ZEISS HISTORICA

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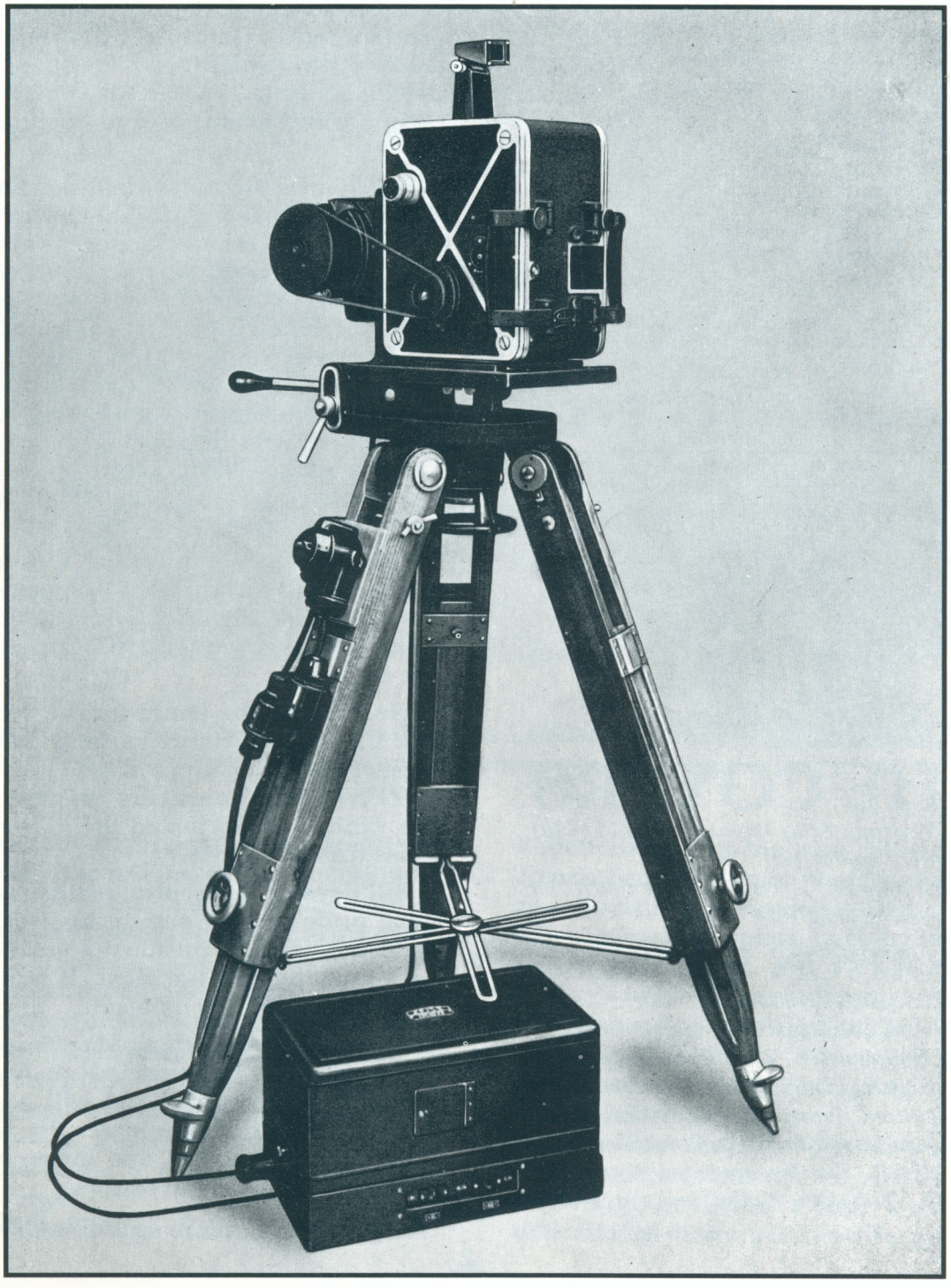

The Zeiss Historica Society of America is an educational, non-profit society dedicated to the exchange of information on the history of the Carl Zeiss optical company and its affiliates, people and products from 1846 to the present.

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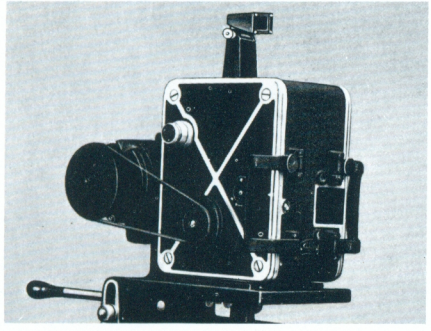


ON THE COVERS

FRONT COVER: Wartime Zeiss Ikon tripod (46 kg=101 lbs) holds Zeitlupe (27 kg=60 lbs).
BACK COVER: Ad from Dr. E. Vogel, Taschenbuch Der Photographie, revised 1930 by Karl Weiss.

ILLUSTRATION SOURCES

Front cover and Zeitlupe, Larry Gubas • Goerz Trieder fake and Gage Blocks, Nicholas Grossman • Topogon lenses etal., Joachim Arnz • Zeiss Ikon finders for Kekatos article, Charles Barringer • Ernemann and Binocular covers, editors' library • Embossed Zeiss Ikon logo on Super Ikonta, Joseph Brown • Clovermeter and Accurapid Wind CO-11, Charles Barringer, Jr. • Back cover ad from the Zubatkin Collection via Joseph Brown.

William Sidney Stone II

August 24, 1928 — December 23, 1995

On May 18, 1996 my husband's ashes will join with his mother's and father's in the special garden adjacent to St. John the Evangelist Church in Hingham, Massachusetts. One day I'll join them.

There, in the town of Hingham, where Bill grew up, whose house on Main Street was the main street, and where his photograph of 1937 as altar boy still hangs in the church, this garden flourishes all year. It's a lovely place in its very own special beauty, well-tended by its devotees.

The garden for us symbolizes continuity, rematerialization, and regeneration, so through this garden we will continue to live in the Universe in a new form. The Universe. It's big — that's certain. It's everlasting — that's for sure. Nothing really dies. It's just changed. And we're all part of the process.

Bill joined the Zeiss Historica Society in 1981 when he discovered in a Shutterbug ad that other collectors of German cameras were very much alive and seeking members. When Dr. Randall Scheid of Ontario, Canada, past president and editor of Zeiss Historica died in 1982, Mrs. Scheid sent her husband's papers on Zeiss to archivist Larry Gubas. Among those papers, according to Larry, were several letters from a Bill Stone offering to help with the journal, either editing, writing, designing, whatever was needed. Larry, who was then living in the same neighborhood as we do in New York City met Bill for the first time.

Quickly, Larry knew what a gem he'd found, and gave Bill exactly what Bill wanted. Bill's first issue of Zeiss Historica, with the Contax History Show on the cover, fall 1982, carried his name on the masthead.

He changed the entire format, setting the tone and the path for future journals. From the beginning of his editorship, Bill kept to the basic tenets of ZHS to reflect members' interests by including the various products and the history of the Carl Zeiss firm since 1846.

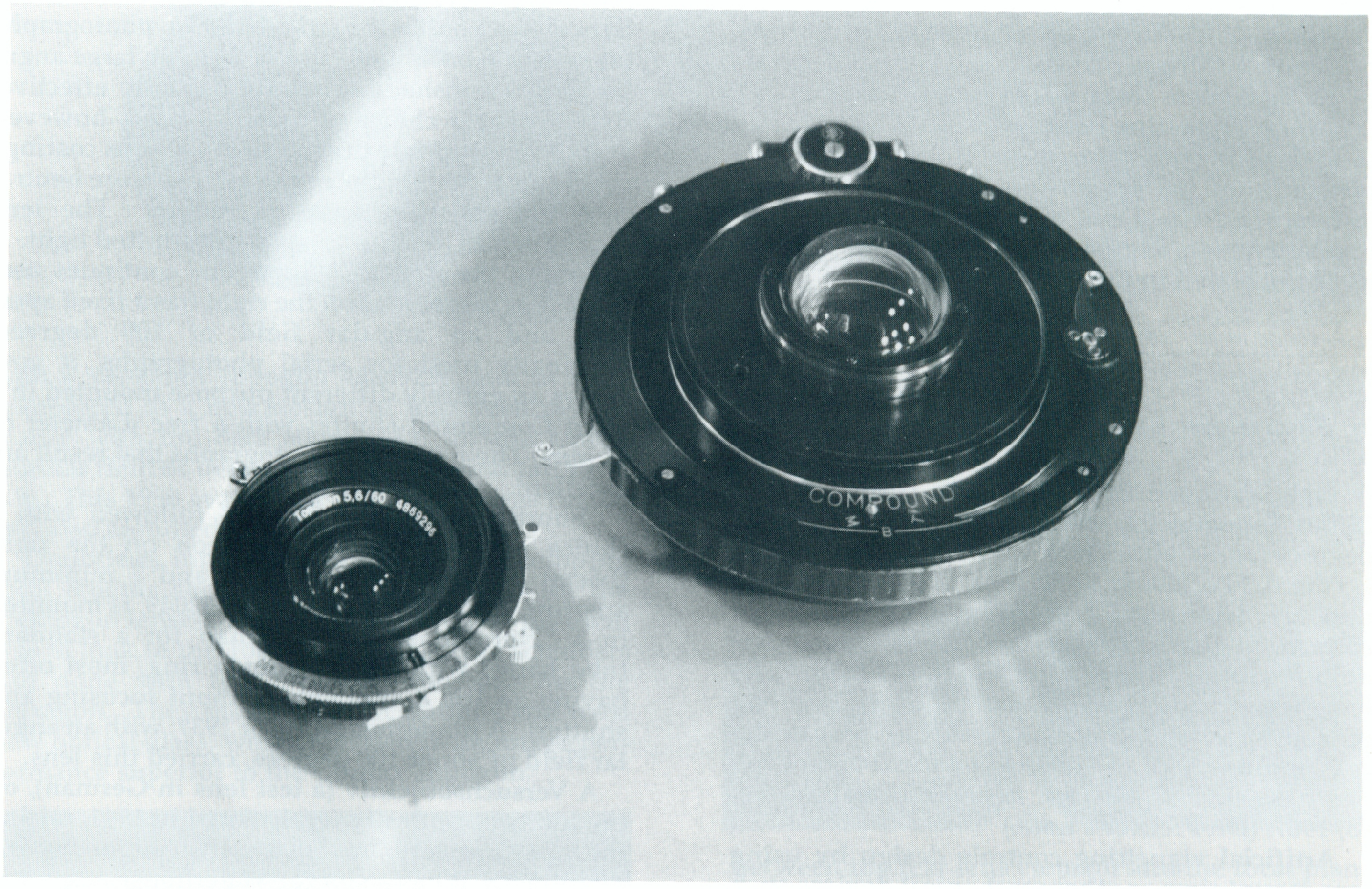
Bill devoted himself to quality issues. He took great pride in each one, in his work, and in his contribution. And breathed a great sigh of relief each time the task was done. It was the sigh of a job finished, for the moment.

We deeply appreciate and thank you all for your good wishes. Bill reached many minds and hearts in many places, and will be remembered for more than fifteen minutes. He was a devoted father, a caring, sweet, and loving husband, and the best of all possible editors.

Marion Husid

THE TOPOGON STORY EPISODE THREE

Joachim Arnz, Jena, Germany



Two examples of the first Topogons: Left - Topogon 5.6/60mm serial number 4869296 from 1939; Right - the hemispherical lens with fixed aperture encompasses an angular field of 100 degrees.

Zeiss Historica (fall 1990 pp. 3-5 and spring 1991 pp. 7-9) carried descriptions of the history and applications of the Carl Zeiss Jena Topogon R wide-angle lens. But there's still more to the story of this gem.

Indeed, its hemispherically shaped front lens and its composition of sparkling high index glass emphasized the resemblance to a diamond cut by a master. Our fascination with its supra-normality and uniqueness may indicate the philosophy of development at Carl Zeiss Jena in the late fifties that led to the project's end and to otherwise unknown lens types.

The mathematical design of the Topogon by Dr. Robert Richter in the early thirties boosted the accuracy and quality of photogrammetric cameras and reproduction systems. These efficient phototheodolites (an optical tracking instrument consisting of a camera and a precision instrument having a telescopic sight for establishing horizontal and sometimes vertical angles) were equipped with Topogon lenses. Aerial photographs of the earth's surface enabled mapping, surveying procedures, tracking, etc.

This rather small inexpensive lens, comprising four meniscus elements only, yielded an impressive image quality at a large angular field. As with all lens designs, the lens designer made com-

promises, perfection being impossible.

Nevertheless, the Topogon embodied excellent astigmatic correction, field flattening, and was almost totally distortion free. Its color correction, also, can be rated good. On the other hand, spherical aberration was insufficiently corrected. Therefore, the original maximum aperture f:10 was changed. A new optical calculation of new optical glasses increased the relative aperture to f:6.3, while retaining the same image quality.

In wide-angle lenses of this sort, two types of vignetting persist: one influences the light distribution in the image plane while the other decreases the brightness towards the image margin.

Natural vignetting belongs to photometric laws of optical imagery that cause light to decrease in proportion to the 4th power of the cosine of half the angular field. Light decreasing (or increasing) in relation to its angular position to the image center is calculated in the table.

½ angular field	0°	10°	20°	30°	**40°**	50°	60°	70°	80°	90°
$\cos^4$ of ½ a.f.	1	0.94	0.78	0.56	**0.34**	0.17	0.06	0.014	0.0009	0

Photometric Laws govern natural vignetting.

Light gathered from the image corners of the 25mm Topogon f:4, with its angular field of 82 degrees (angle 41 degrees ='s 1/2) measures about 1/3 the light of the image center. This results in an underexposure of 1.5 f stops, and is impossible to correct. But a seemingly impossible became partially realized in 1966. The 15mm Hologon R f:8 had the entrance pupil area enlarging as the angle of field increased, thus compensating part of the cos 4 minus effect and reducing natural vignetting See F. Koeber, E. Glatzel, Zeiss Information No. 63, 1967. (Dr. Pfeiffer's note.)

Artificial vignetting controls design by using lens mount rims or other mechanical devices such as filters or sunshades that cut light bundles from the entrance pupil. When one compares the entrance pupils of the Flektogon f:4 with the Topogon f:4 (both 25mm) and both having light gathered from the same angular fields, it's clear that the Flektogon maintains more light around the image center. With the Topogon, brightness from the image corners takes more than 2 f-stops.

This disturbing effect may be partially helped with a correction filter that has more transmission capabilities towards the rim. But there's a major disadvantage. The overall light distribution into the lens is so dim that the maximum aperture is disabled.

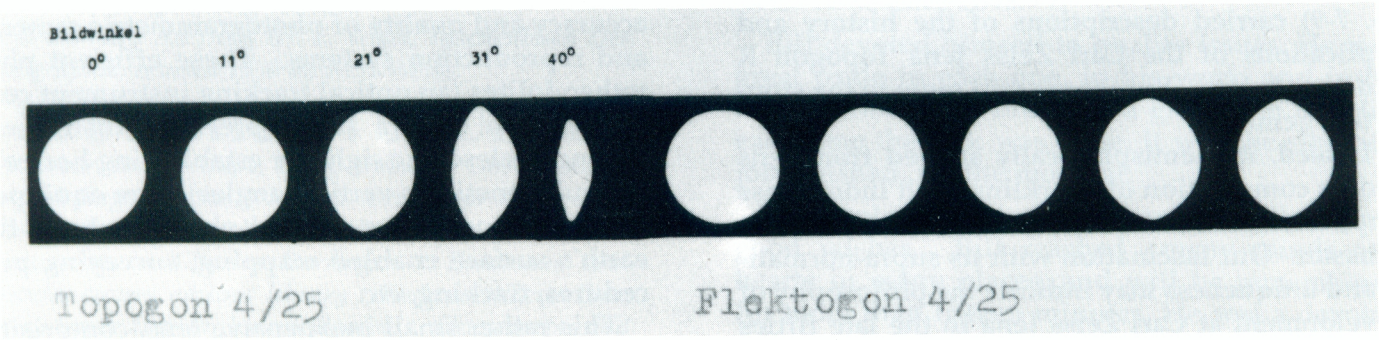
Earlier production lenses had another drawback: High index glasses resulted in reduced brilliance and contrast, particularly in photographs taken using backlight. Because of the large angular field a sunshade was only partially effective. By the proper choice of material used, however, and the appropriate thickness of the lens coatings considered, both higher contrast and more neutral color transmission were attainable. The lens looked white (or colorless) in transmitted light.

One of the first 1939 Topogons continues usefully. The larger lens on the right has a fixed aperture and an angular field of 100 degrees. Originally used for aerial photographs, it now serves an entirely different purpose mounted in a giant Compound shutter with a free diameter of 65 mm. The panorama photographs that result are excellent.

Shortly thereafter, the F:6.3 followed with a choice of focal lengths. Topogon on the right (f:8cm) has an iris diaphragm and a minimum aperture F:32. Its coated lens, 2742049, is mounted in a "Normalfassung" (German for a standard tube barrel with a screw down ring, most often having an iris diaphragm, without focusing and shutter). A phototheodolite of 1937, with an angular field of about 100 degrees, carried this lens.

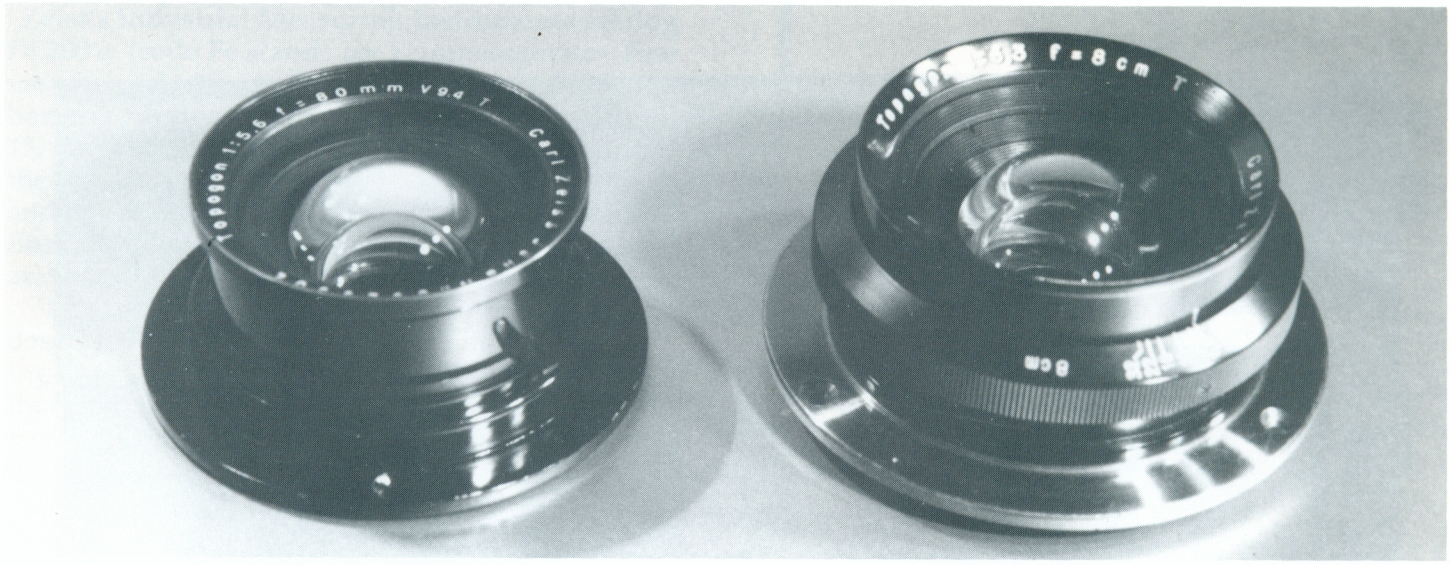
A Versuchsobjektiv (a test lens in German), on the left, was optically recalculated in 1941, raising the aperture ratio to F:5.6. Instead of an iris diaphragm, it has a slot for Waterhouse stops and filters. The free diameter of 23mm corresponds to a maximum aperture of F:3.5 which enables focussing in dim light. Also, this lens embodies excellent sharpness even at F:5.6, and is coated.

In 1939, a new phototheodolite TAL emerged



Entrance pupils of the Topogon f:4 and the Flektogon f:4 (both 25mm) reacted differently to changes from light gathered at the same angular fields.

A choice of focal lengths was added to the lenses about 1941. Right – Topogon f:8cm has an iris diaphragm and minimum aperture f:32, and is mounted in a normalfassuing. Left – a test lens that was optically recalculated about 1941 has a slot for Waterhouse stops and filters.

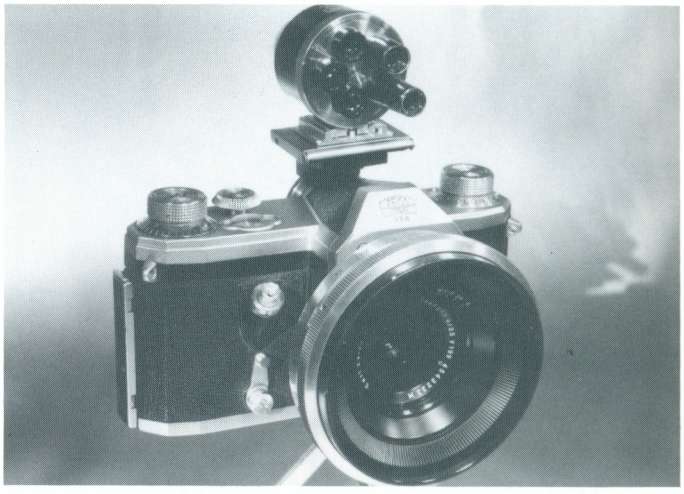


with a 5.6/60mm Topogon #4869296, and in 1958, reappeared as a new design of improved performance with the data 60mm f:5.6 for the Unica, angular field 84 degrees (Zeiss Historica, fall 1992, p.9). This 1958 avatar in a small series was coated and also mounted in a Compur shutter.

Doubtless, initial difficulties with developing focal lengths shorter than 35mm existed for the Flektogon lenses. And how to solve this problem was to look to the Topogon lens. As the scientists had done with the Topogon, they did for the Flexagon. They made new calculations and used new optical glass, which resulted in an image performance superior to the Contax Topogon.

To diminish vignetting, a fixed correcting plate was built in. This construction necessitated an extended flare which also functioned effectively as a sunshade. The filter thread grew to M77 x 0.75mm compared with M55 x 0.75mm for the Contax 25mm Topogon.

Of course using this lens on a reflex camera is a problem because the extremely short distance



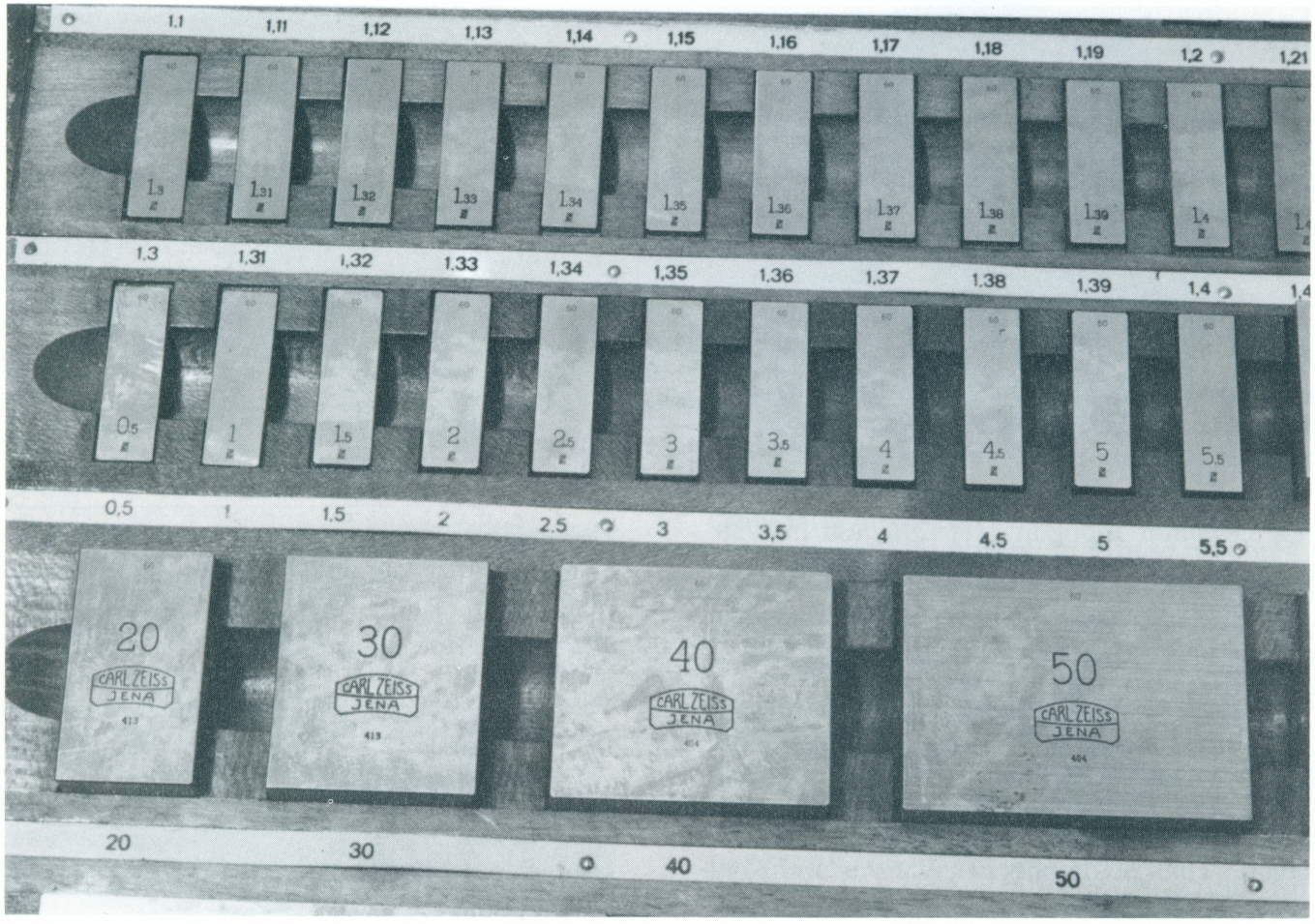
between the rear lens element and the focal plane does not allow the mirror to flip up out of the way. This Topogon, therefore, may be used only with the mirror locked up. For the field of view determination, an external finder, such as the CZJ Universal with its choice of 25 to 135mm, offers fine results.

Series production of the Contax S mount Topogon was never initiated. The Flektogon, much more "user friendly" because of its retrofocus design, was successfully developed in the shorter focal lengths, and became the norm in Carl Zeiss Jena production. Accordingly, development and production of the Topogon lens was terminated.

Editor's note: Thanks to member Dr. Wolfgang Pfeiffer of Aalen, Germany, former head of the Department of Technical and Scientific Information and Director of the Carl Zeiss Optical Museum in Oberkochen, for his expertise and translation of the German manuscript.

PRECISION GAUGE BLOCKS

Nicholas Grossman, Rockville, Maryland



Zeiss Historica, spring 1987, page 13, carried the first article on Carl Zeiss's Measuring Instrument Department. The following year, autumn 1988 (pp.9-10), member Barry Abel of Hamilton, Montana, and Grossman illustrated and discussed other Zeiss mechanical measuring instruments, namely the passimeter and bore meter capabilities.

The Johanneson Gauge (or Gage) Blocks also appeared in the 1934 Zeiss catalog, Zeiss Industrial Measuring Instruments. Fortunately, a complete set in excellent condition, datable to 1939 belongs in the category of pristine collectibles.

THE PURPOSE OF GAUGE BLOCKS

Measuring instruments of all types are not perfect. Ten micrometers would offer slightly differing measurements of the same object they each measured. The following explanation defines what a measuring device should accomplish technologically.

ACCURACY of a measuring device is the value of the variable that approaches the true value. PRECISION is the reproducibility of the measurements. RESOLUTION designates the smallest change in the measurement to which the instrument will respond.

In the United States, the National Institute of Standards and Technology (National Bureau of Standards) provides for the public the primary standard of all measurements. The best known secondary standard comes with Johanneson Gauge Blocks used in the calibration of machine shop tools. Because its standards are prepared precisely to agree with the primary standards, the Jo blocks (so-called) in manufacturing and in the assembly lines are used with confidence. Since these blocks are also fabricated, they, too, should originate from a firm that values perfection and attention to detail.

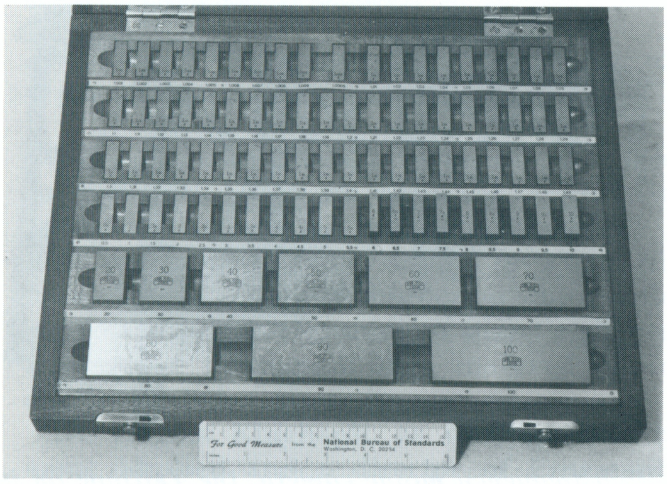
ZEISS STANDARD GAUGE BLOCK

The Johanneson blocks were named for their inventor C.E. Johanneson, a 20th century Swedish

engineer. Some Webster dictionaries define the blocks as "...a set of blocks ground to an accuracy of one hundred-thousandth of an inch or better... also called Jo blocks or Jo block."

Zeiss's Industrial Measuring Instruments catalog Fe 200 e (code Fe stands for Feinmessgerate - fine measuring instruments; 200 denotes catalog number; e is for English) lists the blocks on pages 14-19, under Standard Gauge Blocks. Description of their dimensions, degrees of precision, deviations and measurements available in either metric or English are available in different sets. Also, a separate single block may be ordered.

Set no. 1, 88 blocks in the metric system is described on page 17. A fitted wood box, measuring 39 cm wide, 31 cm deep, and 5.5 cm high holds the "high quality, only one grade - the best, unsurpassed for precision basic industrial measures."



The exterior also carries the Carl Zeiss Jena logo and the original owner's property mark, WL 60. Each block's factory markings identify dimensions, and are stamped with the logo as well. Sixty of the smaller blocks are marked with the number 60. Three of the blocks numbered 60 all carry 403, another trio carry 404, and yet another triad 413. So far, these sub-numbers remain a mystery.

POSTWAR ZEISS PRECISION MEASURING INSTRUMENTS

With an eye to the future in anticipation of new electronic techniques, Carl Zeiss Oberkochen eschewed the manufacture and marketing of mechanical measuring instruments for large scale automation-driven precision machines. Their new department, Optical Metrology, established about ten years ago, revealed a more cosmic and New Age concept, appropriate for moving into the 21st century.

Jena's marketing strategy in September 1952

looked for a viable population that required mechanical precision measuring instruments, and therefore, included the gage blocks. Carl Zeiss Jena's catalog CZ 20-030c-2, Technical Fine Limit Instruments, devoted the introductory 12 pages to the definition and description of precision measurements. Keeping the traditional list of Standard Gauge Blocks available, their special booklet CZ 20-110-1 targeted those interested in specifics. Good PR!

Nick Grossman would gladly appreciate hearing from anyone who also owns a set of these gauge blocks in their handsome case. Offered in the thirties, they've become collectibles. Check your membership list for his address.

ZEISS IKON'S ZEITLUPE
A PHOTOGRAPHER OF MOVEMENT

Larry Gubas, Randolph, New Jersey

Years of collecting Carl Zeiss and Zeiss Ikon exotic equipment evokes the question of whether we've scratched only the surface of this extraordinary company. The immediate object at hand is the Zeiss Ikon Zeitlupe, inherited with Ernemann, who made it in 1916.

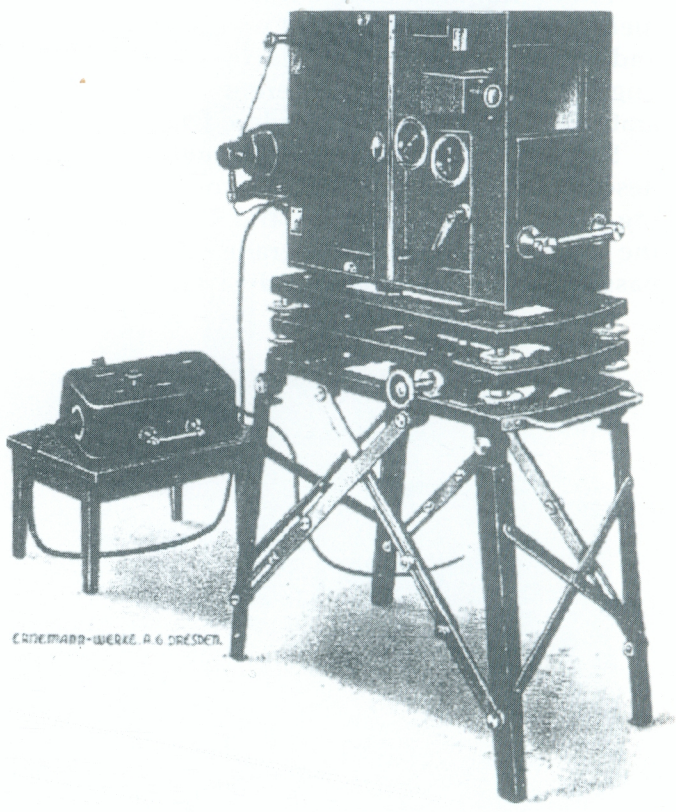
The Zeitlupe became a specialized product of the Instrument Department of Zeiss Ikon Dresden. Its premise was based on ideas already attempted that involved motion: To make clear and distinct the segments of motion that a normal eye was unable to see. Let's expose movie film at the fastest rate possible so when the projector uses the same film at normal speed, a super-slow motion view should appear.

According to A World History of Photography (1989), Abbeville Press, the analysis of motion was already in progress around 1872 in three areas: Ottomar Anschutz in Germany, Etienne Jules Marey in France, and Eadweard Muybridge and Thomas Eakins in the United States. Muybridge was hired by Leland Stanford, ex-Governor of California and owner of the Palo Alto Breeding ranch, to photograph the Governor's favorite horse, Occident. For the first time, they discovered that in a gallop a horse's four legs left the ground.

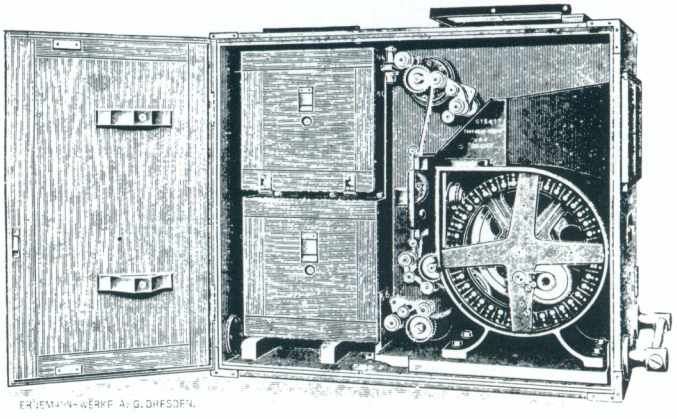
At the Ernemann firm since 1911, Dr. Hans Lehmann, formerly of Steinheil in Munich and Carl Zeiss in Jena, introduced his prototype of the Zeitlupe in 1913. The camera entered production in 1915.

Lehmann used a revolving mirrored drum to catch the images for the camera. Each placement of the image on the film depended upon the pace of the turning drum. His first commercial model, a hand-propelled system, successfully received 300 images per second. With an electric motor attachment, this model received 500 images per second.

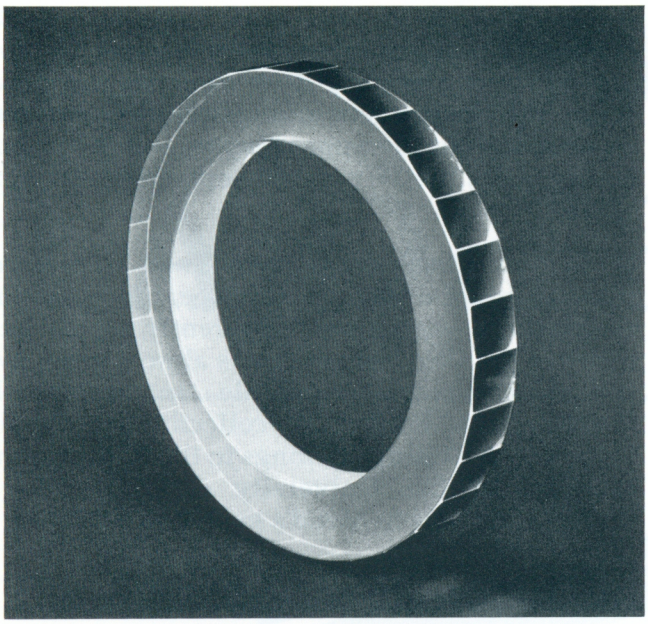
The early version of the camera was made of the same material that cameras were made of — wood. Catalogs showed the Zeitlupe in mahogany, oak, and nut woods, with film holders of wood as well. At 500 frames per second, the camera exposed 10 meters (33 feet) per second. The original model held 300 meters of film (328 yds.) or 30 seconds worth of film! Ernemann received the patent approval (German patent 307022) in January of 1917 when the trademark Zeitlupe became official.



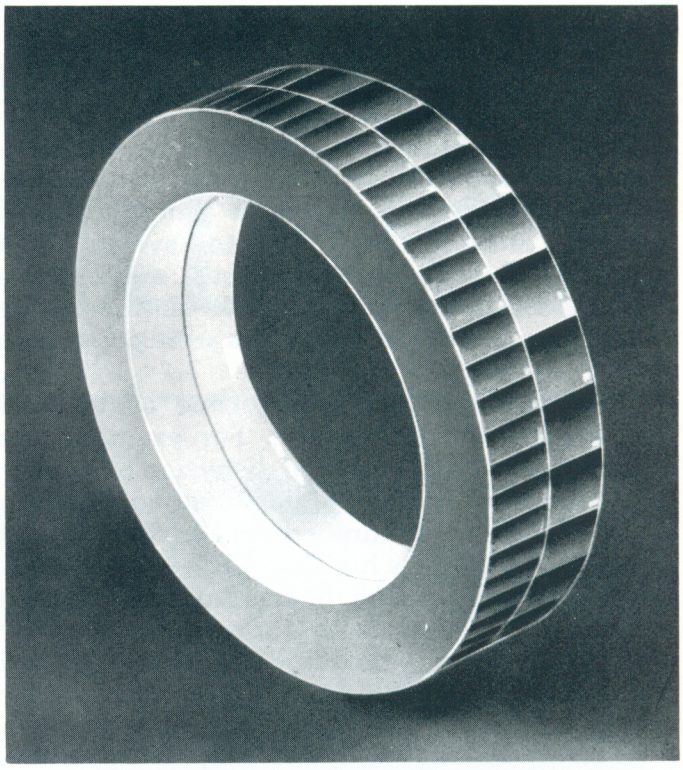
High frequency movie camera, the Zeitlupe on its foldable stand with an electric motor attachment, captures 500 images per second.



An etching of the Zeitlupe with its door open reveals the mirrored drum at lower right, the film feed reels, and the film containers. As the film is put into motion, the drum begins to revolve.



Zeitlupe's revolving ring carried either a single row of mirrors or a double row of mirrors.



When Lehmann died in September 1917, his successors at Ernemann extended the camera's capability. Under ideal conditions as many as 1,000 separate frames per second on 35mm film became realized. During this period when motion pictures were just beginning to attract audiences, a scientific instrument that analyzed motion already existed.

Dr. August Klughardt, as intelligent as his name implied and a director of Ernemann's accounts department in 1924, described his young colleague Dr. Ludwig Bertele as "... dieser Bertele ist ein Genie". This Bertele is a genius. (Peter Goellner, Ernemann Cameras, p.143.) And, indeed, with his first speed lenses, Bertele proved Dr. Klughardt's assessment to be correct. Later, Bertele adapted his Sonnar for the same purpose at Zeiss Ikon.

Schmalfilmzeitlupe (8mmfilm) with its external motor attachment and heavy duty tripod filled three huge carrying cases. It gained the phenomenal speed of 6,000 images per second in the 1944 version. Later, Zeiss Ikon changed the format to 16mm which permitted even greater speed.

For the 1936 Olympics, along with other new Zeiss Ikon and Carl Zeiss measuring and recording devices, a stereo version of the Zeitlupe recorded most of the events. Because humans have two jobs, to see the object and then to transmit information to the brain, the Zeitlupe also involved two jobs, but it could do it faster. The Zeitlupe took the images fast, and the projector, operating at normal speed, slowed the movement

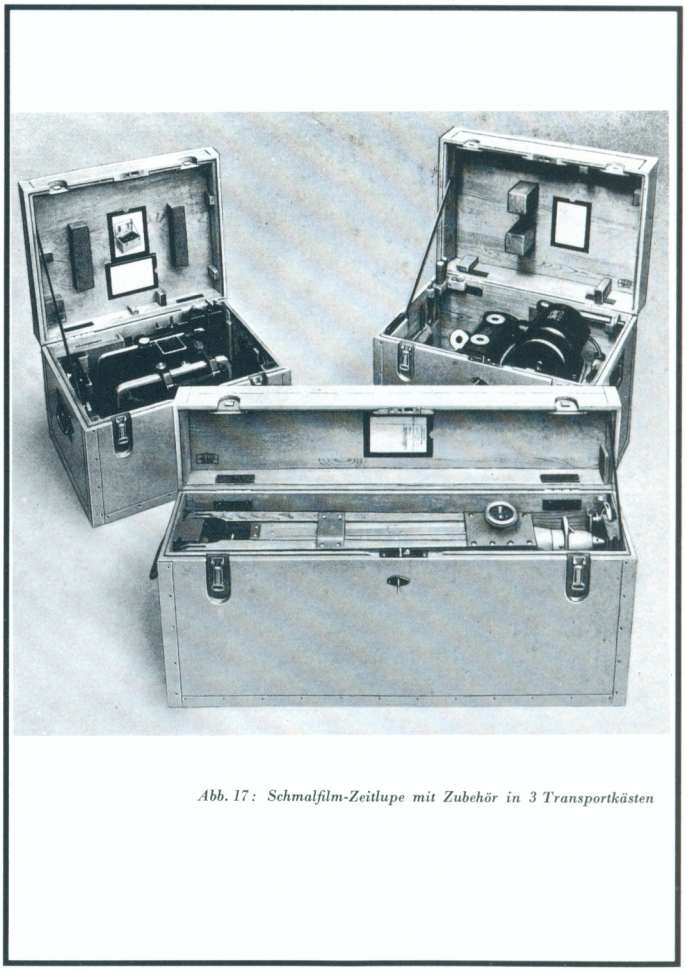


Abb. 17: Schmalfilm-Zeitlupe mit Zubehör in 3 Transportkästen

Zeitlupe ready to travel in three wood cases: Camera, motor, and foldable tripod.

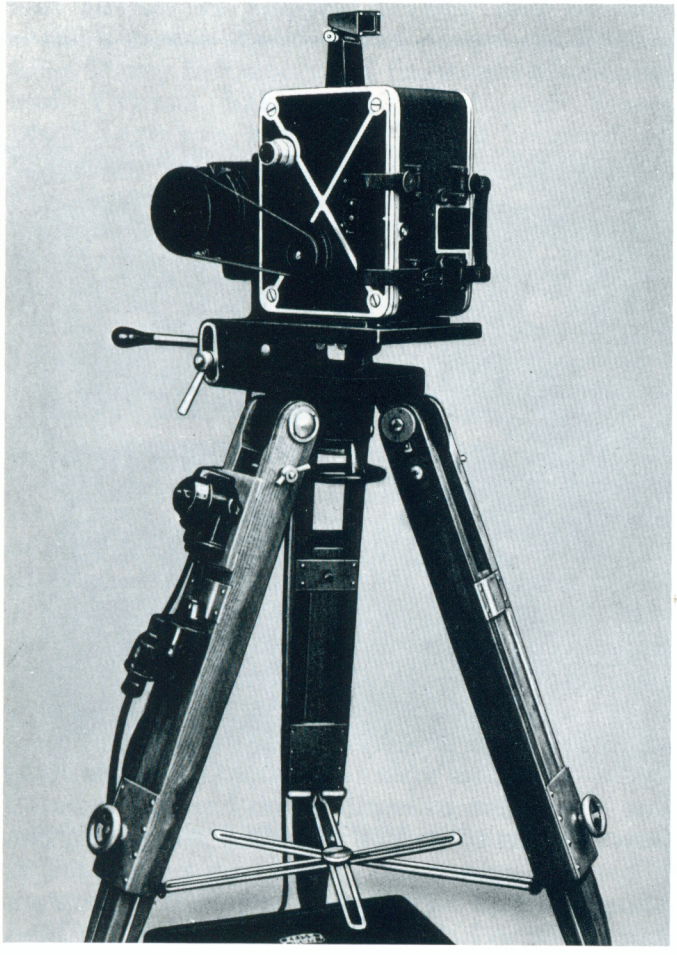
so that every sequential segment appeared. Adding another dimension with stereo added yet another excitement. Like 3D movies today.

In the United States, similar results used different technology. Harold Eugene Edgerton and his associates at Massachusetts Institute of Technology around 1931, developed the Stroboscope. This high-speed gas discharge lamp produced bursts of short brilliant light, and synchronized with high shutter speed, captured a moment of a moving object in all its clarity. On motion picture film, more than 10,000 exposures were possible in .000001 second.

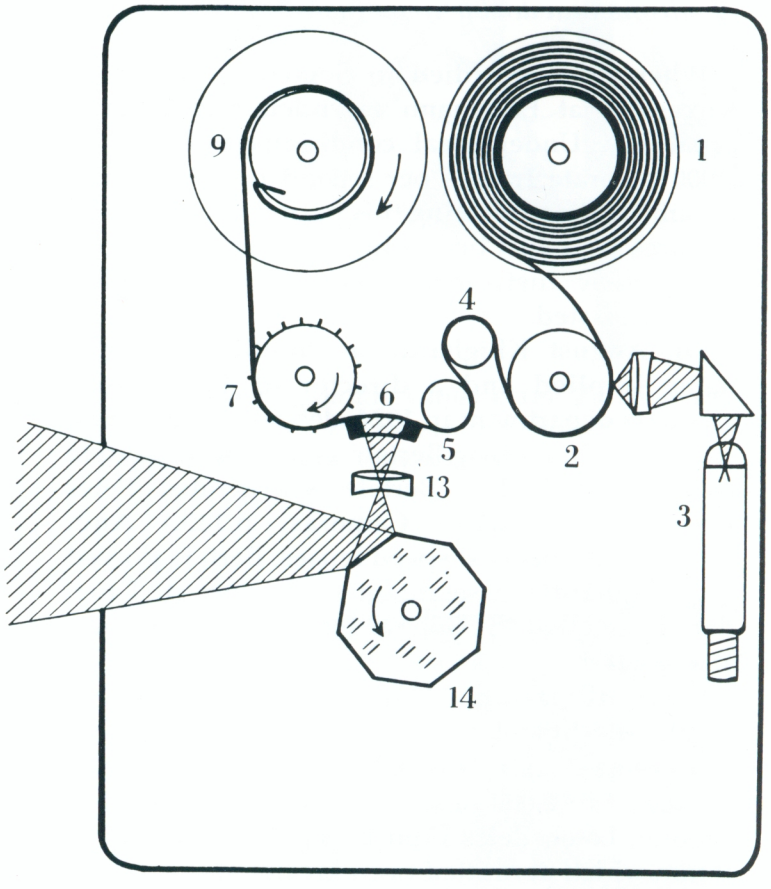
Both Zeitlupe and Stroboscope contributed enormously to engineering. For example, the study of vibration, wear, and distortion of moving parts as a machine worked enabled adjustments to be made to their running speeds that brought functioning to a new high.

Much information on the Zeitlupe was recorded in Zeiss Ikon's catalogs of the Instrument Department, and came from two issues: October 1939 and April 1944. Many catalogs would have come from this department during these years because of their numerical identification, 872 and 2682. Catalogs of this period contained the famous W serial numbers used for special products, such as motion picture cameras, the X-Ray Tenax, the closeup lens and rangefinder contameter products for the Super Ikonta, and the Contax family. Also, the W number served the Zeitlupe, W62244.

The movie industry today with its high- speed cameras might dwarf the Zeitlupe, but in its time the Zeitlupe was a giant. Apparently, a giant kept secret in the USA, where it was almost unknown, yet commercially available internationally. Member Mead Kibbey, my collecting mentor, did have one. A Zeitlupe belongs to the Photographic Museum at the University of California at Riverside thanks to Mead's generous donation.

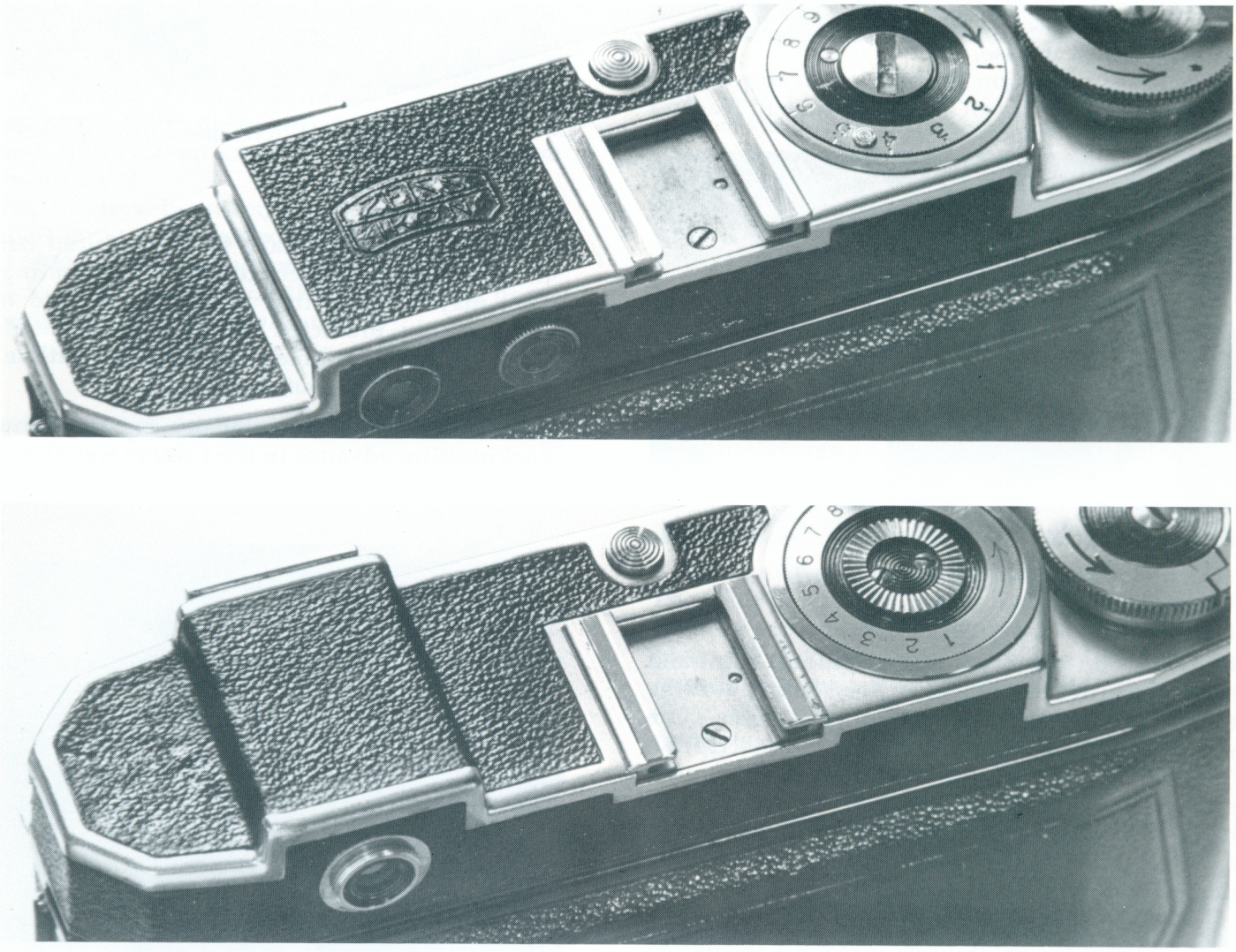


Schmalfilm-Zeitlupe and tripod with attached motor at the base. The motor activates the film speed timer attached to leg (left).



Vertical section of the Zeitlupe's action: 1 – Film reel, 2 – spool guide passes in front of, 3 – fluorescent bulb that activates the counter; 4 and 5 – spools guide the film over, 6 – the stage that captures the images via the lens 13, which received the images from the mirrored revolving drum 14, from 6 a sprocketed spool 7 guides the exposed film to 9 – the uptake reel.

VIVE LA DIFFÉRENCE



Super Ikonta B #Y71974 with 80mm f:2.8 Tessar (above) bears the embossed Zeiss Ikon logo that rarely appears in other Super Ikontas, according to Joseph Brown. For a discussion of similar curiosities, he suggests ZH, spring 1986, p. 10, where Maurice Zubatkin shows four Super Ikonta tops unembossed. Should you have a few in your collection, write to Joseph Brown. You'll find his address on your membership list. Or write to the editor.

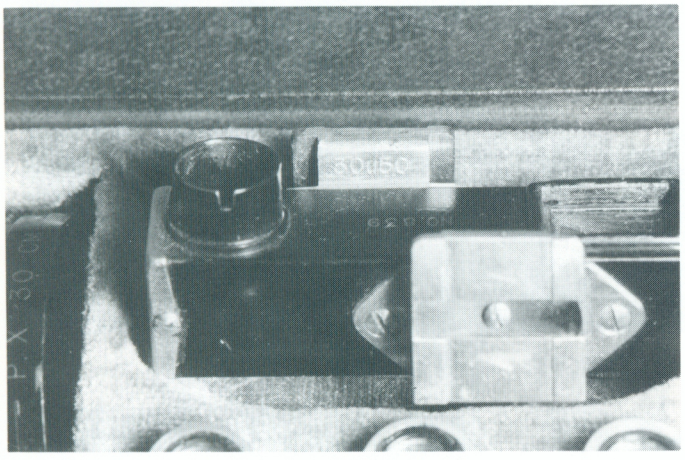
CLOVERMETER AND KNURLING QUESTIONS

Charles Barringer, Jr., Haddonfield, New Jersey

The prewar Zeiss Ikon Contamenter closeup focusing device in its many forms is common on dealers' tables at camera shows. The model 1343 (in several versions) for Contax I or II, the 1340 for Contax III, and the 1341 for Super Ikonta 6x6 show up regularly.

But some are rarer: the 1342 with 25.5mm screw-in Proxars for Super Nettel or Nettax, the 1339 for Tenax II, or the 1338 with the dovetail sliding foot, apparently for Super Ikonta 6x6 come to mind. I always take a closer look when I see a Contameter on a table, just in case.

My first impression of the piece featured here was that quality control at Zeiss Ikon had reached

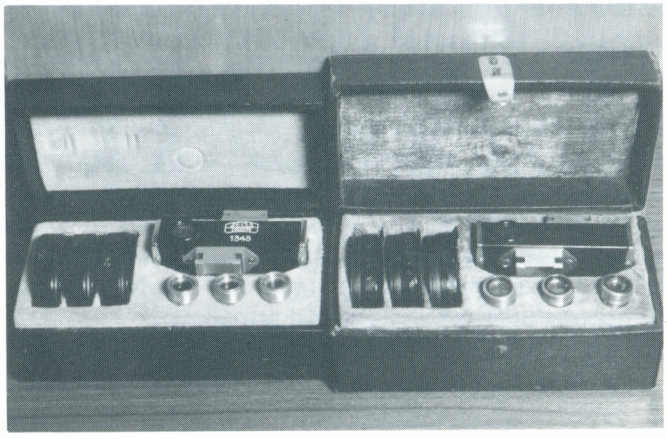


Clover unit closeup detail.

a new low on the day it was produced. Paint and chrome finish fell below the Zeiss norm, and the case was a bit rough. But all other features came straight from the book, down to the inscription "30 u.50" on one of the feet. One other number marked the instrument "No. 839". The lenses carried "PX 20 CM," etc. Obviously, the piece was not a Contameter, but a faithful copy masquerading under the name "Clover".

Not having heard the name before, I supposed it to be Japanese from the 1950s — the heyday of the Japanese copy. But why should anyone go to the trouble of recreating an accessory 20 years out of date? Lots of prewar Contax cameras and plenty of authentic Contameters were for sale in the fifties.

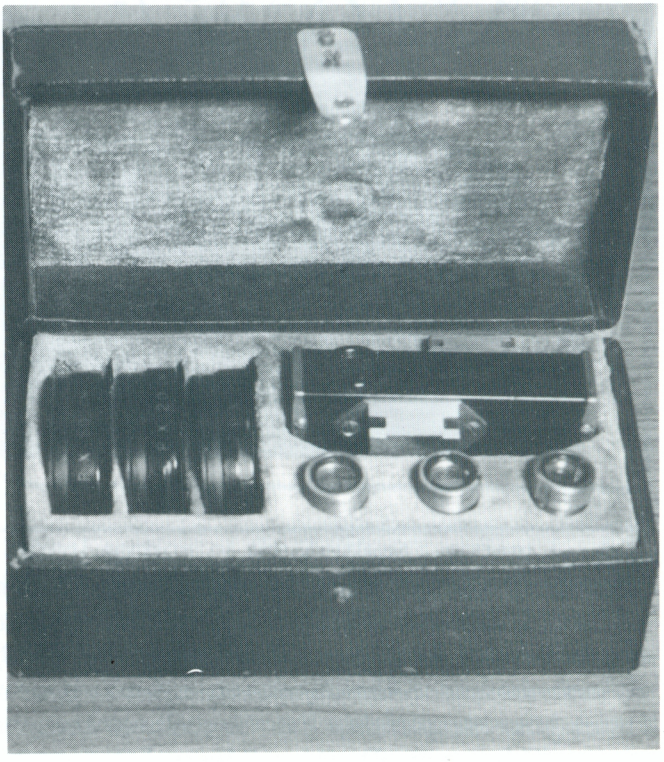
If the Clover wasn't specifically aimed at the Contax market, then why was it a slavish copy of the original? Why would a non-Contax user want a Clover? Even Zeiss Ikon redesigned the Contameter after the war to make it more versatile.



Contameter 1343 (left) and Clover (right)

Could the Clover have been produced before the war? If it had been, could it have continued? One may suppose that the factory would have aggressively protected its patents, since Zeiss Ikon surely was a force to be reckoned with in the thirties. Any ideas out there?

Here's another low-intensity mystery. Shutter cocking/film advance in the Contax was slow in



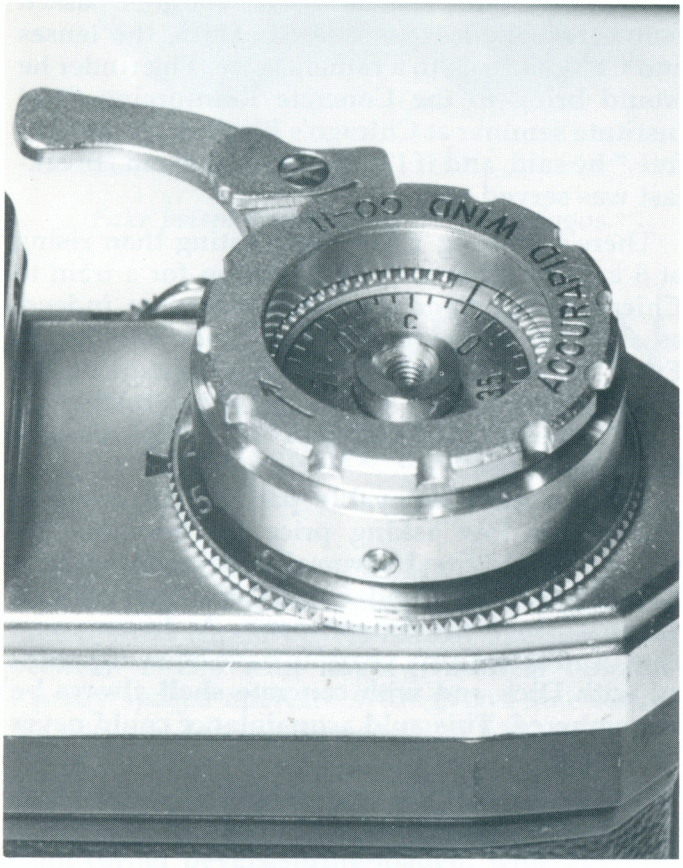
Clovermeter, a faithful copy of the Contameter.

the thirties, and by the fifties, the knurled knob became practically obsolete. One accessory manufacturer offered a solution in the form of the Accurapid Wind CO-11, illustrated. Never was it a howling success because it required a clockwise movement which was counterintuitive and awkward.

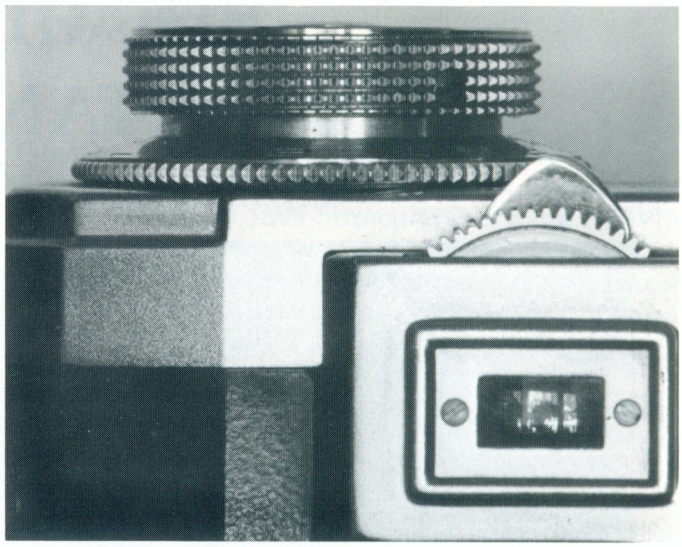
Close scrutiny of the wind knob of the Contax IIa suggested that Zeiss Ikon themselves might have realized the clockwise movement's drawbacks. The knob's gripping surface is in fact a very fine right-hand thread. Little imagination is required to visualize a simple ratcheted lever that could be threaded to the knob.

Of course, Zeiss Ikon's design wouldn't have competed with the Accura, but would have answered a higher calling. Speculation, based on experience with related accessories, suggests that surely another Zeiss Ikon product would have been beautifully designed, made, and priced accordingly. Heaven knows what they might have come up with!

The mystery, however, does not end. I'd long known about the threaded knurling on the 5520/6 and 5522/11 focusing adapters for the Contaprox, which accept the 1251 or 1252 magnifiers, never thinking about other applications.



Accurapid Wind CO-11 on Contax IIIa. Unit can be set with lever in any position.



Closeup of threaded knurling knob of Contax IIIa. Rewind knob of IIa is threaded, but not that of IIIa.

Once aware of these subtly hidden threads in other knurled surfaces, I began to find more and more. Out the window went the rapid-wind lever explanation for the ones of the Contax advance knob.

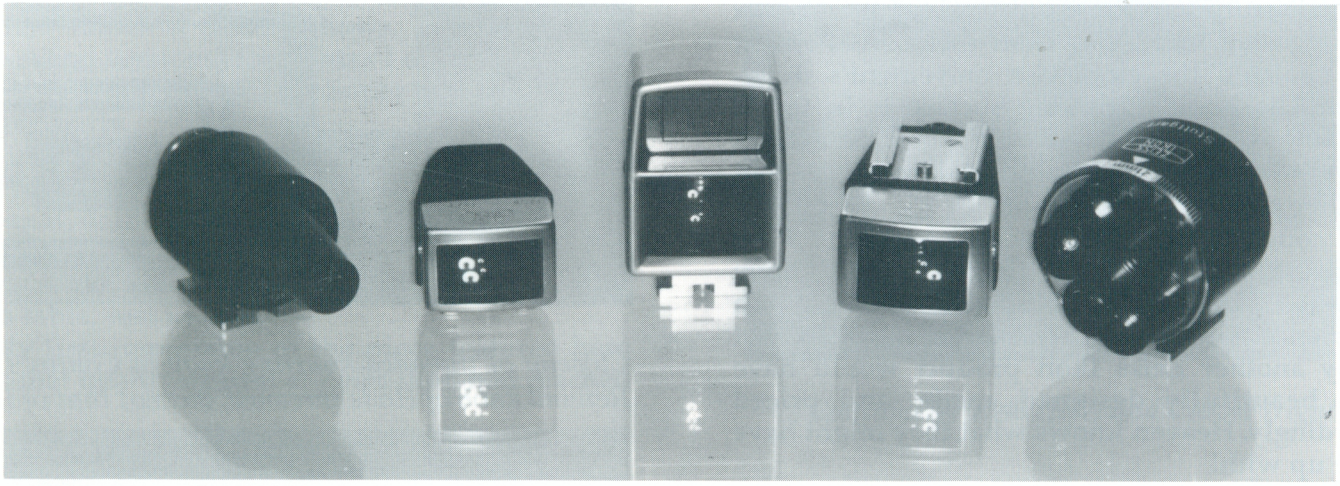
Look around and you'll see threads on many knurled surfaces coming from Zeiss and Zeiss Ikon. Could someone, perhaps with experience in machine design in lieu of specific knowledge of Zeiss practice, explain these hidden threads in knurled surfaces, where the thread is functionally superfluous?

More mysteries ought to be discussed and Zeiss Historica is an ideal forum for such speculations because for our membership it acts as a marketplace of and for ideas. So please submit your questions, your answers to keep the marketplace alive. We want to hear from you. I want to hear from you. You'll find us on the membership list.

Topogon 5.5 cm f:6.3, probably for a Theodolite. Note European progression of f-stop markings, very unusual for a Zeiss lens of this era.

SHOULD AULD ACQUAINTANCE BE FORGOT

Kirk Kekatos, Grayslake, Illinois



*A gathering of postwar Zeiss Ikon finders: (L to R) catalog numbers: 438 *85, 135mm) 425/5 (35mm), 427 Brightline (35-135mm) center, 435 (21mm), 440 Universal (21-135mm).*

Thirty years, working for the government in Chicago, first as an architect and project director and later as an analyst of government spending for products and services, provided many opportunities to meet many people.

Especially remembered is Dick, an architect and draftsman who followed the Frank Lloyd Wright style of architecture. A graduate of Illinois Institute of Technology, I followed the philosophy of Ludwig Mies van der Rohe, noted for the steel skeletal skyscraper, wrapped in glass. Dick was a good fellow who was otherwise misguided!

Dick had a special viewfinder that he used for his 90mm lens and sometimes with his 50mm lens: A Zeiss Ikon finder that worked something like a periscope was his description, showing fields of view of 35mm through 135mm lenses. "Stuttgart" and "427" were stamped on the finder, and it had a leather case.

Having just bought a Zeiss Ikon Contax IIa with a fine 50mm Sonnar f.2 lens, and the camera shop on East Jackson Boulevard (Chicago) still holding a mint 85mm f.2 Sonnar lens that beckoned, I knew in an instant that I wanted such a finder.

Several Contax cameras, lenses, and Contax finders later, the Contax Brightline Universal Finder, bestellnummer 427, was yet to be included. Dick kept his precious finder for his 90mm Steinheil. Also, he kept firm even when tempted with a Leitz Imarect Universal Finder as trade.

In 1993, after being retired and out of touch for ten years, a telephone call from Dick renewed our friendship. He'd read of my camera collecting in a Chicago newspaper. "I'm thinking of getting rid of my old Leica stuff. What's it worth?"

After sending him price information and mentioning that I'd like to make an offer for his Zeiss Ikon finder after seeing it, two months passed before he called. He'd sold his Leica, the lenses and CEYOO flash to a camera store. The finder he would bring to the Concrete Reinforcing Steel Institute seminar at Chicago's Bismark Hotel. "It's free," he said, and if I'd get there by 8 a.m., breakfast was served too.

There's nothing more invigorating than rising at 5 a.m. to drive to the RR station for a train to Chicago. The splendid breakfast was fine, indeed, as was the linen service and fancy silverware. Even the lecture on Mandatory Aspects of the Metric System in Design and Construction of New Federal Buildings kept me awake, despite total disinterest.

But the most enjoyable part of the day was Dick's low low asking price for his like-new Contax Brightline Universal Finder; his gifts: a Leica-Meter 2 set, and a rare 1937 book, "Leica Technik" by Curt Emmermann. A dream come true. And after thirty years, to have been acquainted with Dick and with concrete shall always be remembered. This auld acquaintance could never be forgot.

"Less is more" (Robert Browning's Andrea del Sarto of 1855 interprets Hesiod) was a popular aphorism of Ludwig Mies van der Rohe.

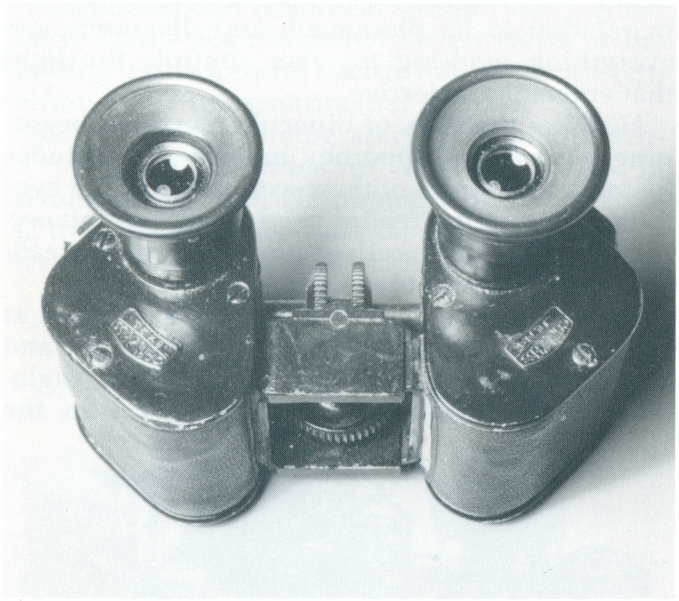
WHAT A FAKE!

If there's a desirable and hard to find collectible, there's lurking a temptation to produce a fake. With the Leica cameras, falsification became so rampant that publications appeared describing these "Leica Imitations". Why the fake is worth less than the original is puzzling.

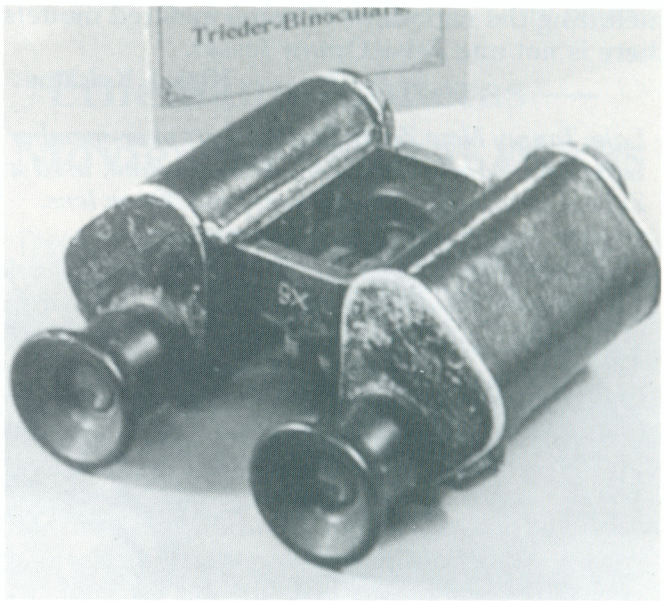
Illustrations show a prism binocular marked on the left eyecup cover with the standard Carl Zeiss Jena logo and on the right side with Carl Zeiss 8x25. To recognize the 9x15 instrument takes no expert.

A recent publication, Binoculars — Opera Glasses and Field Glasses by Fred Watson (reviewed on another page), shows the original Goerz Trieder of 1899 binoculars on page 15. Why someone takes the time and effort to destroy an old, rare and valuable instrument to produce a fake is hopelessly baffling. Surely, the original instrument, a 9x15 Trieder, is far more valuable than this ugly fake.

Nicholas Grossman
Rockville, Maryland



Fake prism binocular carries two logos.



Goerz 9x Trieder of 1899.

MORE ON CONTAFLEX I

Regarding "More on Contaflex I Variations" in the autumn 1995 journal. Review of my Contaflex/ Contaflex I cameras reveals the following external features:

A 66588/Synchro Compur MX (sppeds 1,2,5,10, 25)/CZ Tessar (.8mtr-inf)/male lens threads/strap lugs @ front corner bevels/narrow aperture lever between f4-f5.6 with large cylindrical boss/unequally spaced aperture settings/five line knurling on wind & rewind knobs. TYPE 861/24

D 56030/Synchro Compur MX (spds 1,2,5,10,25)/ CZ Tessar (3ft-inf)/male lens threads/straps lugs @ front corner bevels/spring-loaded, wide aperture lever between f4-f2.8 with truncated conical boss/ unequally spaced aperture settings/five line knurling; wind knob, four line knurling; rewind knob. TYPE 861/24z (?)

E 30581/Synchro Compur MXV (spds 1,2,4,8,15,30) CZ Tessar (3ft-inf)/male lens threads/strap lugs @ front corner bevels/spring-loaded, wide aperture lever beyond f2.8 with small cylindrical boss/equally spaced aperture settings/five line knurling on both knobs. TYPE 861/24A

L 67548/Synchro Compur MXV (spds 1,2,4,8,15,

30) CZ Tessar (3ft-inf)/male lens threads/strap lugs @ front corner bevels/spring-loaded, wide aperture lever beyond f2.8 with small cylindrical boss/equally spaced aperture settings/five line knurling on both knobs. TYPE 861/24A

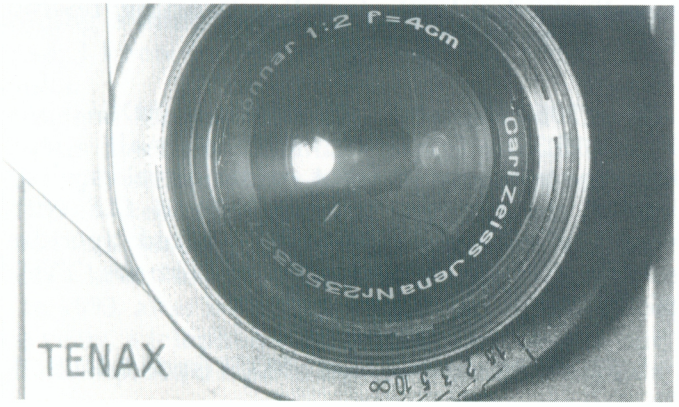
N 39153/Synchro Compur MXV (spds 1,2,4,8,15, 30) CZ Tessar (3ft-inf)/female lens threads/strap lugs @ sides/spring-loaded wide aperture lever beyond f2.8 with small cylindrical boss/equally spaced aperture settings/five line knurling on both knobs. TYPE 861/24B

Incidentally, could Mr. Nannichi be mistaken regarding the rarity of the Carl Zeiss Tessar in relation to the Zeiss Opton Tessar. Among my Contaflex collection of over 2 dozen cameras, including the variations of some metered models, there is not one Zeiss Opton Tessar.

Kirk J. Kekatos

Lake Taupo, New Zealand. Photographer-member Lawrie W. Morton, Foxton, New Zealand, used a Zeiss Contax IIa with a Sonnar F:2/50mm lens.

A prewar Carl Zeiss Jena Sonnar f:2 40mm lens in a Zeiss Ikon Tenax II from about 1936 were overhauled in Oberkochen in 1970. The lens was repolished and anti-reflex coated. Its performance today is impressive," writes member Lawrie W. Morton, Foxton, New Zealand.



SHIRE 317 ALBUM

BINOCULARS

OPERA GLASSES AND FIELD GLASSES

FRED WATSON

Just as one thinks the last book of binoculars has been written, Fred Watson's astonishing thirty-two page paperback appears. Binoculars, Opera Glasses and Field Glasses, replete with diagrams, photographs, concise intelligent captions, and an interesting readable text brings much information in a small package. This booklet belongs in every enthusiast's pocket.

Dr. Watson clarifies and demonstrates the variety of lens shapes: what each shape accomplishes in relation to its placement, and diagrams how everything working together controls the light that enters the objective.

He takes the story of binoculars from its beginning with Hans Lipperhey in 1608 and includes historical examples of these extensions of our eyes today. Should the reader need further assistance, he's included an excellent glossary, further reading, and museums to visit.

Fred Watson is an astronomer who worked at the Royal Observatories at Edinburgh and Cambridge before he took up a post at the Anglo-Australian Observatory. He specializes in the

development of high-tech optical instruments for use on the world's largest astronomical telescopes.

Try your favorite bookstore, or contact Shire Publications Ltd., Cromwell House, Church Street, Princes Risborough, Buckinghamshire HP27 9AA. Published: August 1995 (Shire Album 317, ISBN 0 7478 0292 0). Cost 2.25 British Pounds, about $4.00. Whatever is the current exchange rate. They accept Master Card and Visa. Telephone from USA: 011-44-1844-34-43-01. Fax: 011-44-1844-34-70-80. Ask for Patience Dizon.

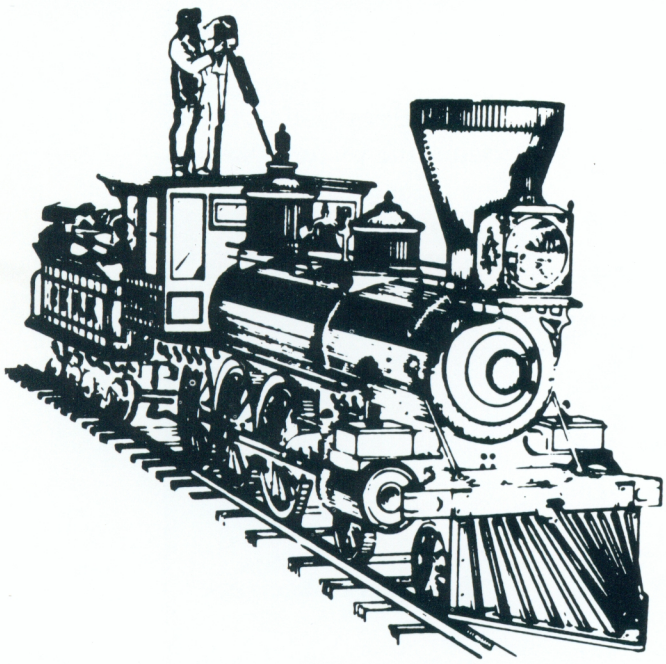
The Railroad Photographs of Alfred A. Hart, Artist

by Mead B. Kibbey

In September 1979 (4 months after Tom Shreiner's first meeting in Canada of Carl Zeiss enthusiasts that became the Zeiss Historica Society) Mead Kibbey represented the organization in Oberkochen, Germany, for the purpose of cementing relationships with the firm of Carl Zeiss. Acting as Ambassador is only one of his many talents.

Mead's involvement in collecting and cataloging 19th century photographs of California, specializing in the work of Alfred Hart of Sacramento (Zeiss Historica, spring 1993, p.3) led him to Hart's 364 numbered stereo views of the building of the Central Pacific Railroad's western portion of the transcontinental railroad.

Hart started the photography of this monumental project (742 miles of railroad track) in Sacramento in 1863. He photographed the crossing over the Sierra Nevada mountains, and completed the task in Promontory, Utah in May 1869.



In addition to the stereo views he cataloged at the beginning of his research, Mead also found Hart's work in other collections. Mead's knowledge and deep interest in railroads combined with his keen searching mind and love of photography resulted in this fascinating history of the railroad as seen through Hart's lens.

Hart's images together with modern views of the same sites reveal facets of construction processes: railroad hardware, multiracial workers side by side, and Indians observing engines that crossed their lands. Descriptions of Hart's images, photography equipment, and methods enhance the development of his story. He also mentions Zeiss a couple of times. (You search them out!) Each of the 238 pages is impeccably organized to bring the reader closer to the project.

This is a quality book. Fine textured paper, superb photographs, and engaging text rest within a forest green hardbound cover, bearing a stunning golden engine.

Available from the California State Library Foundation, 1225 8th Street, Suite 345, Sacramento, CA 95814: $55. plus $4. for shipping. California residents add $4.26 tax. Their telephone is 1-916-447-6331. For parcel post delivery overseas, one may add $15. This book has wide appeal: railroad buffs, historians, image collectors, camera collectors. You'll like it. It's a beauty.

Larry Gubas

Ernemann Cameras — Movie and Optical Works

by Peter Goellner

The history of Dresden's Ernemann-Movie and Optical Works (Ernemann-Kinowerke u. Optische Werke) with a catalog of significant products is divided into two parts.

Part I describes the man and his experience. It traces the journey of Heinrich Ernemann from his roots (born 1850 in Gernrode, about 55 miles NW of Jena) to Dresden in 1876, where he married, took over his mother-in-law's textile and ribbon business, and fathered five children.

In 1889, he sold the business and used the proceeds to become a partner in the photography business with Wilhelm Franz Matthias. Dresden at that time was pulsating with all things photographica. He felt the heartbeat coming to life there and switched products.

Part II details his most significant products, continues with patents from 1889-1926 (their numbers and descriptions), and in alphabetical order lists the products' trademarks, ending with sources and index.

In effect, the book presents an entire catalog of the firm in explicit detail before it became part of Zeiss Ikon in 1926. Excellent photographs of the outstanding cameras in color and in black and white accompany the text with additional personal photos of the family from the family's archives.

For all interested camera buffs and especially for Ernemannophiles, this book is vital and in German. It contains lots of information, is artfully assembled and comes highly recommended. Publisher: Wittig Fachbuchverlag, Chemnitzer Strasse, 10, D-41836, Hueckelhoven, Germany.

Larry Gubas

A late Weimar-era ad from: Taschenbuch der Photographie, by Dr. E. Vogel, 1930 edition revised by Karl Weiss.

Achten Sie auf
die Inschriften
»Zeiss«, »Tessar«
in der Linsen-
fassung

Look for the inscriptions
"Zeiss" "Tessar"
on the camera lens ring

Je besser das Objektiv, desto bessere Bilder beschert uns die Kamera! Daher wähle die Kamera mit

The better the lens, the better the pictures we get from the camera! So choose the camera with

ZEISS Tessar

Das scharfe Kamera-Auge

The camera's keen eye

Alle Photo-Fachgeschäfte liefern gute Marken-Kameras ausgestattet mit Zeiss – Objektiven

All photo dealers carry brand name cameras with Zeiss objectives

Druckschrift Fo 74 kostenfrei von Carl Zeiss, Jena – Berlin – Hamburg – Köln – Wien

Brochure Fo 74 free of charge from Carl Zeiss, Jena - Berlin - Hamburg - Cologne - Vienna

- From the Zubatkin Collection via Joseph Brown