The part about "sharper slices of light" sounds like marketing jargon, but the ability to sync a flash at up to 1/1000 is something that would be of real value to a professional photographer. Most medium and large format FP shutters, including the ones used in the much more modern Pentax 6x7 and Pentacon 6 systems are hobbled by a 1/30th flash sync speed, which makes it almost impossible to use a fill flash outdoors. Leaf shutters can sync at any speed, and being able to use 1/1000th of a second gives you more options to control ambient light in a shot when using flash that you wouldn't otherwise have. Granted, it's only 1 stop more than a 1/500th shutter, but in bright sunlight, that can make a real difference. If you're trying to shoot with the aperture as wide as you can in order to separate the background from the subject (i.e. a portrait), you'll take every stop you can get.

My own experience with the 1000 shutter is limited to a single example, but after taking it apart far enough to safely clean it in my ultrasonic machine, the impression I got was that two things probably contribute to their failure--as plastic ages, it obviously can degrade, and simple age may be a big factor in the gear failure. The other thing might be that as the lube in them dries out and they get crud in them, the amount of force needed to cock the shutter increases...and as you have to put more torque on the mechanism to cock it, the level of stress on the parts goes up until they sometimes fail.

[3] Inman, Bill; Graflex Historic Quarterly; Volume 5, Issue 1, 2000, and email correspondences in 2005.

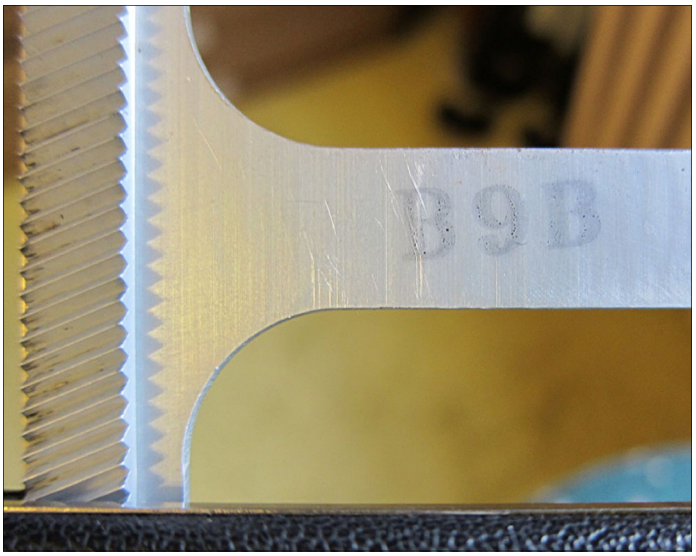
[4] Notebook of Graflex employee and historian Tim Holden.

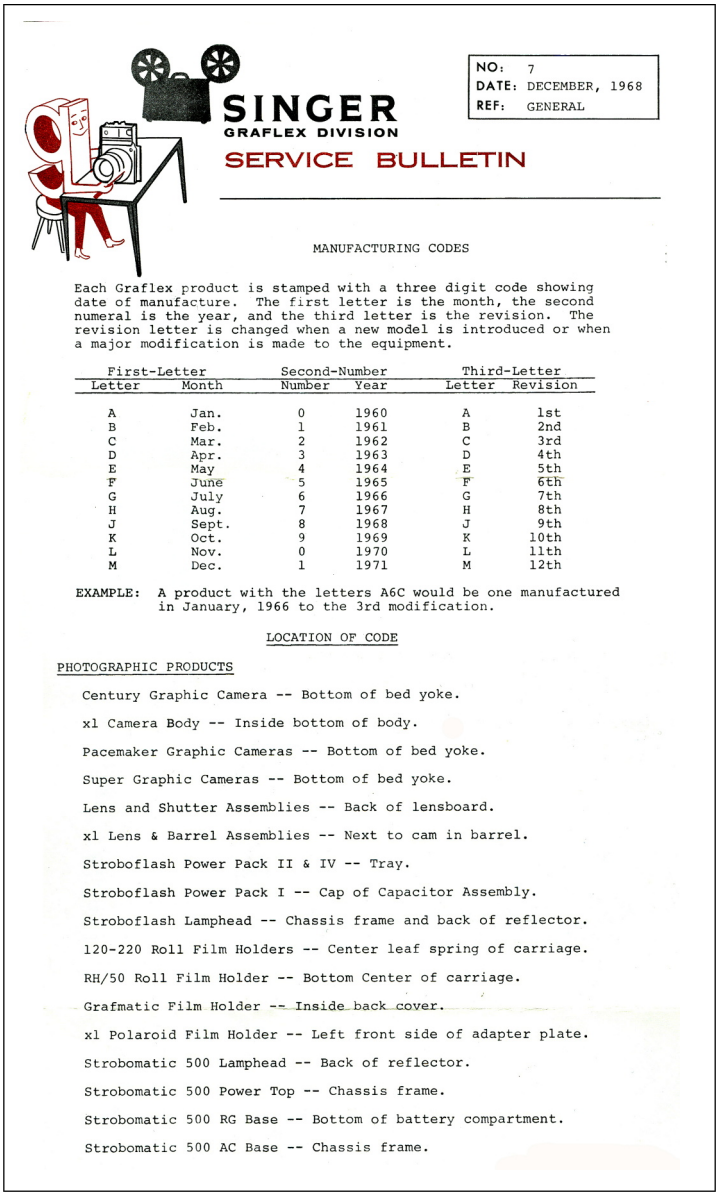
[5] Tim Holden went through all issues of Trade Notes and dictated comments on each issue, which were then transcribed. Regarding the September issue, he wrote, "Note, this camera [Model 1000] does not have the focal plane shutter. That [the camera that does] will be identified as Speed Graphic Model FP (and boy, we had a big go around on that, so there's a story.") Unfortunately, we will never know what the "big go around" was, although it was probably about changing the naming convention. "[ ]s" courtesy Graflex Journal editor, Les Newcomer.

[6] Graflex Trade Notes; September 1960, p. 3; November-December 1960, p. 7.

Manufacturing Codes

Though the meaning of the code has not been found, here is the code for the Model 1000 Crown Graphic.





SINGER
GRAFLEX DIVISION
SERVICE BULLETIN

NO: 7
DATE: DECEMBER, 1968
REF: GENERAL

MANUFACTURING CODES

Each Graflex product is stamped with a three digit code showing date of manufacture. The first letter is the month, the second numeral is the year, and the third letter is the revision. The revision letter is changed when a new model is introduced or when a major modification is made to the equipment.

First-Letter		Second-Number		Third-Letter	
Letter	Month	Number	Year	Letter	Revision
A	Jan.	0	1960	A	1st
B	Feb.	1	1961	B	2nd
C	Mar.	2	1962	C	3rd
D	Apr.	3	1963	D	4th
E	May	4	1964	E	5th
F	June	5	1965	F	6th
G	July	6	1966	G	7th
H	Aug.	7	1967	H	8th
J	Sept.	8	1968	J	9th
K	Oct.	9	1969	K	10th
L	Nov.	0	1970	L	11th
M	Dec.	1	1971	M	12th

EXAMPLE: A product with the letters A6C would be one manufactured in January, 1966 to the 3rd modification.

LOCATION OF CODE

PHOTOGRAPHIC PRODUCTS

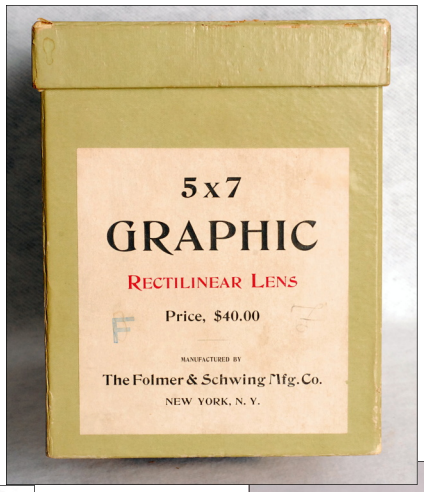
Century Graphic Camera -- Bottom of bed yoke.
xl Camera Body -- Inside bottom of body.
Pacemaker Graphic Cameras -- Bottom of bed yoke.
Super Graphic Cameras -- Bottom of bed yoke.
Lens and Shutter Assemblies -- Back of lensboard.
xl Lens & Barrel Assemblies -- Next to cam in barrel.
Stroboflash Power Pack II & IV -- Tray.
Stroboflash Power Pack I -- Cap of Capacitor Assembly.
Stroboflash Lamphead -- Chassis frame and back of reflector.
120-220 Roll Film Holders -- Center leaf spring of carriage.
RH/50 Roll Film Holder -- Bottom Center of carriage.
Grafmatic Film Holder -- Inside back cover.
xl Polaroid Film Holder -- Left front side of adapter plate.
Strobomatic 500 Lamphead -- Back of reflector.
Strobomatic 500 Power Top -- Chassis frame.
Strobomatic 500 RG Base -- Bottom of battery compartment.
Strobomatic 500 AC Base -- Chassis frame.

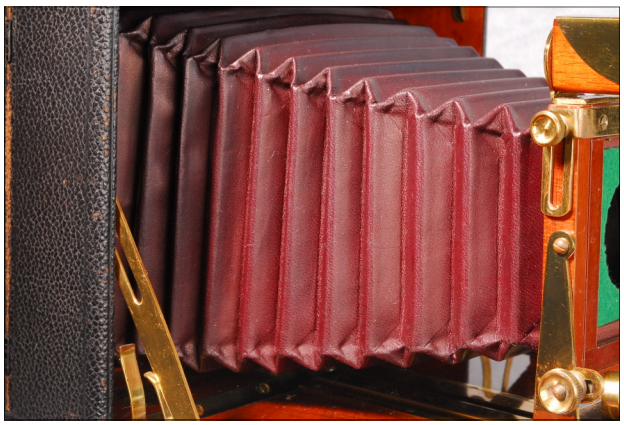
FROM THE CHARLIE KAMERMAN COLLECTION
(http://www.kodakcollector.com/)

As Charlie tells it:

Every once in a while you get lucky and have the opportunity to acquire something simply magnificent! This is truly one of those times. For a Kodak collector, finding anything wood and brass is tough, in a 5 x7 is tougher... in a box... rather impossible... in excellent condition. Well, you get the idea... LUCKY!!!

This Folmer & Schwing Graphic camera (serial number 3191) that has been in one family since it was purchased in 1898 came with the 1898 catalogue which lists the camera. It is the first boxed item I have from Folmer & Schwing before they were acquired by Eastman Kodak Company in 1905.





Graflex Journal

The Graflex Journal is dedicated to enriching the study of the Graflex company, its history, and products. It is published by and for hobbyists/users, and is not a for-profit publication. Other photographic groups may reprint uncopyrighted material provided credit is given the Journal and the author. We would appreciate a copy of the reprint.

THE BEST ANGLE

Thanks to John Fleming of the Australian Photographic Collectors Society (www.apcsociety.com.au) for allowing the Journal to publish this image.

Two intrepid (but unknown) photographers, one with a telephoto-fitted Speed Graphic and the other with a Series B Graflex, are taking pictures, high up, of the 1947 AUSTRALIAN GRAND PRIX from a gum (eucalyptus) tree.

Editors: Thomas Evans, Les Newcomer, and Ken Metcalf
Publisher: Ken Metcalf

Contacts:

Thomas Evans
cougarflat@jeffnet.org

Les Newcomer
LNPhoto@twmi.rr.com

Ken Metcalf
94 White Thorn Drive
Alexander, NC 28701
email: metcalf537@aol.com

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From Thomas Evans:

Fujifilm just announced that they are discontinuing the FP100c instant film pack film! Suddenly all of those 1960s & 1970s Polaroid cameras and backs have become obsolete. http://www.diyphotography.net/the-end-of-an-era-fujifilm-kills-off-fp-100c-the-last-of-its-instant-peel-apart-paper/

Will These Star Wars Movies Never End!

Peace was upon the world of Graflex flash gun collecting after the company stopped making their first gun in 1948 (aka cheap) until 1977, when the world of Graflex collecting was thrown into turmoil with the introduction of the first Star Wars movie and the use of the Graflex battery case as the Jedi Order lightsaber!

According to the never wrong Wikipedia, "...a survey of approximately 2,000 film fans found it to be the most popular weapon in film history." Further, " Set decorator Roger Christian found the handles for the Graflex Flash Gun in a photography shop on Great Marlborough Street, in London's West End." And further degradation ensued.

While the newer more versatile Graflite gun goes for less than $100, its predecessor goes for many $100s. Cheap no more. If you are looking for an original Graflex flashgun to add to your collection, all I have to say to you is, " May The Force be with you.™"