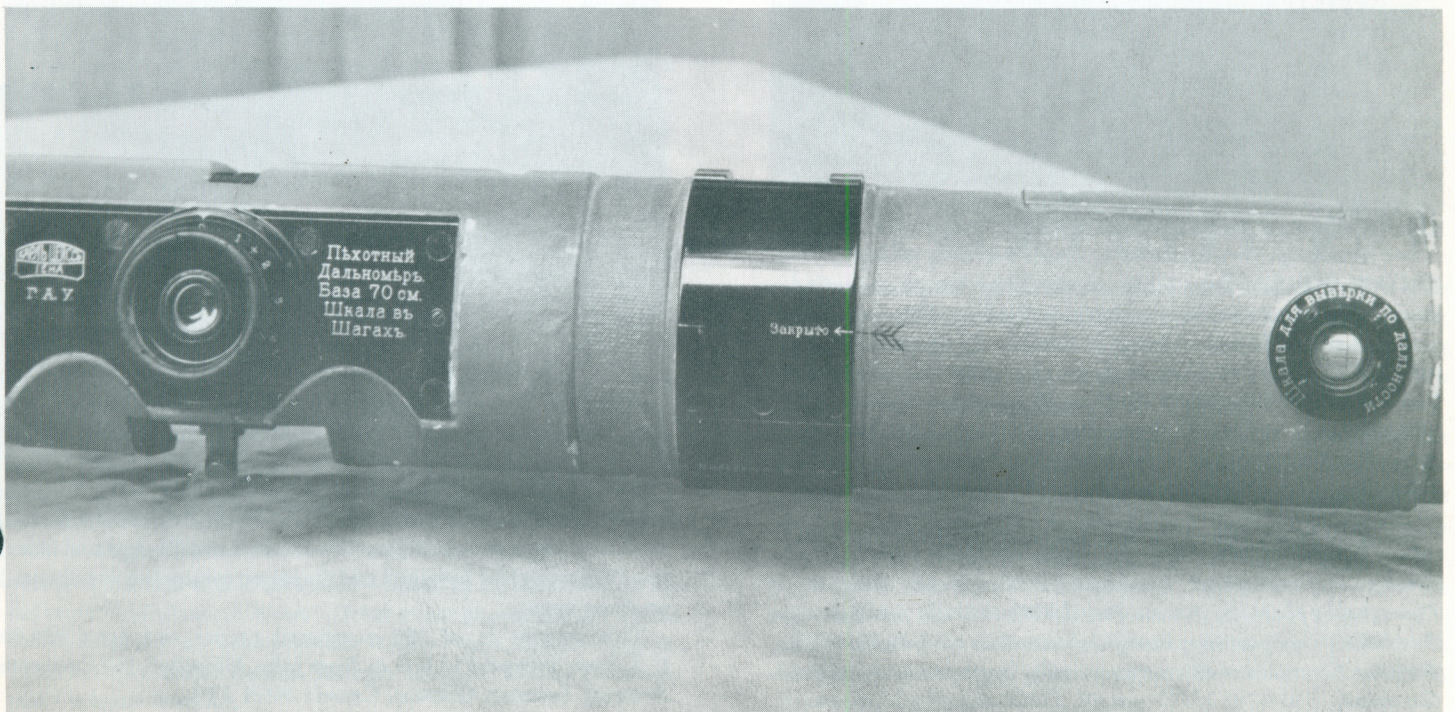
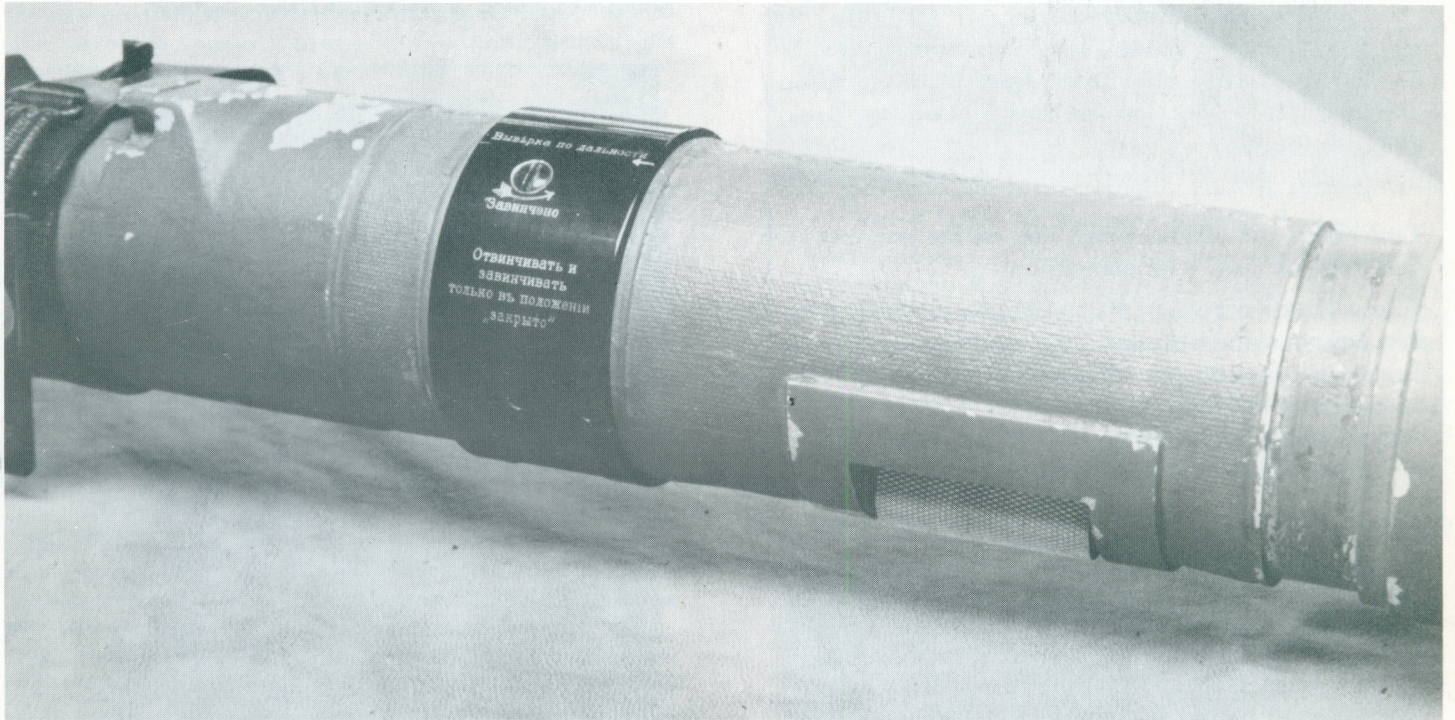


ZEISS HISTORICA

The Journal of the Zeiss Historica Society • Volume 6, Number 2 • Autumn, 1984



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

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Lawrence Gubas, 51 Eileen Way, Edison, N.J., 08817, USA Annual Membership Dues: North America, \$20., Overseas, \$25. Dues include subscription to Zeiss Historica Journal.

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ON THE COVERS

FRONT COVER. Two views of the Zeiss Em 34 rangefinder described in Nick Grossman's article in this issue. The rangefinder was probably built and shipped to Czarist Russia before 1914.

BACK COVER. Full-page ad showing two accomplishments of Zeiss twin-lens technology: the Contaflex and one of the long line of Ikonflexes — in this case, the Ikonflex II. Ad is from the back cover of the English-language Zeiss Magazine, April, 1936. From the collection of Archivist Larry Gubas.

ILLUSTRATION SOURCES

Front Cover, Nicholas Grossman. • California Museum of Photography photos by Marion Husid. • Illustrations for "Zeiss: The Post-War Years", courtesy Larry Gubas. • Zeiss level, Model I photo, Nicholas Grossman. • Microscope catalog pages, courtesy Nicholas Grossman.

1984 ANNUAL MEETING

The Society's 1984 Annual Meeting was held, for the first time, on the West Coast. It took place in Burbank, California, at the Burbank Airport Hilton Hotel, Saturday, September 15, 1984.

Some twenty members were present, including three officers: President John Alldredge, Treasurer Mead Kibbey, and Journal Editor Bill Stone.

Highlight of the meeting was Dr. Stan Bishop's slide presentation of some of the treasures in his incomparable Contax collection. Dr. Bishop also told of his search for the elusive Contax gunstock mount, and he has promised to share its details with the membership in a forthcoming issue of the Journal.

The meeting was held in conjunction with a large West Coast show on the following Sunday, that of the American Society of Camera Collectors at Machinists Hall in Burbank.



NOW AVAILABLE

A facsimile reproduction of the short form 1932 Canadian Zeiss Ikon general products catalogue, complete and unabridged. 87 pages with original page numbers, printed on glossy coated stock and properly bound with card covers. The original catalogue was printed in Germany and is similar to the English Zeiss catalogue of the mid-1930's.

There are cameras, enlargers, accessories, film, etc., shown in well detailed illustrations with prices in 1932 Canadian dollars. Both new Zeiss Ikon designs (like Kolibri and Ikonta) and older, pre-1926 types like Ermanox and the stereo cameras are represented on these pages.

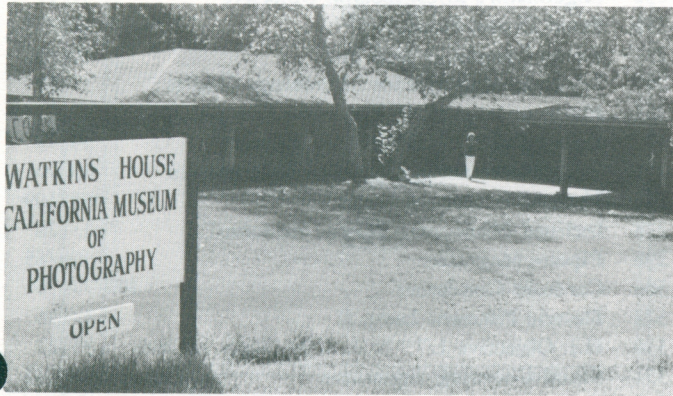
This reprint is of 500 numbered copies and costs \$20.00 U.S./copy postpaid in U.S.A. from John Alldredge, 362 Delaware Avenue, Toronto, Ontario, Canada M6H 2T8.

THE CALIFORNIA MUSEUM OF PHOTOGRAPHY

Bill Stone, New York City

Major museums in this country that are devoted solely to photography are few and far between. Few: the International Center of Photography in New York City, Eastman House in Rochester, and the California Museum of Photography. And surely far between, since the latter is located some three thousand miles to the west of the other two.

The California Museum was established in 1973 by the University of California, Riverside. Riverside is situated some 50 miles east of Los Angeles . . . an easy drive via freeway to the single-story Watson House which is the Museum's current home.



Exterior of the California Museum of Photography.

The Museum houses collections of both images and equipment. Its major collection of equipment was acquired early in its life as a resource for campus teaching: the Robert Bingham collection of 3000 cameras and other pieces of photographic apparatus.

In 1977, the Museum acquired the unique Keystone-Mast Collection of some 350,000 stereographs and negatives covering the period from 1860-1960. This collection is the largest surviving assemblage of its kind.

The University print collections, housed in the Museum, consist of over 10,000 prints. They include such rarities as a complete set of



Registrar Dan Meinwald with Contax outfit.

prints — the only one in existence — made by Edward Weston for his book "Idols Behind Altars". Other major photographers whose works are in the collections include Walker Evans, Renger-Patzsch, Francis Frith, Ansel Adams, Barbara Morgan, Robert Doisneau and Carleton Watkins.



Journal Editor Bill Stone with Museum's Ermanox.

Several members of Zeiss Historica have been instrumental in augmenting the Museum's collection. Among them is Mead Kibbey, who is a member of the Museum Chancellor's Committee. One of his donations: twelve copies of Stieglitz's "Camera Work".

The Museum is hard-pressed for space. Most of the equipment is currently housed in storage facilities in Watkins House, and is not on display. But members of Zeiss Historica will find themselves welcome, and those with specific areas of interest will find the staff cooperative and helpful.

The Museum presents between twelve and eighteen exhibitions each year — exhibitions of both images and equipment.



Main gallery displays both images and equipment.

Membership in the California Museum of Photography is open to all. Members receive invitations to the Museum's receptions, lectures, films and other public events. A Participating Membership is \$25, includes a one year subscription to the Museum's handsome Bulletin.

The Museum's galleries are open to the public free of charge six days a week. (Monday-Saturday 10AM-5PM, Thursday 10AM-7PM). For researchers and others who wish to view or study works not on exhibition, the Keystone-Mast Collection is open by appointment Monday-Friday, 8 AM - 5 PM. The Bingham Collection and the University Print Collections are open by appointment 10 AM - 2 PM daily.

The Museum's Director is Charles Desmarais. Its address: California Museum of Photography, University of California, Riverside, California 92521. Phone: (714) 787-4787.

CARL ZEISS MICROSCOPE CATALOGS

Nicholas Grossman, Rockville, Maryland

It is well known that Carl Zeiss started his activities in a microscope shop, and that his early products related to microscopes and auxiliary equipment. It is equally well known that after Ernst Abbe joined the firm, the product line grew both in variety and in scope. The microscope line, however, remained one of the main pillars of the Zeiss establishment.

Therefore, it is not surprising that the microscope literature published by Zeiss is very extensive. The purpose of this compilation is to provide the basis of a listing of the microscope literature that this writer was able to identify. Hopefully, other Zeiss collectors will be able to fill in the gaps and provide corrections if needed. Thus, we may eventually arrive at an authoritative listing of all the Zeiss microscope publications.

My starting point was the General Catalog, which had the following title: "Carl Zeiss-Optische Werkstaette-Jena — Microscopes and Microscopic Accessories 32nd Edition — 1902." This catalog was published in English, measured 7¼" × 10½", and was hardbound with 162 numbered pages. This type of general catalog described the overall product line, and then gave references to specific literature for the specialist who required more detail.

By the time the 35th edition was published in 1913, the product line had expanded to such an extent that Zeiss chose to condense the main catalog to 127 pages, and refer the specialist to subsidiary publications. Thus, for example, in the 1913 Catalog we find this listing: "Stand IS. Stand IS differs from Stand I in that the stage is attached to a fitting . . . etc." and concludes, "For description of this stand see our booklet Mikro 236."

Mikro was naturally the identification abbreviation for the Microscope ("Mikroskop" in German) Division. The writer is of the opinion that about 500 microscope catalogs were published by Carl Zeiss prior to the War. Based on a careful review of all the references available, the listing below was compiled. It should be noted that, in general, once an identification number was assigned to a publication, this number remained unchanged, but revised editions were identified with revision letters.

Unfortunately, in some cases, the same publication number was reassigned to different equipment — but this seems to be the exception. One further note: the compiler had access mostly to the English language catalogs and literature. Thus it is quite possible that unless we go back to the original German sources, some gaps will remain, because it is not likely that every catalog and document was also published in English.

The scheme of the listing is: Mikro publication number, title of the publication or description, reference to the General Catalog by catalog number (not by publication year) and the page number.

MIKRO NR.	DESCRIPTION	REFERENCE/PP.
10	Counting Chambers/Apparatus, Accessories	35/91
15	Abbe Illuminating Apparatus	35/28
71	Use of Stage Centering Slide	35/41
81	Microscopes for Meat Inspection	35/113
89	Vertical Illuminators	35/38
93	Stand III	13/54
114	Abbe Apertometer	400/43
116	Abbe Test Plate	400/42

123	Attachable Mechanical Stage (Stands D & E)	400/76
125	Abbe Spectroscopic Eyepiece	400/90
170	Ultra-Violet Light Microscopy	35/31
183	Stand IV	35/57
188	Magnifiers, Lens Holders	35/112
192	Gas Heated Crystal Condenser	35/100
229	Slit Ultra Microscope	400/100
230	Dark Field Observation/Dark Field Condensers	400/44
232	Engelmann's Microspectral Objective	35/97
236	Stand IS and Stand S	35/54, 400/37
257	Stereo Camera — Druener	400/56
259	Selection of Optics for Microscope Outfits	35/61
264	Photo-micrographic Apparatus (7th Ed. 1912)	35/73
270	Stereo Tubes on Dissecting Stands	35/73
273	Stage Micrometers, Eyepiece Micrometers	35/90
277	Nernst Microscope Lamp	35/109
278	Inclined Monocular Tubes (Monokni)	1/128
298	Pipette Magnifier	400/65
306	Cardioid Condenser	400/72, 99
322	Electric Filament Lamp II	1/136
330	H.I. Objective 1/7" N.A. 0.90 (Supp. to 184)	35/22
351	Blood Counting Apparatus	400/82
352	Cedarwood Oil	400/44
360	Double Eyepiece	400/88
361	Comparison Eyepiece	400/89
363	Small Capillary Microscope	1/141
365	Dark Field Observation/Condensers	400/44, 98
371	Device to Test Immersion Oil	400/44
373	Siedentopf 'Phoku' Eyepiece (Capillary Photography)	400/88
374	Micromanipulator	400/92
375	Stereo Dissecting Stand X	400/51
378	Microscope Lamps	400/94
386	Condenser Stereo Stop	400/69
393	Microscope Lamps	400/94
401	Stand G	400/34
404	Stand D	400/16
405	Stand E	1/20
406	Ring Condenser	400/73
407	Dark Field Observation/Condensers	400/44, 98
410	Micro Spot Arc Lamp	1/140
411	Stand E	400/21
412	Bitukni Binocular Attachment	400/88
418	Stand F-incl. Photomicrographic Stage F	1/32
425	Stand G	1/36
445	Travel Microscope	1/46
464	Binocular Stand XII	1/82
476	Epi Illuminators/Epi Objectives	1/61
478	Inclined Binocular Tube (Bitukni)/ Monocular Tube	1/128
479	Capillary & Skin Microscopes/ Camera Attachments	1/143
486	Microscope Filament Lamp IV	1/138
488	Stand H	1/39
492	Stand L	1/43

CARL ZEISS JENA

Microscopes and Accessories for the Microscope



35th Edition
1913

Reference: *Mikro 184.*

No. 12.0670. Centring Revolving Vulcanite Stage.

This Stage requires for its adaptation a Stage Centre Housing No. 12.0660. Its motion of rotation cannot be locked. The stage has a diameter of 11.5 cm.

No. 12.0680. *Large Mechanical Stage (Fig. 18).

The range of motion amounts to 50 mm in one direction and 35 mm in the other, and in either direction the displacements can be read by scales and verniers (Zeitschr. f. wiss. Mikrosk. II, 301—304, 1894). The stage is fitted with a third scale with vernier showing the position of the movable stop for the object slide. This scale renders the apparatus useful as a Finder. It assists also in the operation of centring the stage by means of a **Centring Glass**, which is an **Object Slide with a Cross ruled upon it**. Directions for using this Centring Glass are given in our leaflet *Mikro 71*.

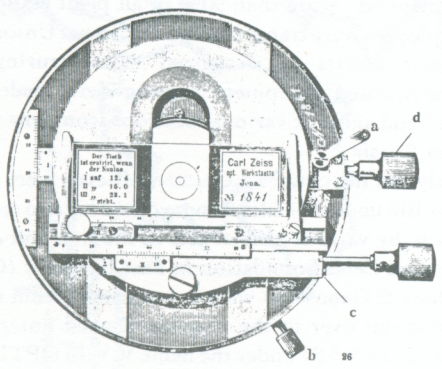


Fig. 18.
Large Mechanical Stage No. 12.0680.
(1/4 Full Size.)

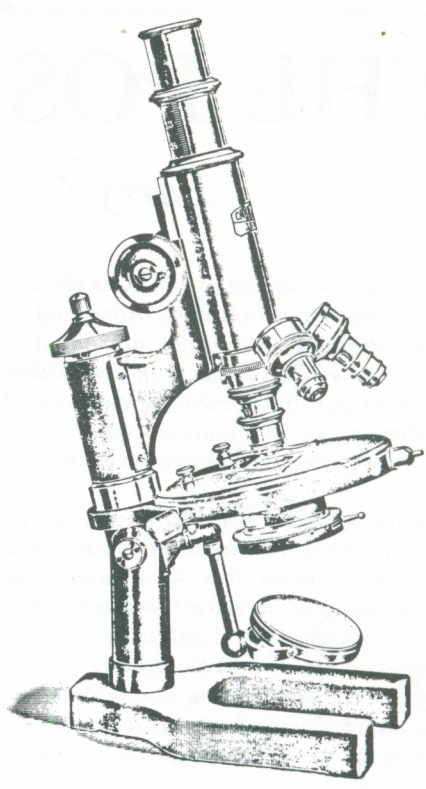


Fig. 27.
Inclined Stand VBA
with Revolving Nosepiece, Three Objectives and Eye-piece.
(1/4 Full Size.)

Of Devices for Mechanically Displacing the Object along the surface of the microscope stage proper we supply, amongst others, the following:
No. 12.0800. *Small Attachable Mechanical Stage (Fig. 19).

This stage, or more correctly, object displacer, is constructed on the principle originated by J. MAYALL jun. (*Journ. Roy. Microsc. Soc.* (2), 5, 122, 1885) and serves to move the object slide along the surface of the stage in two directions at right angles to one another. It consists of two slide fittings, one of which travels upon the other at right angles to its sliding motion. Both are actuated by milled heads situated at the side. The displacements of the objects can be read off by means of two verniers and scales. The range of the motions, with the sliding milled head a pulled out to clear the slide fitting, is 50 mm in the trans-

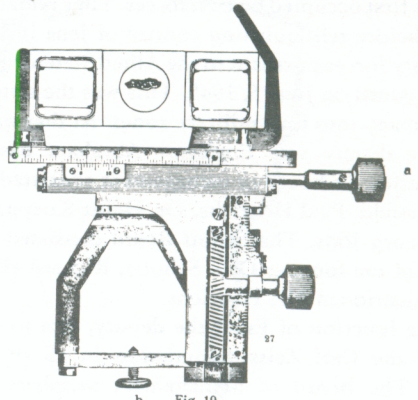


Fig. 19.
Small Attachable Mechanical Stage.
(1/4 Full Size.)

verse direction and 30 mm in the frontal direction at right angles to it. The apparatus is available for use as a **Finder**. Directions for using this stage are given in our pamphlet *Mikro 123*.

The Small Mechanical Stage is intended for use with Stands IVA, IVB, IVC, VA, VB, VC and VD. It attaches to the base of the slow motion prism post by means of the set screw *b* shown in Fig. 19. It is advisable to make a small indentation where the point of the screw meets the prism base so as to cause

No.	Marks	Codeword
12.0660 Stage Centre Housing for Nos. 12.0670 and 12.0680	17.—	Micarent
12.0670 Revolving Vulcanite Stage for Stands I, III and IV	25.—	Micaremus
12.0680 Large Mechanical Stage with Centring Glass for Stands, I, III and IV	100.—	Miaulerent
12.0689 Centring Glass for use with the Large Mechanical Stage, in case	4.—	Micarelle

No.	Marks	Codeword
12.0800 Small Mechanical Stage, without case	85.—	Micaretis
12.0800k Case for No. 12.0800	5.—	Micariae

ZEISS: THE POST-WAR YEARS

Larry Gubas, Edison, New Jersey

Many mysteries pique the interest of collectors of Zeiss cameras with regard to the pre-war, post-war and wartime products of Zeiss Ikon. One of the deepest is the firm's situation as it existed immediately after the war. This article is an attempt to clarify this situation as much as possible, presenting the personalities and events in overview so as to eliminate confusing claims and counterclaims of the Eastern and Western companies using the name Carl Zeiss.

As the days of the Second World War were finally ending, the American Army removed the staffs of certain war materiel manufacturing firms to what they knew would become the American Military Zone after the end of hostilities. They evacuated both the management and technical staff from Carl Zeiss in Jena, the Schott & Genossen glass works from Jena and the Zeiss Ikon firm from Dresden. The intertwining relationship here was that Carl Zeiss, Jena manufactured the photographic lenses for Zeiss Ikon cameras using the special optical glasses produced by Schott & Genossen.

The fact that each company was owned and managed by the Carl Zeiss Foundation (situated also in Jena) was only incidental to American military purposes. The military's only thought was to produce for the Japanese war (which everyone thought would still be a long hard effort) specific military hardware (especially aerial cameras) in which Germany had no equal. This evacuation, however, had a profound long term impact on the three interwoven companies, the evacuees, and their brethren left behind in what was to become East Germany.

Jena Occupied

Beginning on April 13, 1945, the city of Jena was occupied by the Allies. It was first occupied by U.S. forces. They remained for some 2½ months before relinquishing control of Jena in July, 1945, to Soviet military forces pursuant to the Allied Statement on Zones of Occupation issued on June 5, 1945. This was the statement which divided Germany into four military zones. At that time, the Zeiss Foundation's deputy was Professor Abraham Esau, who was located in Berlin. Its board of management consisted of Professor Walter Bauersfeld, Paul Henrichs, Dr. Heinz Kueppenbender and Professor Georg Joos. The Schott Board consisted of Dr. Erich Schott (son of the founder Otto Schott), Richard Hirsch and the previously mentioned Mr. Henrichs.

The prime function of Esau, the deputy, was to represent the interests of the Carl Zeiss Foundation in all of its different enterprises. The Board of Management members had specific management responsibilities and lifetime employment contracts with the foundation.

In mid-June, when it was evident that Jena was shortly to become a part of the Soviet Zone, American military authorities evacuated all of the members of the Board of Management of the Zeiss and Schott firms and approximately 120 of their top scientific, production and administrative personnel to Heidenheim, Wuerttemberg, in the U.S. Zone of occupation. Here they were to establish a factory to manufacture war materiel at the direction of

the U.S. Army. Strangely enough, the factory building assigned to these Zeiss evacuees had belonged to a firm named Leitz. But it was not the Leitz firm that comes to mind.

Similarly, in Dresden, the Zeiss Ikon managers and technicians were evacuated. These managers and scientists did not depart voluntarily but under American military orders. Under the terms of the German unconditional surrender, they were bound to obey such orders. At this time, the members of the Zeiss board of management designated three senior employees, Dr. Friedrich Schomerus, Viktor Sandmann and Dr. Hugo Schrade, to act in their behalf in Jena during their absence. The Schott firm did very much the same thing.

All the Zeiss and Schott management were attempting to do was to hold together their companies. The companies' main assets were situated in what would become East Germany. But their senior management and scientific staffs had been forcibly taken into what would become West Germany. Many intermediate steps and actions would be taken to try to insure the integrity of the Carl Zeiss Foundation yet permit it to exist in both socialist and capitalist environments. Some of these seem confused and contradictory, but they were taken with the survival of the Company and the Foundation in mind.

In December, 1945, the Soviet military authorities sequestered all of the Soviet Zone assets of the Zeiss and Schott firms as war reparations. Their pretext was that the plants had supplied materiel for the Nazi military effort. Notice was given to the Zeiss works and Dr. Schrade was appointed sequesterator.

The Dismantling






Then, beginning on October 22, 1946, the Zeiss and Schott plants in Jena and the Zeiss Ikon plants in Dresden were almost totally dismantled. More than 90% of all plant equipment and over 300 employees were transported to the Soviet Union. I have heard many horror stories of destroyed manufacturing capacity and of sophisticated equipment bearing Zeiss trademarks lying in the mud and snow at various locations from Jena through Poland and into Russia.

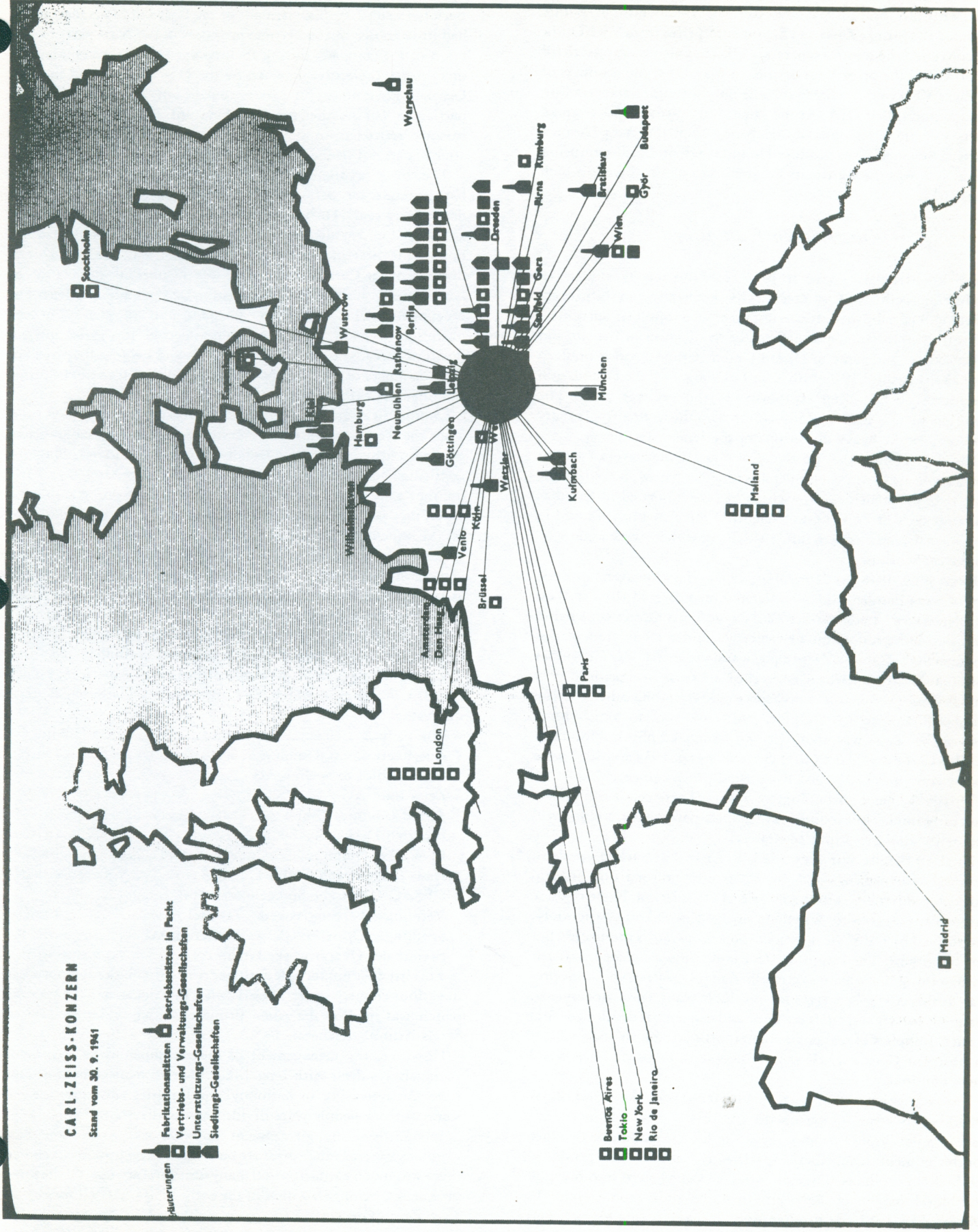
Early on, the new East German officials were eager to begin their new life under socialism and worked hard to restore these factories. Then, by various official acts in the first half of 1948, the assets of the Carl Zeiss Foundation in East Germany (Carl Zeiss, Jena, and Schott & Genossen) were expropriated from their private owners and given over to the People's Owned Enterprise (Volkseigener Betrieb or VEB) under the name V.V.B. OPTIK. This was the East German national association of people's-owned enterprises engaged in the manufacture of mechanical and optical goods under the direction of Dr. Schrade.

For all intents and purposes, the Carl Zeiss Foundation in East Germany was now destroyed. The East Germans would attempt to revive it later when they realized what prestige and trademarks they had lost by their action. But by then, Western Zeiss was well in control of the situation. Similarly, Zeiss Ikon became Zeiss Ikon — VEB. But it quickly disappeared into a series of variously-named

CARL-ZEISS-KONZERN

Stand vom 30. 9. 1941

- 
 Fabrikationsstätten
- 
 Betriebsstätten in Pacht
- 
 Vertriebs- und Verwahrungs-Gesellschaften
- 
 Unterstützungs-Gesellschaften
- 
 Siedlungs-Gesellschaften



Contemporary map shows Zeiss and Zeiss-allied firms as of September 30, 1941.

East German camera collectives.

In November, 1949, the holdings were renamed Optik Carl Zeiss Jena VEB. In May, 1951, the German Democratic Republic separated the former Zeiss and Schott enterprises from VVB Optik and converted them into a separate VEB. They also attempted to fill the offices of the prior Foundation. In May 1954, the products of the Zeiss VEB were available for sale only through a state trading organization called DIA. At the same time, various East German courts were making opposite decisions from the West German courts. These decisions produced long-term worldwide confusion as to which was the legitimate Foundation and who owned which trademarks.

Oberkochen Established

Meanwhile, from July 1945 to June 1948, the new West German production facility of Carl Zeiss at Oberkochen was in the process of becoming established. It was not yet able to supply or sell optical and scientific instruments. A formal organization of the site and facility under the name of Opton GmbH (GmbH = stock holder's company) began in 1946 with a staff of 200 under the Foundation procedures as had been customary in the pre-war years. The changing of this title to Zeiss-Opton GmbH occurred in January 1947 despite the heavy objections of the Jena constituency.

The first commercial products of Zeiss Opton were eyeglass lenses made at Oberkochen and photographic lenses marked Tessar from another branch factory which had been opened in Coburg. The first sales of Zeiss Opton scientific instruments produced in Oberkochen were made in June 1948. By now there were some 800+ employees working.

From June, 1948, to September, 1953, when the assets of Zeiss Opton were merged under the legally reconfirmed (by the West German courts) trademark of Carl Zeiss, Zeiss Opton engaged in the sales and production of materials under many trademarks. These included Opton, Zeiss Opton, and the letters "ZO" (together with familiar trademarks used by the Carl Zeiss firm prior to 1945 such as Tessar, Sonnar, Umbral and Punktal, among others). From this point on, the Zeiss Opton trademark was no longer used. Instead Carl Zeiss was used, with no associated physical location. In 1953 Carl Zeiss had its first profitable year. 1954 and 1955 were losing years, but Carl Zeiss has posted profits since 1956.

This is the basic chronology of events. Their detail and impact are nearly impossible to interleave in these paragraphs, and so I will deal with some situations separately.

At all of the pre-war sites, the U.S. Army had packed up plans, designs, and materials and put them into railroad boxcars and trucks for shipment into their Zone of Occupation. None of these shipments ever arrived. Whether they were carted off as war booty, intercepted by the Soviets, or met some other fate is interesting but not important. The important fact is that the evacuated staff left with nothing but what was contained in their minds and some pre-war cash. All specifications, product plans, test documents, materials tolerances, etc. were gone and had to be redeveloped from scratch. Supplies of metal, glass and tools were almost non-existent in post-war Germany. How were people to be paid? How could Zeiss continue?

The most important step made then was that Carl Zeiss Oberkochen went forward with completely new product plans based on developing technology while Jena attempted to produce for the moment. Jena took the specifications on hand and produced 1935-41 era products. They did not take strong steps into research and development of new products for quite some time. In Oberkochen, by 1951, production plans were made for new and unique scientific instruments of all kinds.

Postwar Personalities

Back in the mid-1930's, members of the Board of Management had had little choice but to become members of the Nazi party for the good of the company during the pre-war and war years. Many of them were, therefore, detained by the U.S. military and the new German government and questioned. Dr. Kueppenbender, in particular, was detained for several months. Dr. Joos, for whatever reasons, retired from his position in June of 1945, immediately after his arrival in the American zone.

The three gentlemen left behind in Jena were of various backgrounds. Dr. Schomerus had been a member of the Firm for nearly forty years. He had served primarily as an administrator and as a sort of a firm historian. He was by no means a young man and not in the best of health. Mr. Sandmann was the commercial director of the Carl Zeiss firm. He was the only one of the three to have signing authority ("prokurist"). Dr. Schrade had been Dr. Kueppenbender's immediate assistant and in charge of the planning division. All three were selected for these interim positions because of their backgrounds, and because they had not been members of the Nazi party and could therefore not be prime candidates for impoundment.

Communications between East and West were not always easy. Thus there were periods when senior management in Oberkochen was not always available. Overall control deteriorated. The Jena gentlemen needed more authority to hold their end together. Early on, they were made "prokurist"(s) to give them signing authority. Later, they were given the power of attorney in an attempt to ward off the impending seizure of the Foundation's assets. This caused a great deal of confusion as to who had control and who did not have control of the Company. Dr. Schrade seemed to take this situation as an opportunity for personal growth. But there was always hope that unity could be preserved.

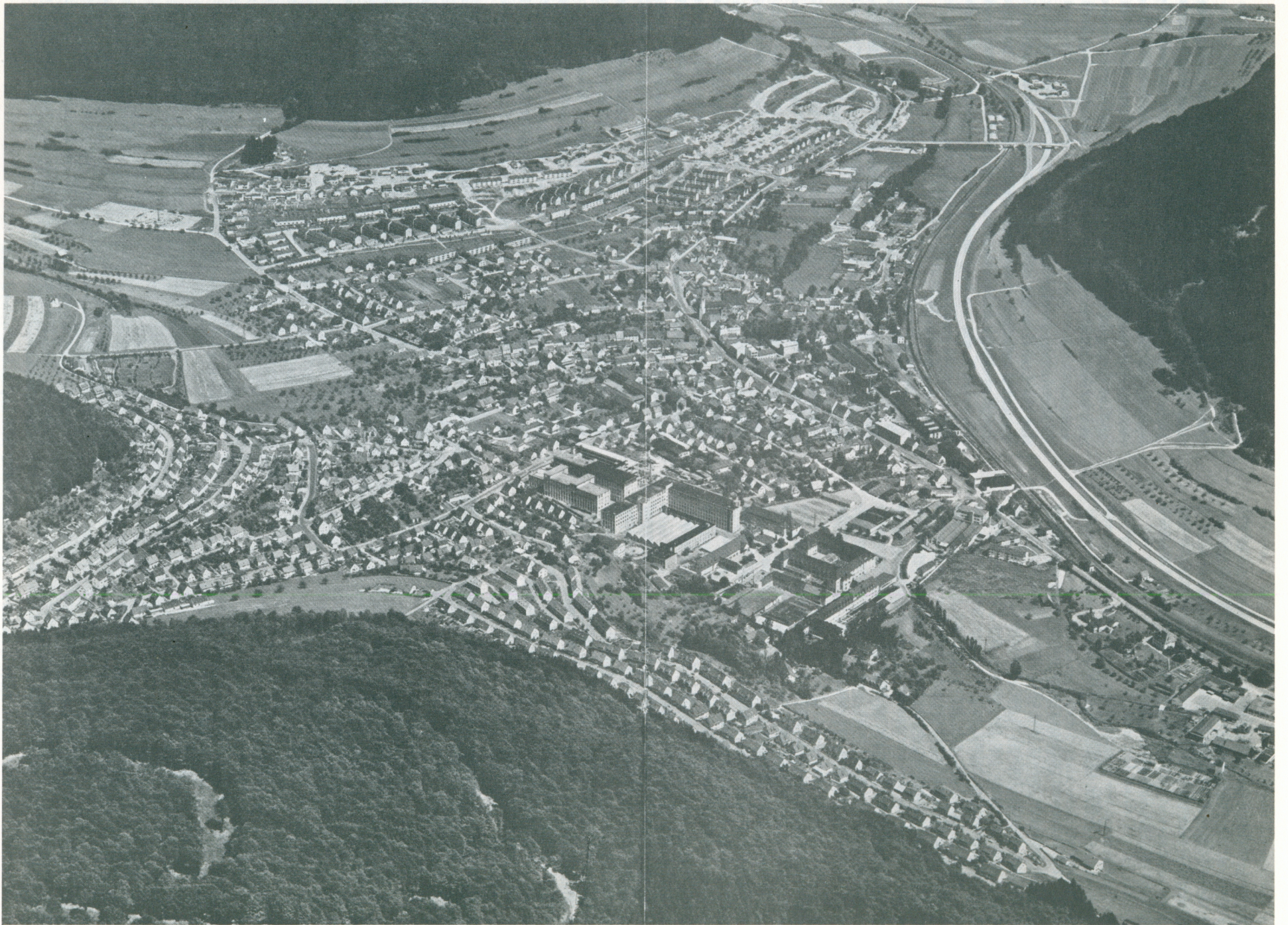
The Soviet Zone assets consisted of the Zeiss and Schott factories in Jena and nearby manufacturing facilities in Saalfeld and Gora. There were however, major corporations in the American, French and British Zones in which the Carl Zeiss Foundation held major interests:

Company	Foundation Holdings
Anschuetz & Co. GmbH	100%
M. Hensoldt & Soehne AG	66%
Zeiss Ikon AG	70%
Alfred Gauthier GmbH	84%
Fredrich Deckel	30%
R. Winkel GmbH	100%
Hans Kollmorgen GmbH	unspecified
DESAG (Deutsche Spiegelglas) AG	50+%
Vereinigte Farbenglaswerke Zweisel AG	100%
Sendlinger Optische Glaswerke Berlin AG	unspecified
Bremthaler Quarzitwerke GmbH	unspecified

This list does not include entities created for marketing purposes in various countries such as Carl Zeiss, Inc. (located in New York) which was held by the Alien Property Office under the United States Attorney General.

However, the management of these companies had, in prior years, always dealt with Jena. Since the two management groups were not operating in harmony, the loyalties and ambitions of some of these people were divided and undirected.

In addition, the government of what was to become East Germany exerted much pressure on all of the new prokurists and so there was much confusion and many unilateral actions. Of the three prokurists, Schomerus died in the early 1950's. His *History of the Carl Zeiss Works 1846-1946* was published in Stuttgart in the Western Zone. Sandmann later defected to the West and



Aerial view of Oberkochen, West Germany, about 1964. In the foreground is the Carl Zeiss factory.

Oberkochen. Schrade stayed behind to become the leader of VEB Carl Zeiss and other elements of the East German Optical Industry.

Bauersfeld and Henrichs, although quite old, remained active in the Company until the early 1960's. Kueppenbender stayed with the Firm until the early 1970's and even saw the eventual demise of Zeiss Ikon as a camera manufacturer.

Zeiss Ikon in Stuttgart

Zeiss Ikon had the fewest problems starting over of any of the three firms. Their Stuttgart facility (the old Contessa factory) suffered no major war damage. Indeed, it had continued to manufacture cameras for government use throughout the war. Its normal workday activities were halted only for a few weeks when the French army occupied the city before turning it over to the Americans. Once the Americans arrived, production was restarted immediately. The second site, in what would become West Berlin, did however receive severe war damage and was completely out of supplies. Hubert Nerwin made an especially harrowing seven-week trip in a truck convoy with supplies of covering leather, shutters, manufacturing dies and equipment to help restart the plant.

Since Stuttgart had manufactured only folding cameras in the pre-war and war years, only such cameras as the Ikonta, Super Ikonta, Nettars and the like went into immediate production. (See my article on Super Ikontas in ZH Journal/Autumn 1982.) There were also no dies or parts available for the Contax or any of the 35mm. cameras which had all been made in Dresden. The Ikoflex and Box Tengor lines had been made in Berlin and it would take some time to gear up and retool the plant there.

The sorely-needed money for salaries and capital could be earned in part from the sale of Stuttgart cameras. But other problems remained. The firms of Deckel in Munich and Gauthier in Kalmbach would be able to manufacture shutters soon enough. But since the only place that optical glass had been made in any real quantity in Europe before the war was at the Schott plant in Jena (hence the term Jena Glass), there would be difficulty in getting lenses. Carl Zeiss, Jena - VEB was not immediately able to produce lenses although there was some inventory on hand. The management there was also very interested in getting cash to support themselves, and, more importantly, to support the East German photo collective, Mechanik. So their main concern was not Zeiss Ikon in Stuttgart.

Zeiss Opton did not produce photographic lenses until 1947 since it could not get glass from Jena. New glass production sites were not yet in place under the firm of Schott & Genossen whose evacuated staff had now situated itself in Mainz. Obviously there would also be production problems in setting up a new glass-making operation due to lack of materials, money and the usual start up problems.

Since money was at a premium, most of the initial 1947 photographic lens production did not go to Zeiss Ikon. It went instead to Rollei, who were fully capable of manufacturing both of their very popular cameras, the Rolleiflex and the Rolleicord in the West and were able to pay cash. Because of this, most post-war Zeiss Ikon cameras were produced with less expensive "house lenses" like the Novar. The Novar was available from the two subcontracting firms of Steinheil and Rodenstock. Better-quality lenses were purchased from the firm of Schneider in Kreuznach. These were installed on the Super Ikonta A (which used the same format lens as the Rollei cameras) and the Ikonta 35. Pre-war stockpiles for the larger format Super Ikonta cameras were in much larger supply.

New Designs

Zeiss Ikon, since they had their major designers and management staff in Stuttgart, went right to work designing new cameras. Hubert Nerwin and his staff began the design of the beautifully symmetrical Zeiss cameras of the late 1940's and early 1950's. These were the Contessa 35, Ikonta 35 (which later became the Contina) and the uncoupled rangefinder Contina II. The Contina II would also be the model for the later Mess Ikonta uncoupled rangefinder cameras.

Nerwin began work with other designers on the improvements for the Contax series of cameras Ila & IIIa. These included a structural redesign of the shutter blinds, a new camera back and coupling design and a reworking of some of the lens housings. However, it was not long until Nerwin was offered a substantial and lucrative position with Graflex in the U.S., whereupon he moved to Rochester.

Dr. Ludwig Bertele, the famous lens designer, also left Carl Zeiss to work for Wild, a Swiss optical company. Other long-term Zeiss employees, Merte (who designed the Biotar) and Wandersleb (who perfected Rudolph's Tessar) left the firm to go to the U.S. as well. Thus, some of the famous Zeiss know-how began to disappear.

Hans Sauer stepped in to take Nerwin's place and completed the new designs of the Contax Ila & IIIa, the new Ikoflexes, and the new SLR Contaflex which was quite revolutionary for its day (1954). Dr. Bertele was subcontracted through Wild and redesigned the 35 mm. Biogon and the Sonnar lenses as well as the new exotic 21 mm. 90 degree angle Biogon for the new Contaxes.

Nevertheless, there was still some definite information interchange between Jena and Oberkochen. In fact, Carl Zeiss VEB was manufacturing new lenses to the specifications of the Contax Ila & IIIa long before production of the camera! A copy (authorized or unauthorized?) of Bertele's redesigned 35 mm. Biogon was available as well as the standard pre-war Contax lenses. Some new lenses such as the 35 mm. Biometer, several different versions of the Flektoscope and an adaption of a pre-war aerial camera lens (designed by R. Richards) the 25 mm. Topogon, were pictured in Jena catalogs. These lenses appeared in publicity stills of pre-war Contaxes, with Stuttgart Contax Ila and East German SLR Contax cameras sitting side by side.

There was a verbal authorization with regard to the acceptance of a licensing agreement to the East German organization to produce photo lenses and other products for Oberkochen. Such products were to be sold by West German Zeiss from both the management of the East German firm and the East German government. But the authorization was never put into written form.

In the U.S., VEB had begun to sell goods bearing Zeiss trademarks through Carl Zeiss, Inc. in 1949. But in 1950 they also sold through 2 other U.S.-based companies, Ercona and Steelmaster. However, this agreement was never formalized. Once the Oberkochen facilities began to produce regularly and use the name of Carl Zeiss, steps were taken to abandon this never-consummated agreement and protect their trademarks by the Oberkochen management.

Trademark Disputes

The VEB Carl Zeiss organization was informed in writing that West German legal decisions had given exclusive rights to the trademarks to Oberkochen. Their use was forbidden to the East. Suits and countersuits followed in all major consumer nations all over the world. Some were won by Jena, others were won by Oberkochen.

In the U.S., the Oberkochen group prevailed, but not finally until 1970 — some 17 years later. In some locations, both firms were given the right to the trademarks. Since most trademarked products before and after the war were organized for major sale in the United States, the use of international trademarks was heavily dependent on American rulings.

Early legal tests were not conclusive but temporarily restricted the use of the trademark to Oberkochen. As a result, there are some rather weird Jena-manufactured lenses available at photo fairs. Semi-trademarks like "C.Z. Jena", "aus Jena", and no trademark or first initial trademark of photographic lenses are not uncommon.

The Zeiss Ikon factories in Dresden suffered the same fate as the Jena factories with regard to equipment and staff by heavy war damage, sequestration and nationalization. However, there may have been some lapses in Russian actions or they have simply missed some things.

Zeiss Ikon in Dresden

After the war, Dresden was able to manufacture only three cameras under the Zeiss Ikon trademark. One was an adaption of the Ikonta C camera which was distributed under the name Ercona in the U.S. thanks to its distributor who had specialized in Dresden china before the war. Since Compur shutters were not available to East Germany, lookalike Tempor shutters were fabricated in Dresden.

The second camera was a new version of the pre-war Tenax I. A reasonably small number of these cameras were sold worldwide and in the U.S. through Ercona. This had been a poor-selling model in the pre-war years, but the post-war model had pre-war Compur shutters and coated Tessar lenses. I feel that this less-than-spectacular camera was ignored by the Russians scavengers who took all of the Contax manufacturing equipment. Dresden was therefore able to assemble them from what may have been regarded as worthless parts — or perhaps an unsold surplus had been in storage throughout the war years. I say this because although the Compur shutters must have been pre-war products on these cameras, the lenses were definitely post-war products in an unusual format.

Only the desperate post-war camera market would permit an interest in the Tenax I. It had been one of Zeiss's few pre-war

failures. I also remember that Hubert Nerwin remarked in our Rochester meeting that all Zeiss Ikon cameras were produced in batches of 5,000 or more. For these cameras to be available so quickly, I feel that pre-war supplies had to be available. The major positive step here was getting the quality Tessar lens to replace the poor pre-war cheapie, the Novar.

The Contax SLR cameras have been well documented by Hans Juergen Kuc in his earlier articles and books. Let me simply note here that the basic design of the camera was accomplished in 1937 under Nerwin. Some post-war changes such as the conversion of the shutter to a horizontal cloth curtain made the prism housing and brightness more easily achievable.

One of the major locations of Zeiss Ikon which was not heavily damaged by wartime bombings and subsequent reparations was the Reikworks where all of the dies for Zeiss Ikon camera parts and specialty tools for manufacture had been made. These facts and the documentation completed under Nerwin made the manufacturing much easier. The man credited with the East German design was Mr. Winzenberg. He had been a long term employee in the Zeiss Ikon design department.

Hubert Nerwin also told the story of a Russian soldier walking into the Zeiss Ikon Berlin factory after the war with one of the SLR prototypes and demanding that it be repaired.

Unfortunately, no one there had the presence of mind to give him a replacement camera. (With this prototype, Zeiss Ikon in Berlin or Stuttgart could have more easily reconstructed their previous work.) The soldier was allowed to depart — grumbling — with his broken treasure. All of the development work to produce the new SLR Contaflex camera in 1954 had therefore to be undertaken completely from scratch.

I hope that this information has made the situation and events after June 1945 a bit more clear. On file in the Society archives are three separate briefs which were submitted to the U.S. courts by the attorney for Carl Zeiss, Inc. (USA). These go into far greater detail with regard to these events. I thank Mr. Isaac Shapiro for making copies of these briefs available to the Society. I also wish to extend my respect and admiration to the Zeiss technicians who endured not only the war but its aftermath. This includes those who followed their management to the West under exceptionally difficult and dangerous circumstances.



Zeiss worldwide headquarters, Oberkochen, West Germany, c. 1983.

A ZEISS RANGEFINDER FOR THE CZAR'S ARMY

Nicholas Grossman, Rockville, Maryland

The rapid and accurate measurement of the distance between an artillery piece and its target is an essential requirement in ballistic calculations. Military rangefinders using various optical principles have been utilized by the armed forces and have been well documented. Among the classical optical rangefinders two types gained popularity: those based on the split-image coincidence working principle (a well-known concept to camera users) and the stereoscopic three-dimensional type using the depth perception principle. Each type has had its enthusiastic advocates.

In the famous World War I naval battle off Jutland, the English vessels were equipped with coincidence rangefinders while the Germans used stereoscopic instruments. According to naval historians, despite the numerical superiority of the English navy, the Germans inflicted disproportionately heavy losses on the English ships. Proponents of the stereoscopic rangefinders used the outcome of this engagement as proof of the superiority of the stereoscopic instrument. Others attributed the heavy English losses to the structural inferiority of the English vessels.

Without taking sides, let us note that the leading German optical firms produced both types of military rangefinders in assorted sizes and styles to suit military requirements all through World War II. (Radar and other technical advances rendered the optical rangefinders obsolete).

Carl Zeiss, Jena, manufactured a wide assortment of optical rangefinders; representative models are described and illustrated in Felix Auerbach's classical treatise "The Zeiss Works". As an avid student and collector of Zeiss military optics I was fortunate to obtain a Zeiss Model Em 34, 70 cm. base, split-image coincidence rangefinder with all its markings in the Russian language!! Recalling that the Germans and Russians were on opposite sides in both World Wars, I was anxious to bracket the period when Carl Zeiss, Jena, was supplying the Russian armed forces with these classic German rangefinders.

The key to the solution came from two experts: a specialist in the Slavic Department of the U.S. Library of Congress in Washington, D.C., and Mr. Oscar Fricke of Pomona, California, an internationally-known authority on the history of the Russian camera industry.

Following the 1917 Russian Revolution the Cyrillic alphabet and the rules for spelling in it were reformed and simplified. The markings and the letters on the rangefinder are from the pre-1917 period. Since it is most unlikely that Zeiss provided military hardware to the opposing side during wartime, the rangefinder was probably fabricated and shipped to Czarist Russia before 1914.

Most military optical instruments from the pre-1914 era are in poor shape, usually incomplete and inaccurate for their originally intended purpose. As it is often said, "nice to look at, but not to look through."

This rangefinder, however, came with an almost intact original cardboard composition carrying case, leather straps and accessories — and has surprisingly clear and accurate working optics. The Russian markings are:

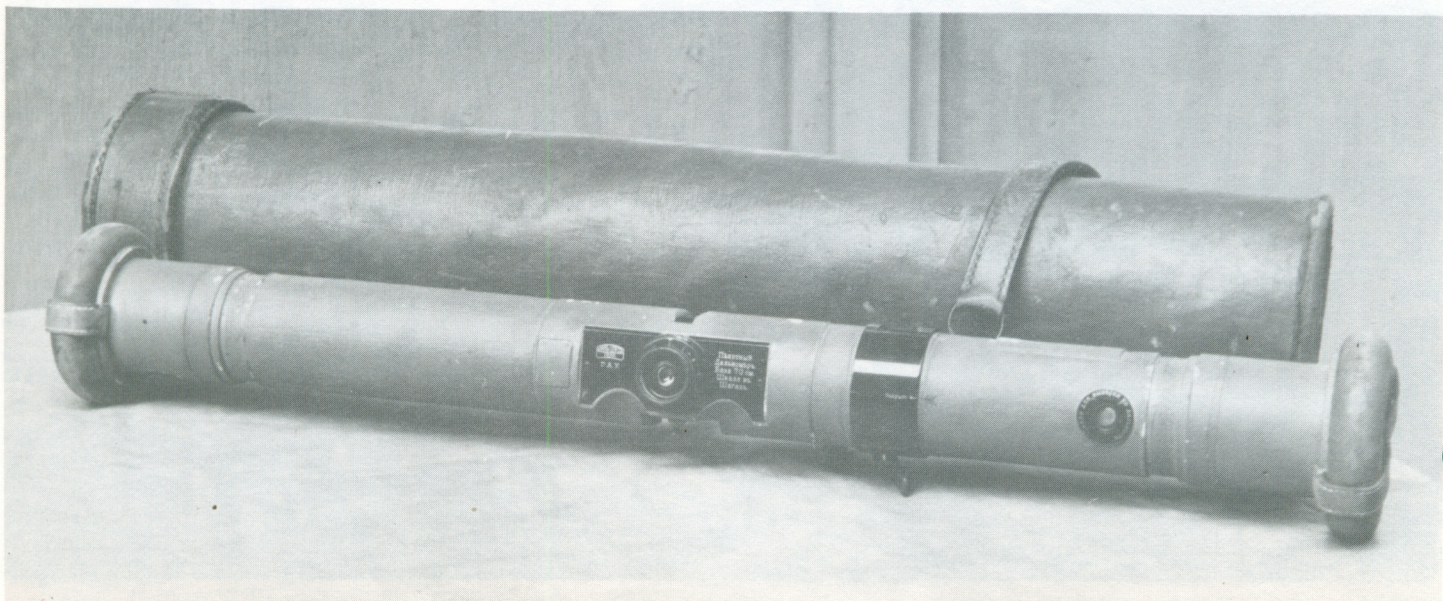
Карль Цейссь ЙЕНА (Karl' Tseiss' IENA) = Carl Zeiss JENA.

Г.А.У. Главное Артиллерийское Управление
(G.A.U. = Glavnoe Artilleriiskoe Upravlenie)
(Main Artillery Directorate/Chief Ordnance Administration/etc.)

The first two words to the right of the lens, which describe the device as an Infantry Rangefinder, would now be spelled **Пехотный Дальномер** (Pekhotnyi Dal'nomer). Jena would now be spelled **Йена** in Russian.

The observant reader may wish to compare this Zeiss 70 cm. base rangefinder with the Em-34 series 70 cm. base instrument made under Zeiss management during the Second War in Poland, described in the "Zeiss Historica" Journal Volume 6, Number 1.

Any further information or clues about Zeiss instruments for the Czarist army are welcome by the author.



Czarist army Zeiss rangefinder Em 34, 70 cm. base, with its field carrying case.

ZEISS IKON CATALOGS

Larry Gubas, Edison, New Jersey

Zeiss Ikon researchers have many primary sources. These include the catalogs published by the predecessor companies: Contessa Nettel, Ica, Goerz, Ernemann, among others, and the transition catalogs that Zeiss Ikon published covering the products of these firms under the unified logo of Zeiss Ikon from 1926 to 1930-31.

Next, the Contax era brought with it a collection of fine booklets of Zeiss-designed products — all printed in Germany. At this point all instruction books and product flyers were primarily produced in Germany. Most of the full product catalogs were printed by the local distributor (in most cases a wholly-owned subsidiary of the Carl Zeiss Foundation) who was furnished with pictures, text and illustrations.

After the war, both the Zeiss companies in Dresden and Stuttgart produced flyers and instruction books but only Stuttgart produced representative catalogs. This was due to the fact that East German Dresden companies produced very few cameras. (The famous Contax SLRs, a version of the Tenax I camera with a Tessar lens, and an Ikonta C styled camera called the Ercona seem to be the only major products this Zeiss company contributed before disappearing into MECHANIK, the East German socialist camera organization of the early 1950s). In the mid to late '50s and through the '60s, advertising of the local corporation seemed to be the main focus of sales and pricing literature. One exception was product catalogs, which were usually printed in Germany. This remained true until the fateful days of 1972.

Secondary sources can be found in many magazine advertisements (some of which are spectacular), in magazine features introducing or evaluating new products, or in the large catalogs of Central Camera, George Murphy, Sears, and others.

I would like to focus here on the literature products of Zeiss Ikon's golden era in the mid-1930s in Germany. Each such document had a "Bestellnummer" (order number). This number was usually prefixed by an alphabetic character (usually a "B" or "C") and 2 to 4 digits. These numbers were assigned somewhat chronologically but were completely changed when a volume was updated. In the instruction books, this change consisted of adding an "a" to the original number and then replacing it with "b", "c", or "d" for each additional change. However, for catalog and flyer updates entirely new numbers were issued. The first or last page of the document showed this number, printing information (such as run number, number of copies, etc.), sometimes the name of the author, but always the month and year of the printing. All of the instruction books of this period were designated "C" and carried four digits as well. "C" was also used for some flyers.

In the USA at this point, the Zeiss Ikon distributor, Carl Zeiss, Inc., also produced quite a volume of interesting small catalogs and pamphlets. Some of these were printed with the name of a large photographic store like Bass in Chicago. One of the more important of these USA publications was the famous "The Contax

with Zeiss Lenses". There were many different editions of this fine description of the first three Contax models and their accessories. These editions seem to be fitting successors to the fine earlier German publications — "The Connoisseur and the Contax", "The Contax Lenses", "Accessories for Contax Photography". American publications had their own numbering scheme. The order number usually was the letters "CAM" and 2 to 3 digits.

The pre-war Dresden publications were published in many languages. According to the German language version of Steinhauser's "The Miniature Camera" published in 1936, the advertising literature of the Contax family was always published in German, English, French, Spanish and Italian. Additional languages were chosen per the following list of some of the important documents of the Contax family.

TITLE	BESTELL-NUMMER	PAGES	LANG- UAGES
C 504	Contax The Universal Camera	32	X,1,2
C 523	The Connoisseur and the Contax	64	X,1,2,3,4
C 545	The 10 Lenses for the Contax	56	X 1,2,3
C 546	The Contabox-Projector	8	X
C 551	The Accessories for the Contax	48	X,1
C 572	Super Nettel	8	XX
B 591	Contameter	16	X
C 714	Contaflex	32	X,1
C 717	Contaflex	8	XX
C 2554	Depth of Field Tables	48	X
C 733	Carefree Photography	24	X2,3,4
C 740	Contax Photography	96	X

X = base languages noted in the previous paragraph.

XX = The base languages plus Dutch, Portugese, Danish, Norwegian, Czech, Polish, and Hungarian.

1 = The base languages plus Dutch.

2 = The base languages plus Czech.

3 = The base languages plus Polish.

4 = The base languages plus Swedish.

Some catalogs also appeared in Lithuanian but none of those listed above.

Some of the more important instruction books are:

C 2447	Contax I	C 2561	Contax II
C 2502	SuperNettel	C 2566	Contax III
C 2539	Contaflex	C 2567	Nettax

These instruction books were available in most of the languages above but within a different pattern.

As Archivist for the Society, I collect representative literature about Zeiss products that the membership can use for research. Please remember the Society archives with your duplicates. If you wish any help in research, please contact me.

EARLY ZEISS SURVEYING INSTRUMENTS

Nicholas Grossman, Rockville, Maryland

In tracing the marketing strategy of the Carl Zeiss management after the establishment of the Zeiss Foundation, one is impressed by the systematic broadening of the product lines, and the apparent search for a larger share of the world market.

One may characterize the era from Ernst Abbe's arrival in 1866 until about 1896 as the period devoted to intense research and development activities. This path, conscientiously laid out by Carl Zeiss, laid the foundation for further product line expansion. As a footnote to this approach, when Zeiss management recognized the need for cost-effective mass production techniques, they entered into a licensing arrangement with Bausch & Lomb of Rochester, N.Y. in 1908 that gave Zeiss access to advanced American production technology.¹

The writer has been unable to find the date when Zeiss established its formal organization structure based on product divisions such as microscopes, optical measuring instruments, telescopes, photographic lenses, binoculars, etc., but they were in place by the end of the nineteenth century.

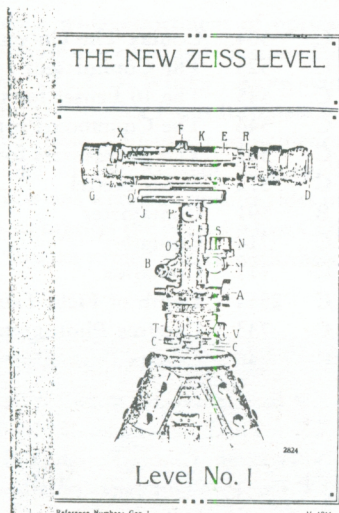
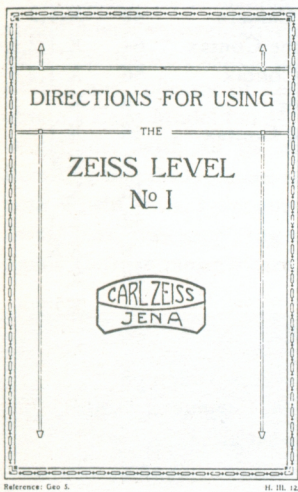
This short note deals with the establishment of the optical surveying instrument department, designated as GEO ("Geodäesie" is German for "surveying"). Zeiss entered the surveying

model Ia and Ib levels until 1909.³

In 1911, level I was marketed. It was described in Zeiss literature as the "New Zeiss Level" and the corresponding descriptive leaflet is designated GEO 1.-V. 1911 (published in May 1911). It was followed by a booklet "Directions for Using the Zeiss Level Number I", publication GEO 5-H. III 12 (March 1912).

The author located the above publications in the Library of the Smithsonian Institution, Washington, D.C. and acquired the Zeiss Level I, 1911 version illustrated.

One of the distinguishing features of these early Zeiss levels was the emphasis on ready portability. They usually were fitted into a

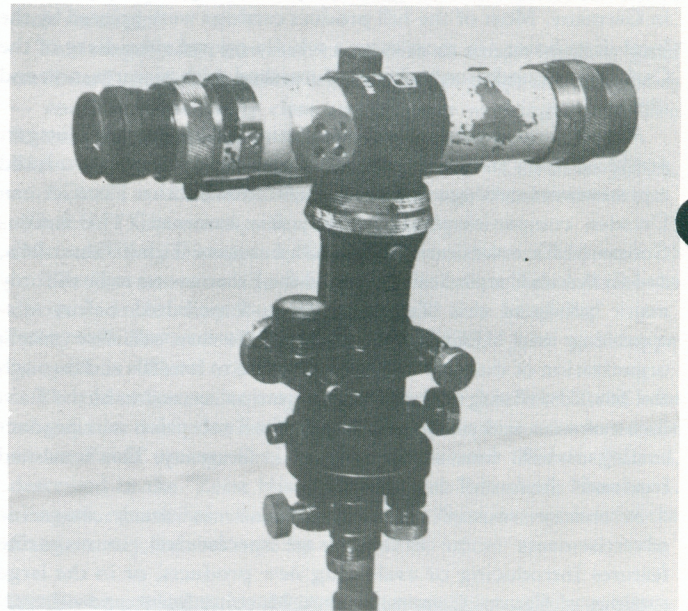


1911 instruction book for the Model I level.

instrument market in 1901 with a specialized theodolite (theodolites are usually called transits in the United States) designed as a tacheographometer. This surveying instrument is used in conjunction with a stereoscopic rangefinder for topographic surveys, and obviates the need for a person to hold a calibrated vertical rod at the target site.

This was followed in 1904 by a universal theodolite designed by the prolific Zeiss staff scientist Dr. C. Pulfrich.²

While surveying levels are mechanically simpler and thus easier to manufacture than theodolites, Zeiss delayed the marketing of its



The Zeiss level, Model I.

leather-covered compact metal case which could be slung over the shoulder of the surveyor when being transported. This compact feature was not usually found in contemporary competitive levels marketed by U.S. and Continental manufacturers.

As usual, the writer is asking for opinions or answers about a Zeiss puzzle: why did Zeiss market model Ia and model Ib prior to model I "New"?

1 "Geschichte des Jenaer Zeisswerkes 1846-1946" — von Dr. Friedrich Schomerus, Piscator Verlag, Stuttgart, 1952, page 177.

2 "Ueber einen neuen zerlegbaren Theodoliten und Phototheodoliten" *Physikalische Zeitschrift*, 1904, pp 656-657 — referenced in Zeiss Information, number 74, March 15, 1970, page 125.

3. "The Development of Zeiss Surveying Instruments" by Martin Abrend, Zeiss Information *ibid*, pages 112-125.

LICHTSTRAHLEN

Light Rays: Notes of Interest to Those Interested in Zeiss and Its History

THE ZEISS/B&L CONNECTION

Connoisseurs of early photographic lenses, microscopes and medical-optical instruments frequently notice that such lenses as the B&L Tessar, B&L Protar, or B&L microscopes seem to be mechanically interchangeable with similar Zeiss products, and optometric instruments bearing a family resemblance. These similarities are the outcome of turn-of-the-century cooperation and exchange agreements that existed between Carl Zeiss, Jena and Bausch & Lomb of Rochester, N.Y.

The association provided mutual benefits to the two optical firms: B&L obtained the results of decades of research by the Zeiss establishment, while Zeiss had access to the up-to-date mass production and quality-assurance practices of American industry.

In tracing the historical facts, the only source Nick Grossman was able to locate was a short historical summary (unattributed) dealing with the Bausch & Lomb Company. What is puzzling to Nick is that Zeiss historical records do not deal with this arrangement. Dr. Friedrich Schomerus' "Geschichte des Jenaer Zeisswerkes 1846-1946", published in 1952, states that the cooperation (details unspecified) started in 1908, which is inconsistent with B&L records. The chronology based on the B&L records are:

- 1891 B&L and Carl Zeiss Optical Works form an association for the manufacture of Zeiss-patented anastigmatic lenses. Manufacturing facilities of B&L are exchanged for scientific accomplishments of Zeiss. Patents on these lenses are granted to B&L.
- 1892 Newly patented lenses by Zeiss, developed by Abbe and Rudolph, are manufactured by B&L in Rochester under Zeiss license.
- 1896 B&L Zeiss Convertible Protar photographic lenses are offered to the American market. B&L — Saegmuller Company is formed. (George N. Saegmuller, Washington, D.C., was a well-known maker of quality surveying instruments). B&L-Saegmuller-Zeiss affiliation is announced.
- 1907 B&L-Saegmuller company is dissolved. B&L-Zeiss affiliation replaces the tri-partite arrangement of 1896. Zeiss is given specific access to mass production methods developed by B&L, while B&L continues to receive licenses to all Zeiss patents.
- 1915 Zeiss-Bausch & Lomb agreement terminated.

THREE NEW BOOKS

The following are three recent books of interest to the Zeiss collector, reviewed here by Archivist Larry Gubas.

ICA-CAMERAS, 1922 — An interesting catalog reprint of a Zeiss Ikon predecessor company, ICA, has recently appeared on the collectors' market. This small-format reprint is 114 pages long with a wealth of information on the ICA cameras of the period. One can see the Zeiss organization and Bestellnummer system in this Carl Zeiss-controlled company some four years before the Zeiss Ikon merger. The reprint is in German but with the excellent illustrations and detail it is certainly worth its price of \$6. Available from The Photographers Bookshelf in New York.

ZEISS CAMERAS 1945-1975 by Bernd K. Otto and Kurt Juettner is a recent publication of two private German researchers. This

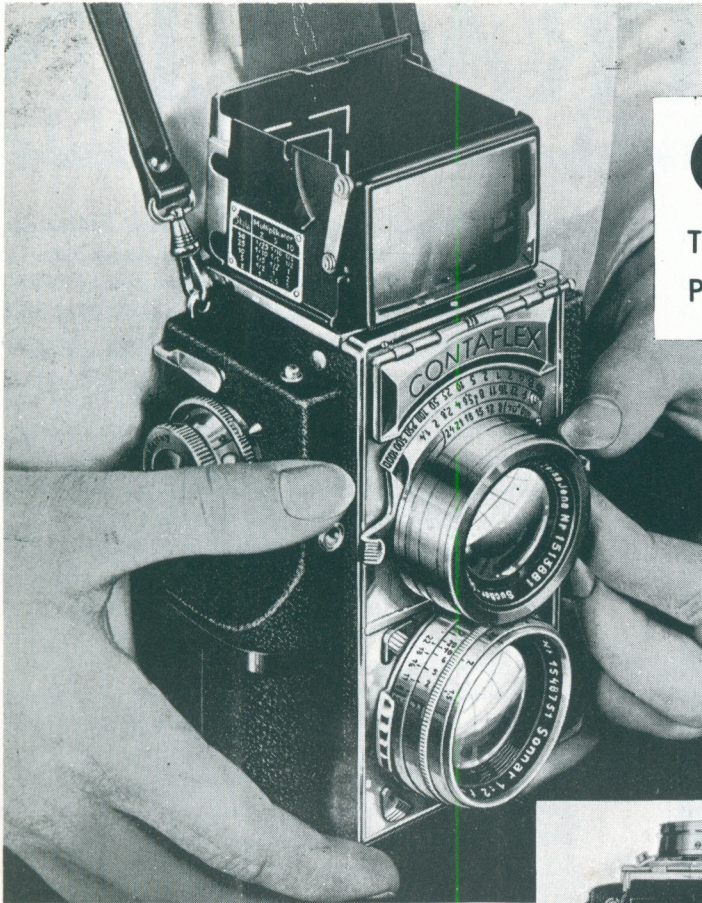
volume contains a short history of the four companies who have used the name Zeiss in connection with camera manufacture since 1945. These include the East German concerns of "VEB Carl Zeiss, Jena" and "VEB Zeiss Ikon, Dresden" and the West German firms of Zeiss Ikon AG, Stuttgart and Carl Zeiss Contarex-Vertrieb, Stuttgart.

The main thrust of this looseleaf-bound volume is to present a specification sheet for each camera manufactured by these companies. Each camera is described in exhaustive detail. Covered are prices, periods of manufacture, lenses, etc. Nearly every page shows an illustration of each camera covered. The overview historical text and preface appear in both English and German but the specification sheets are entirely in German. Use of the sheets is somewhat eased by a check-off system of displaying camera features and a fully-translated copy of a blank specification page with captions in English.

The author's original plan was to produce two volumes covering the period from 1900 to 1975. They decided to publish Volume II first, since it is easier to research, and then follow it with Volume I at a later date. The second volume is now available (but in limited supply) from the authors: Kurt Juettner, Auf der Schlosshecke 11, D-6000 Frankfurt, West Germany. The cost is approximately \$30 U.S. plus postage. The looseleaf format is European: four hole, 8¼" × 11¾" and is in a handsome dark red vinyl binder. I highly recommend this work if you are interested in the period.

PHOTO-DICTIONARY by Hans-Juergen Kuc — Should you have extreme or just normal difficulty with the German language in browsing through either of two books described above, a Zeiss Historica member — Hans-Juergen Kuc — has recently finished a photographic dictionary which covers a multitude of photographic terms and presents them in both an English-to-German and a German-to-English format. I have seen an advance copy and have found it quite useable as well as useful. Details on its availability and cost should become known in the next few months; so be on the lookout. With Kuc's book at hand, you can safely acquire German language items like the ICA catalog and the Otto and Juettner volume even if you don't understand German. Thank you, Hans-Juergen.



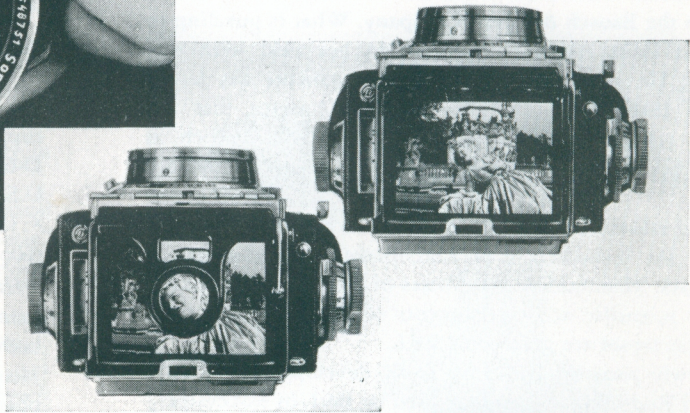


Contaflex

The First Camera with Built-In Photo Electric Exposure Meter

and the first twin-lens reflex using 35 mm film with choice of six interchangeable bayonet mount zeiss lenses • speeds from f:1.5 to f:4 and focal lengths from 50 to 135 mm. • many new features including delayed action shutter release and built-in eye-level albedo sports finder • a new conception in camera design • remarkable ease and simplicity in operation.

large aperture long focus viewing lens projects image on plano-convex collective lens ground on under side • extraordinarily brilliant image is 60% larger than negative size • strong magnifier snaps easily into position.



Ikonflex II

6X6 cm Twin Lens Reflex

twelve exposures at each loading from standard eight exposure $2\frac{1}{4}'' \times 3\frac{1}{4}''$ roll film • equipped with fast f:3.5, 7.5 cm (3'') zeiss tessar lens in new rapid compur-shutter • extra brilliant full-size viewing image with even illumination to edge of screen • strong magnifier in hood for very fine focusing • automatic film counter visible from top of camera and resets to zero when camera is unloaded • many other new features including new type focusing lever which automatically indicates diaphragm setting for required depth of focus and eye level finder • complete assortment of accessories

