

We dedicate this book:

To Peace among Nations

To the Conscious Progress of the World

To Science and Knowledge, the only source of Justice

To our restless efforts towards improvements for Mankind

To another 100 years of Glory!

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Editorial coordination and preparation

LUIZ ANTONIO PARACAMPO FILHO

Research

LUIZ ANTONIO PARACAMPO FILHO

Proofreading

ROGER BARESEL

Desktop publishing

ADOLFO SAMYN

Cover

LUIZ ANTONIO PARACAMPO FILHO

The Author

Luiz Antonio Paracampo Filho, is a metallurgical and special materials engineer. Since the early days he has been involved with photography and has done his own laboratory developing and enlarging, after completing the first course for developing color films in Rio de Janeiro where he lives. In those days he not only took his own pictures and developed them but also began constructing his own cameras and related equipment, as well as planning what he could not yet construct. While still in middle school, he met Hans Gaizer, a very skilled man who used to maintain the microscopes at the medical university where Luiz' father was a professor.

This contact was a skilled and important employee of a large firm which imported Zeiss equipment from Oberkochen. Soon Luiz went to the workshop of the firm which specialized in all kinds of tools such as lathes, cutters of all kinds and more specialised devices for the manufacture of lens elements for used microscope lenses, with vacuum pumps for coating the lens surfaces. To Luiz, this was Paradise! This paradise, he says, was completely unseen by ordinary people in the streets, once it found a location in the commercial sector of Rio de Janeiro, in the basement of a communal building. They used the garage of two nearby buildings to get the workshop into operation and access was via an extended corridor. This large facility also carried out guarantee and after sales service for all Zeiss (West) products, including cameras. That way, Luiz became familiar with the cameras and shutters of the famous Zeiss Ikon range. Luiz was only 13 years old! During the early 1960's, the shop moved to Vila Isabel, slightly further from the center. In 1960, the Soviet Exhibition took place in São Cristovão, RJ.

This exhibition demonstrated the great industrial power of the Soviet Union, and according to Luiz, no other exhibition since then has shown so many movie, photo, and television products.

Luiz told me he was surprised by two events:

The first of them was meeting a man who had taken his first pictures when he was a very little child. He was an old family friend and won the agency rights for the Foto-kino segment of Mashpriborintorg, the Russian export company.

The second and most striking event was meeting a Zenit camera, which seemed to have been "born from his mind", according to Luiz. He told me that this camera system had been conceived by himself, just one year before he saw the Zenit. It was love at first sight.

As the World is very small, and Rio de Janeiro smaller still, the first camera to present a problem was a "Leningrad" model. Luiz says that possibly due to the Zenit's impact he didn't notice the Leningrad at the Exhibition. This camera came into the hands of Hans Gaizer, now a competent Zeiss repairman, and consequently to Luiz' knowledge, GOMZ (the factory in Leningrad) not only produced Lubitel and Smena cameras, whose simplicity fascinated him from the beginning, but also a fine top line range of products.

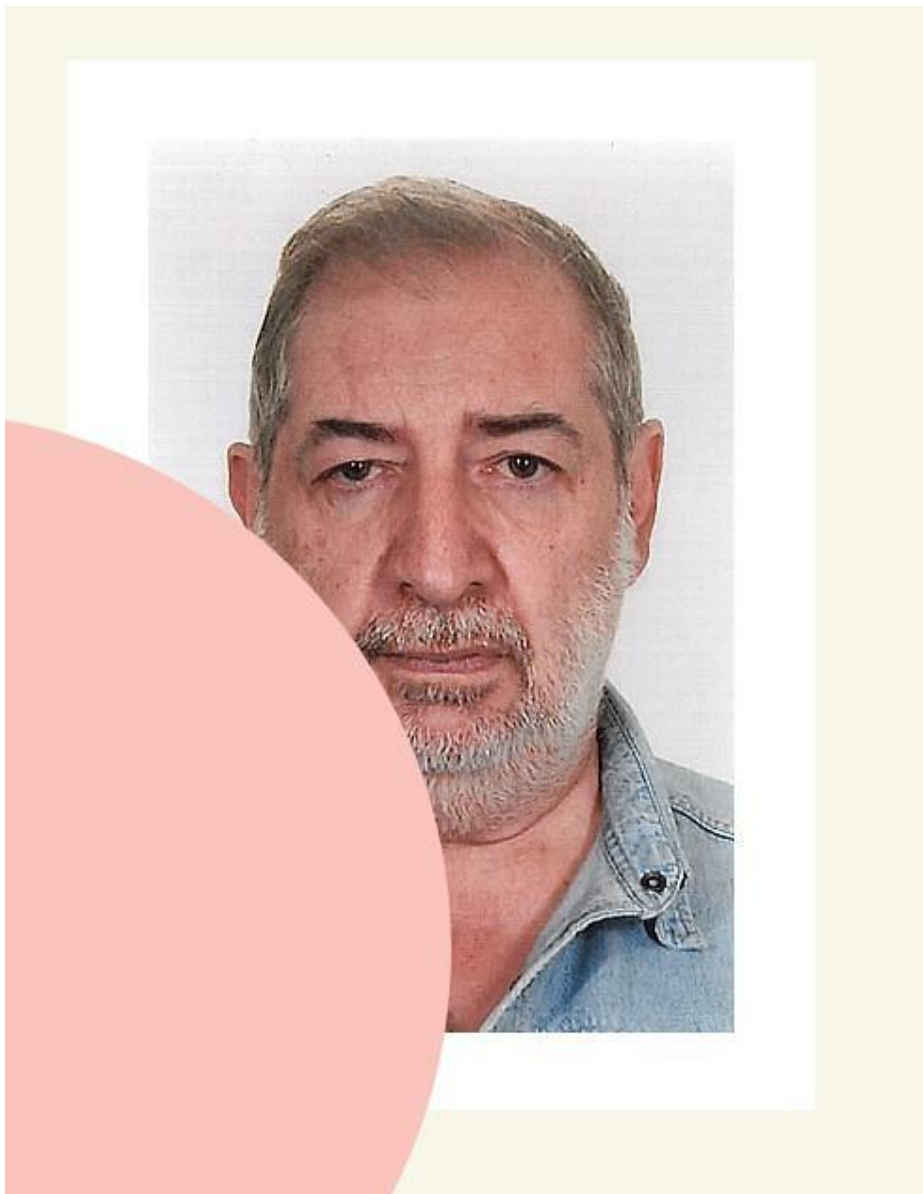
As is well known and according to Luiz' observation, Zeiss was the grandfather, not only of the Soviet camera industry but was indirectly present in the background in its early sales in Brazil.

From then, a history of experience and knowledge was set in motion. The author empirically constructed the basis of an after-sales repair and maintenance service that was further extended to pre-sales checks at Artia, the firm that began importing Soviet cameras to Brazil.

This general description is a patchwork of information from Luiz' mind and several other sources, aided by a great team of co-operators

mentioned in the text, of course not excluding the histories and experiences reported at the end of the book.

Luiz's obsession with Soviet cameras dates back to 1962. As a technical photography buff, the most perfect camera that he could imagine was a synthesis - a synthesis of the Contax S and the Leica screwmount rangefinder. While attending a Soviet Exhibition in Rio de Janeiro, he happened upon a Zenit 3 - which pretty much matched the ideal vision in his head! At that moment, Soviet cameras captured his imagination - and they haven't let go since!



Luiz Antonio Paracampo Filho: Professional Lubitel Tester & Technical Expert

A few years later, he went to work at an import company that brought Soviet cameras into Brazil. His job was to test and evaluate the cameras – so that the company would be comfortable selling them with a warranty. Each day, he broke down, rebuilt, and fully examined Soviet cameras – inside and out – to see what makes them tick and to identify any potential problems. His vast experience has given him an intimate knowledge of the technical quirks of Soviet design – and he has gained unique insight into the very special hardware that underpins their amazing results. The Lubitel was one of the best-selling cameras that he handled, and he's a bona fide expert in the technical underpinnings of each model.

Name: Luiz Antonio Paracampo Filho

Job: Engineer

Hometown: Rio de Janeiro, Brazil

1. The Lubitel's design remained largely the same for almost 60 years, and it is one of the most widely produced Russian cameras - you feel that it holds a special place in Russian camera history? Why?

Paracampo: I believe so. The Lubitel was a kind of phenomenon, a kind of boom in the photographic world. The first boom was the FED camera before the war – which continued afterwards in a stream of FED and Zorki models. Both were produced in millions of units. Both were copies of German cameras which were much less prolific with smaller production runs.

These booms were due to several factors. First, the Soviet people's interest in photography was encouraged by the government – as the Revolution called upon each citizen to become a responsible register of events and history. Secondly, a lot of money was invested in camera factories and engineering in the Soviet Union. And third – not to be forgotten – was the Socialist structure of the Soviet Union.

Before the War, their cameras were of poor quality but afterwards, their attitude changed. The Lubitel began as the "Komsomolets" (Young Communist) –offering a "better" product to a "better" class of children. Before the War, this market was filled with Maliutka cameras and Smenas (originating from the Greek "Semen"- New Generation or – Change). The Komsomolets boys were given this idealistic name, and idealistic product – so this camera gained a strong level of acceptance. From my experience in Brazil, I particularly recall the Lubitel 2 camera. It outsold every camera! It was really a phenomenon. At first, I hated the camera but my attitude suddenly changed when I saw the results it could produce. Regarded as a copy of the Voigtländer Brilliant, it easily beat its predecessor and proved to have much broader appeal. Both amateurs and professionals loved it. Why? Because it was unbeatable for the price: it had just the right amount of technology; its optical results were astonishingly good; resolution was fantastic; its depth of field was remarkable.

2. What do you think the Russians contributed to the international world of photography and cameras?

Paracampo: In the Soviet era, the Russians contributed their expertise in large mass production of good quality and very acceptable cameras – derived from "high class" foreign cameras – and priced extremely low. This expanded the worldwide market and attracted consumers. The real philosophy of "socialism" applied to this market.

3. You once created a mash-up camera consisting of a Smena 8 body and a Lubitel 2 lens. How did that work?

Paracampo: It was only a joke really. I never used it as a real camera!

4. When you repaired classic Lubitels, what were the most common problems that you found? Any really crazy defects?

Paracampo: Lubitel 2's (and previous models) are prone to film freezes after the 6th or 8th picture. This is because they had no axle in the feeding spool. The Lubitel 166 and 166B solved this problem, but it reared its head from time to time in the 166 Universal. Happily the Lubitel+ has once again fixed this problem, and done it one better with rewind capability. If you have a Lubitel with this problem, here's a quick fix: paint the spool rails with a bit of Vaseline. Other common problems are stuck shutters and self-timers. Light can leak through the rear door near the tripod thread or throughout the entire rear door if the top springs that keep it closed come loose. The 166 models came with better shutters and better doors than previous models. Any light leakage is really rare with these models – and if it occurs, is probably due to the photographer more than to the camera.

5. Do you still enjoy shooting film through analog cameras? What kind of photography do you like to do?

Paracampo: I hate cameras that use any kind of batteries. So I stay away from digital – unless it's absolutely necessary – like for e-mail. Even so, I prefer to shoot film and scan my negatives. I mostly shoot children, people, and macro images.

6. Do you have any funny or crazy stories about the Lubitel or another Soviet camera? Any freaky bits of trivia?

Paracampo: Perhaps my most unforgettable experience happened with a friend. This friend bought a camera from where I worked. It was a magnificent new Kiev 10. He was not all that experienced, so he used Agfa-color CT18 as his first film. The lab technician developed it wrong and the film became reddish. He had probably used a hot bath by accident. My friend received the film and saw the results. He said "this is impossible, everything is RED!!" The guy who sold him the camera asked what kind of camera he was using. He

said “a Kiev 10.” “Oh,” said the salesman, “that figures, communist cameras only take RED pictures!”

7. In your opinion, what makes a Lubitel unique?

Paracampo: First, the attraction of its brilliant and clear viewfinder. Secondly, its small size which allowed it to fit nicely into your hands – if it wasn’t for its complete lack of ergonomics! Thirdly, the 6×6 image that it creates is nothing less than the *OPTIMUM COMBINATION OF LENS RESOLUTION, DEPTH OF FIELD, PICTURE SIZE, and FILM GRAININESS*. And finally, the democratic usability of the camera. No automatic settings, no stopping, nothing that prevents you from doing anything. It’s almost like a professional view camera – but not quite.

8. If someone REALLY loves the Lubitel, what are some other Soviet-era cameras that they should hunt down and purchase?

Paracampo: According to the forums in which I participate, FED and Zorki cameras are unbeatable. These cameras really deserve a re-created edition; I have several of them. In particular, the FED 2 is the most sought-after and loved camera in my community.

9. Would you have any words of advice for future Lubitel photographers?

Paracampo: You can’t beat the basics. Keep studying the basics. You’ll learn with them. When you grow, the camera grows with you. Do everything, not just what other people suggest for you to do. Think for yourself about what you can do in the present to best design your future.

Interview taken from Lubitel+ Love From Waist Level



Luiz was always a promoter of the idea of producing a variety of cameras in Brazil, and always met resistance from those who can do it, as well as difficulties from the competition.

The first difficulty was met in **1966** when someone registered the camera shown below,



It had a f9 lens and fixed focus & single speed, of equal capabilities to the Lubitel 2, and so, the importer had to pay a fee equivalent to 20 dollars (in 1966) on each of the cameras imported. Incredibly, despite a price rise, Lubitel's sales more than doubled in the following year.

Time provided the answer: after almost 50 years this camera completely disappeared; the maker does not make cameras of any type yet Lubitel still makes successful products.

The other problem arose in **1980** with the "producer" (really only a mere packer) of the camera shown here:



A lawsuit was begun claiming to be the official Brazilian and "real" producers of Smena 8, Smena Symbol, Vilia, and Siluet. That way, we were required to request them to authorize the commercialization of such cameras. Time again was implacable but eventually, the authors of this unwarranted attack simply disappeared from the market, to the rightful condemnation of all respectable world camera dealers.

At the end of this narrative the reader can delight himself with some of my personal projects, mainly directed to LOMO and Lomography products.

From RAOOMP to LOMO

Writing a book is not always an easy task. Mainly if you have in mind the intention of doing it in the best possible way. The excellent is enemy of the good, and the good is not always satisfying. Through this motto, developments are made, items are perfected, and new technologies come to light. That way mankind goes forward.

This book has two objectives: to commemorate the first hundred years of the LOMO factory, and to praise the open minded people whose ambition and philosophy lay behind such a great endeavour.

I had the idea of writing this book some time ago, but I only recently made up my mind how best to shape everything that will be described in the book. Such a large enterprise, with multiple activities would be impossible to describe. Far from that, it is my intention to make a history of the LOMO factory, that produced everything from toys to space research items, military weapons to the largest observatory telescopes, from sea oil prospecting equipment to optical devices for ships, from movie theatre equipment to semiconductor production devices.

I intend to concentrate on the image making equipment that include movie making and projection equipment, together with photographic cameras and connected items, for which the factory is best known all around the world.

To do so completely and comprehensively called for the help and support of many people, and their previous work was a contribution to this task. Their work was invaluable for the feasibility of such a task. To them my best thanks.

HPR with his book Leica Copies;

Patrice Hervé Pond with 300 Leica Copies;

Jean-Loup Princelle with the Authentic Guide for Russian and Soviet Cameras and the new edition Made in USSR;

Albino Pegorari and Claudio Asquini From Russia with a click;

David Tomlinson with his pioneer notes at RCCCCUK;

Viktor Suglob with his book 1200 Fotoapparatov iz SSSR, and his site Mirfoto.by;

Jimmy McKeown . Price Guide to Antique and classic Cameras;

Georgiy Abramov with his detailed painstaking work on his huge site Photohistory. ru;

Vladislav Kern mentor of the reference forum USSRPhoto.com. Without his efforts world's main lovers of Soviet cameras would not be gathered together and this book perhaps could never get birth;

Aidas Pikotas pioneer in his precision site Sovietcams;

Juhani Halmeenmaki with his magnificent cedricfan web page, where one can see his love for the uncommon and his efforts on research;

Erkan Urmut: A movie art professional enthusiast and professor at the Istanbul University;

João Lopes Freitas from Zenith camera yahoo groups, with his excellent photos obtained from a Smena camera;

Nathan Dayton with his site Communist Cameras;

Alexey Niktin USSR cameras;

Alfred Klomp in Alfred's Camera Page;

Ulrich Witte - fotos.cconin.de;

Alexandr Komarov – Fotoua;

Fotomuda - fotomuda.net;

Marco Cavina - *Articoli Tecnici Di Argomento Fotografico*;

Alex Photo - Fotoua.com;

Igor Ustinov - rus-camera.ru;

Francisco Duarte Forum Câmaras Russas;

Zenit Camera Archive;

LOMO Museum;

The Polytechnical Museum of Moscow;

Fotocamers.narod.ru;

Museum of photography agecam.nm.ru;

Sovietcamera.su;

Lomographic International Society;

Antique Russian Cameras.

And the extraordinary collectors:

Yuri Boguslavsky, Fedka;

Yuriy Davidenko DVD Technik;

Oleg Khalyavin okvintagecamera.com;

Alain Berry University professor and camera collector;

Massimo Bertrachi - corsopolaris.net/supercamera;

Jean-Marc Burtscher - Soviet camera;

Holger Schult - Cameras downunder;

William Parkinson - nightfoto.com;

Guido Studer – Guido-Studer.com;

Andrei Klemin - klemin.ru;

Sylvain Halgand - [collection appareils fr](http://collectionappareils.fr);

Tom Tiger - tomtiger.nl;

Alexander Bronstein - leica.boom.ru;

Oleg Staroseltsev [retro texnika.ru](http://retro.texnika.ru);

Kiev survival site - www3.telus.net;

Jay JAVIER - jay.fedka.com;

novacon.com.br;

Cultural Hercules Florence.

And the independent collectors:

Igor Chertok, Mike Haley, Jim McGee, Dmitriy Kopp, Mike Schenk, Jacques Morin, Michel Chretien, Oleg Kravets, and professor Milos Mladek;

And of course several others who anonymously contributed to our general knowledge.

This book reflects my own opinions as well as knowledge gained during several years of observing and working together with the importer of Russian cameras and microscopes in Brazil at Rio de Janeiro city, where a quality control was implemented and further conversations were changed with TOE of London.

During this period – 1960 to 1995 - we learned about LOMO know-how transference and factory training in Turkey, and India, and we also collaborated with EMPG in Campinas, State of São Paulo, in the production of our own cameras based on the Lubitel and Smena models.

That way, a chapter of Foreign LOMO cameras describes some of our adventures.



Museum Kino Moscow

Professional cameras like that were the first peacetime productions at RAOOMP. Modelled on the Le Parvo 35mm movie camera from Debie & Cie. France. Still in 1916! Made for World War I documentary!



Latvia stamp 2006 - Le Parvo camera - The first one produced at RAOOMP

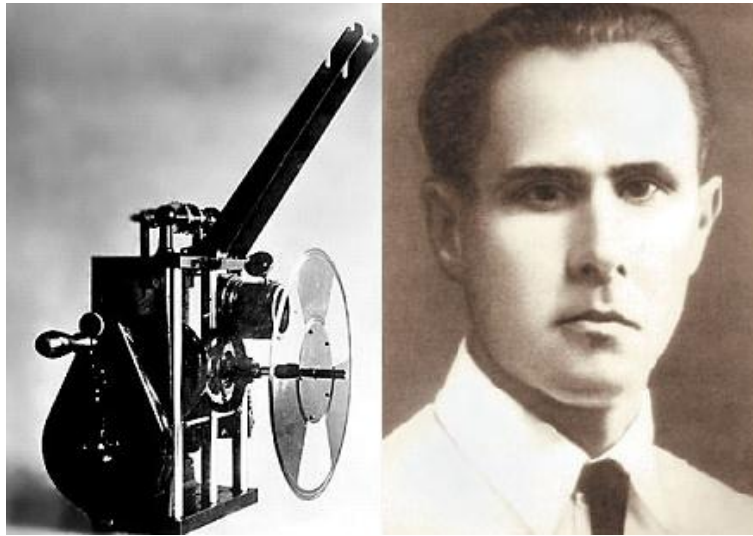


With a camera like this, Dziga Vertov made the famous film "Man with the Movie Camera"; Sergei Einzentein made "Potëmkin" and V. Pudovinka made "Deserter".

These cameras were produced in small quantities. The first mass produced item was a 35mm movie projector "The Russ" in 1918, aimed at schools, adult education and entertainment. These devices were organized under the supervision of the engineer Leonid Gavrilovich Titov.

These items initiated a series of other new products and started the early history of the Soviet Optical industry.

It is said that the large consumer market and the mass production made the cornerstone of Soviet development during those years. It is dated at 1929, two years after the beginning of the "Five Year Plan", when the camera industry in the Soviet Union began with the production of EFTE cameras in Moscow and the Fotokor at the GOMZ factory in Leningrad.



Russ projector and Leonid Titov

At that time, Russia was in a state of extreme political instability. In June 28th 1918, just two days after the launch of the Russ projector, based upon the Pathé N° 2, the factory was nationalized and became GOZ - its second name.

Internal peace in Russia began only after 1922 when it was declared the Soviet Union. Then began the real Soviet pre-history of the photographic industry. There are two pre-historic periods. The first one began just when photography was invented and Russia produced cameras and other devices using imported components. The Soviet pre-historic period nationalized this manufacturing but units were only produced in limited volumes. GOZ being now a public enterprise, several people with their own ideas came to them to show their own concepts, which would be produced on experimental basis to test their potential. At the same time this would bring expertise and knowhow to the engineers and workers of the manufacturing unit. In order to fulfill their aims comprehensively, the OOMZ "Experimental optical-mechanical plant" was founded in 1921 especially to deal with new born ideas. The workshop also served to help the creation of the new devices of GOI, the optical institute that calculated all optics in the Soviet Union. It began operating at full capacity in 1926, when it became VOOMZ "All-Union experimental optical-mechanical plant" and was working as such when it was consolidated in the LOMO group

in 1962, becoming a trainee factory to develop specialized workers. Which western country would today make such a decision? There are no more "Experience Houses" to develop new products. Although in China it is said that small workshops operate within universities in order to raise a generation of skilled workers for their tasks in various industries.

Independent workers congregated in cooperatives and sold their production in the common market.

There were known a variety of products in the pre 1927 years:

And as will be seen in the next topic, just due the gathering of useful information among interested citizens, Russia became a pioneer in the world of photographic camera techniques.

St Petersburg as the capital of Russia in the XIX century produced various photographic cameras.

Some marvelous examples are shown here:



Karpov Uchenik Series 1 ~1905



Karpov Reflex ~1896





I. Steffen camera ~1906



FK 13x18 camera ~1890 also from Steffen. The definitive model appeared around 1900 and was produced at first by LOMO, and later by several other producers until 1990 with only very small modifications!

LOMO History a Brief Presentation



The LOMO PLC Works at Chugunnaya Street in St Petersburg. Picture from 1914



The LOMO PLC Works at Chugunnaya Street in St Petersburg. Picture from 1962



The LOMO PLC Works at Chugunnaya Street in St Petersburg. Picture from 2012

The optical enterprise LOMO was officially founded on February 4th 1914, first with the name RAOOMP (РАООМП) "Российское Акционерное Общество Оптического и Механического Производства" (Russian Joint Stock Company of Optical and Mechanical Production) as an Optical and Mechanical Production Joint Stock Company. From this date it was by far the first and largest Russian factory dedicated to the manufacture of optical and mechanical enterprise, and is now one of the greatest in the world, if not the greatest. The start of construction was registered during the summer of 1913.

The present description is a tribute to Knowledge and Science and also to a factory whose destiny was not just the generation of revenue, but also a legacy to mankind, and how technology can be used for the development and improvement of mankind.

At the time, the Russian economy was in good condition and it was made to be the largest financial, scientific and industrial centre in Europe.

It was an era when Russia's industrial growth peaked at the extraordinary level of 30% a year, never attained by any other country in the world. The nobility owned almost all the land and Tsar Nicholas II decided to industrialize his country to an unsurpassed level.

Soon the WW War I exploded and RAOOMP was the first factory to furnish all kind of required optical devices for the Russian army, such as telemeters, binoculars, periscopes and gun sights.

The foundation of RAOOMP was done under military philosophy, once it united three main smaller shops: the local subsidiaries of the German companies Goerz and Zeiss (the enemy) and the workshop of the French company Debrie, Russia's ally during WWI. German factories in Riga which could easily fall into German hands, were relocated to the capital of the then Russian empire in Petrograd, later Leningrad and now St. Petersburg. The main shareholders of the newborn firm were the French "Schneider-Creuzot" company, the Russian-Asiatic Bank and the St. Petersburg Commercial Bank. After considering a number of sites, a four-floored building at Chugunnaya Street was constructed and happily inaugurated on the February 14th 1914. It stands there now.

The sad experience of the Russian Navy defeated in the Russo-Japanese War called for modern equipment for Russian battleships. Tsar Nicholas II ordered to pay what was necessary to rival the outstanding German industry, and so was born this new enterprise with its optical and mechanical workshop based at the Obukhovo Steel Mill Works, then in Petrograd. A.L. Gershun, a professor at the local university, was appointed as the first head of this emerging optical industry.

The foundation of LOMO was not a random decision. Its history belongs to the origins of modern Russia, and of Russia herself. It was part of the continuation of a supremacy plan, which had its roots in Peter the Great's decision to move the capital to St. Petersburg in 1703.

At that time, the navy was the most important military force of a modern nation. Through his decision, Tsar Peter the Great was not only transferring the capital to a port but also encouraging the all important ship building industry to come to the new city.

Russia, and especially St. Petersburg, had an important prior history in optics and lens development. Back in 1839, Vasili Yakovlev von Stuve opened the Pulkovo Observatory under the orders of Tsar Nicolas I. Thanks to the Stuve works, by 1885 the city of St. Petersburg was acclaimed as the World's Astronomy Capital.

Also in 1900 the St.Petersburg National Research University of Information Technologies, Mechanics and Optics was founded as a special school for masters of precision instruments and optics. In 1918, just after the Bolshevik Revolution there was founded also in St. Petersburg, the GOI, State Optical Institute, which became the centre of development of all Russian optics since then.

After the end of the WW1 Germans were prohibited to develop military devices, lost their territories and became economically vulnerable as a result of the Versailles treaty. During 1917, Russia quit the War, renouncing some territorial and financial claims through the Treaty of Brest-Litovsk. Germany saw in Russia the possibility of restoring some of its power. The Soviet Union was an excluded country due its new political regime and saw enormous possibilities in her own development. That way on April 16th 1922, in the Italian city of Santa Margherita Ligure, both countries signed the Rapallo Treaty of mutual cooperation at various levels. At that time, the economies of both Germany and the new Soviet Union were isolated from the

western countries, and thus favored cooperation between these two countries.

Furthermore, the Russians got access to German engineering techniques and expertise, which proved invaluable, when in 1927 Stalin began his series of Five Year Plans to rapidly industrialize the USSR. According to him, Russia should, at the third stage of the Five Year Plan, be at the top level of production quality making all the best products the world could ever hope to see.

In fact, at the first Five Year Plan the Progress Factory was founded which from the beginning made school and scientific microscopes and also in the 1930's the best planapochromatic objectives bearing the name Zeiss, of superb quality which would have been impossible to produce at such prices in Germany.

In 1918 RAOOMP was nationalized. In 1926 it began producing its own optical glasses at its other unit LENZOS (Leningrad Factory of Optical Glasses) (ЛЕНЗОС) Ленинградское Завод оптического-стекла ; this same year the branch Promet (later Progress) was opened, producing gunsights for the German Reichswehr army artillery. During 1932, there were nationalized two types of German camera shutters: the Vario became the GOMZ and the rim-set COMPUR became TEMP. Following a plan of amalgamation of factories, the conglomerate had passed through a number of different names and administrations:

The names:

The original RAOOMP led into forming several branches the most important were:

GOMZ /ГОМЗ (1914-1962)

KINAP /КИНАП (1931-1962)

PROGRESS /ПРОГРЕСС (1931-1962)

From 1924 the enterprise was frequently reorganized with various designations and management boards.

The enterprise conducts the history from existing since 1924

(TOMP) "Trust of the optical-mechanical productions" (ТОМП), "Треста оптико-механических производств" where some small plants and workshops entered.

On December 29, 1929 by the decision of Council of Work and Defense of the USSR it was reorganized into TOMP and its structure included the Izyumsky and Leningrad plants of optical glass, and also Pavshinsky plant of exact mechanics.

This new association received the name (VTOMP) "All-Union Trust of the Optical-mechanical Enterprises" (ВТОМП). "Всесоюзный Трест Оптико-Механических предприятий".

In 1930 of VTOMP again I replaced the name with (VOOMP) "All-union association of the Optical-mechanical industry" (ВООМП) "Всесоюзное Объединение Оптико-Механической промышленности". In the same 1930 the enterprise was renamed into (GOMZ). "The state optical-mechanical plant" (ГОМЗ) "Государственный оптико-механический завод".

Since 1962 The conglomerate was known as LOOMP, "The Leningrad association of optical-mechanical enterprises" (ЛООМП) "Ленинградское объединение оптико-механических производств" — and in 1965 it became LOMO, "The Leningrad optical-mechanical association (ЛОМО) "Ленинградское оптико-механическое объединение". By the time of LOMO's creation it included the following manufacturing plants:

- "KINAP" (film equipment)
- "Progress" (military production — artillery sights etc.)

- (OOMZ) "Experimental optical-mechanical plant" (ОМЗ) «Опытный оптико-механический завод»
- Certain other enterprises

From 1962 to 1965 the enterprise was called "LOOMP" (The Leningrad Association of Optical-Mechanical Enterprises).

In 1993 LOMO was privatized and received the name JSC LOMO, the owners of which include more than 16 thousand shareholders. Today about 3.5 thousand employees work in JSC LOMO ОАО "ЛОМО".

LOMO NAMES before the LOMO structure:

1914 - Russian Joint-stock Company of Optical and Mechanical Productions (RAOOMP) - Российское Акционерное Общество Оптического и Механического Производств (РАООМП)

1918 - Plant of Optical and Mechanical Productions - Завод Оптического и Механического Производств

1921 - State optical plant N 95 (GOZ) - Государственный оптический завод N 95 (ГОЗ)

1930 - State Optical Plant (GOZ) - Государственный оптический завод (ГОЗ)

1931 - The State Optical-mechanical Plant (GOMZ) of name OGPU - Государственный оптико-механический завод (ГОМЗ) им. ОГПУ

1939 - Plan N 349 of name OGPU mail box 412 - Завод N 349 им. ОГПУ п/я 412

1960 - GOMZ of name OGPU - ГОМЗ им. ОГПУ

1961 - GOMZ of Lenin's Order of OGPU - Ордена Ленина ГОМЗ им. ОГПУ

1926 - Experimental telescope plant - Опытный трубочный завод

1927 - Progress plant - Завод "Прогресс"

1933 - State mechanical plant "Progress" - Государственный механический завод "Прогресс"

1937 - State unified plant "Progress" - Государственный союзный завод "Прогресс"

1940 - State unified plant N 357- Государственный союзный завод N 357

1953 - State unified plant N 357 of mail box 825 - Государственный союзный завод N 357 п/я 825

1931 - Leningrad state plant of cinematographic equipment (KINAP) - Ленинградский государственный завод киноаппаратуры (КИНАП)

1962 - Leningrad association of optical and mechanical productions (LOOMP) - Ленинградское объединение оптических и механических производств (ЛООМП)

1965 - Leningrad Optical-mechanical Association (LOMO) - Ленинградское оптико-механическое объединение (ЛОМО)

1993 - LOMO open joint stock company - Открытое акционерное общество "ЛОМО"

The Second War years were a hard time for LOMO and during the Leningrad Siege several employees died from hunger and starvation. LOMO lost many of his staff as occurred everywhere in Russia, but the great challenge of reconstruction after the War was eventually won.

In 1957 due to the high demand for photographic products, LOMO cooperated in the foundation of the MMZ factory at Minsk in Belorussia, the Minsk Mechanical Works named after S.I. Vavilov. His first products had been cameras and machines for optical instruments and processing devices. A production line of Smena cameras was founded there. In view of expanded production and the naming of manufactured items, in 1971 the BelOMO (Belarusian Optical and Mechanical Association) was founded on the basis of the previous MMZ S.I. Vavilov factory. Soon new generations of camera such as the Vesna, Siluet, Chaika and Vilia models came into production, all derived from the original Smena. They can be seen on the following pages.

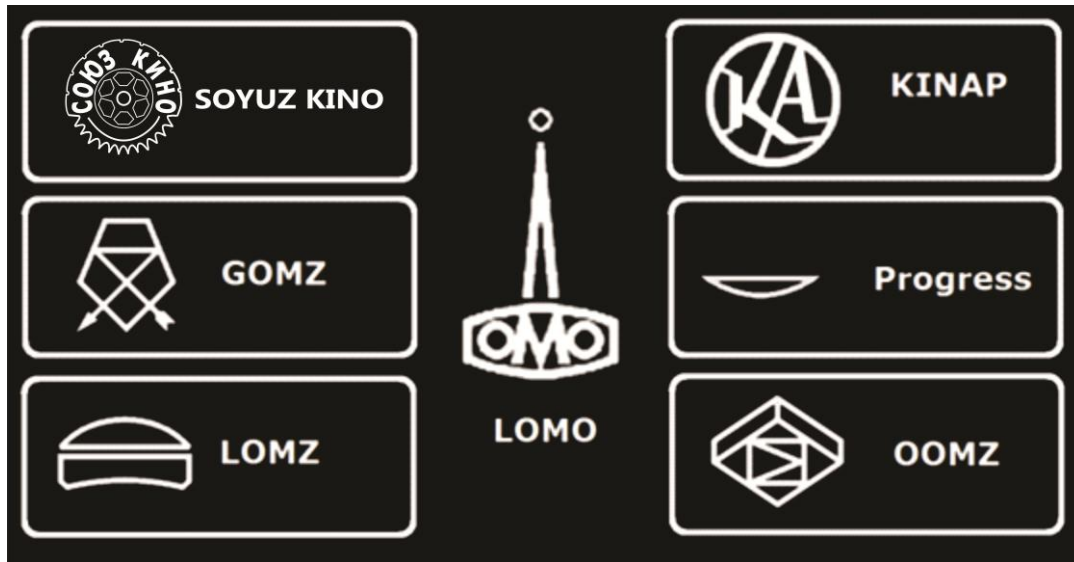
From the 1990's, the now giant company, became known the world over and this is probably due to the efforts of Matthias Fiegl and Wolfgang Stranzinger, who founded LOMOGRAPHY in order to spread and commercialize popular photo cameras. As a result of a short joint venture experience with the consultancy McKinsey, that organised international trade fairs, resulted in the creation of the LOMO American subsidiary now operating in the United States.

Naval optical instruments; all kind of lenses; astronomic instruments and telescopes; meteorologic instruments and devices; Professional movie cameras and projection equipment; sound installations for theatre and radio broadcasting; sound and image recorders for television networks; amateur and professional cameras; telephone and communication equipment; loudspeakers and microphones; amateur movie equipment; medical and metallurgical, scientific and school microscopes. Precision measuring equipment was pioneered in the construction of large telescopes; stereo projection without glasses for the audience; the kinopanorama technologies and MANPADS a portable optical guided missile.

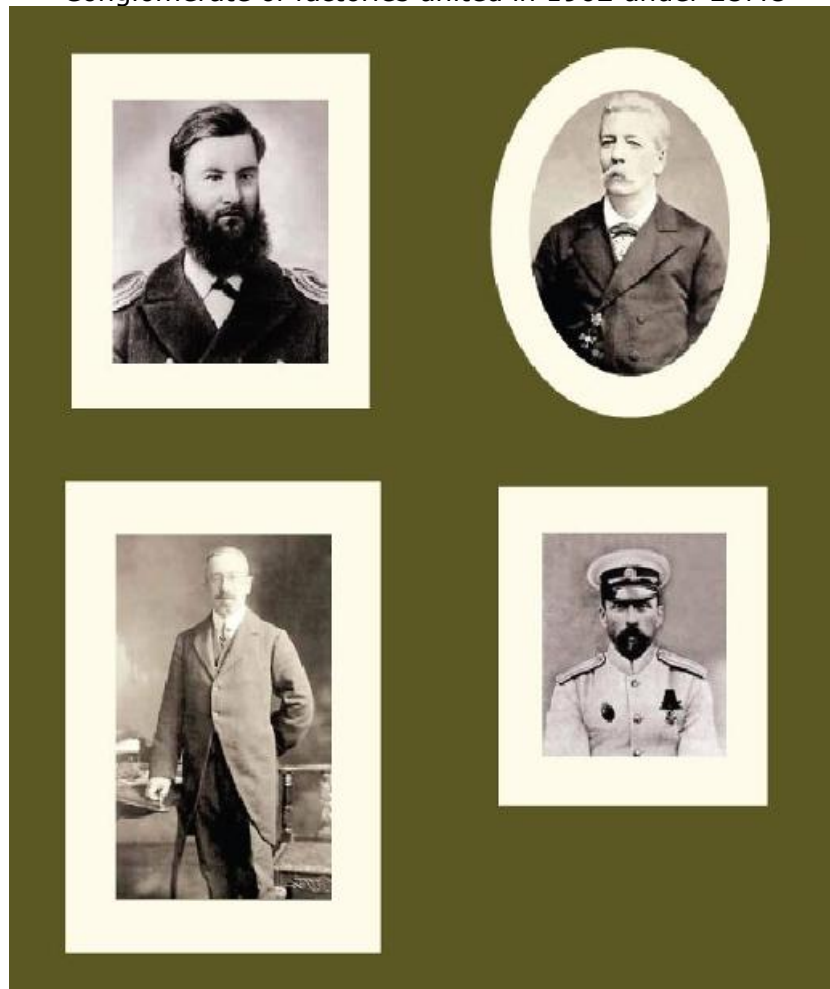
Our description will concentrate on the development of the camera, giving special honor to the most important market phenomena –the Smena, which is not often seen as an important landmark in the photographic world. But this camera was decisive in a series of technical innovations adopted by various other manufacturers. Smena (the new generation) is said to be the very opposite of all sophisticated cameras. Its technical conception, alongside the Lubitel another LOMO product, goes against the establishment belief that complicated cameras are needed for quality work. This simple camera in expert hands produces top quality results at near box camera prices. Really it is one of the best cameras to counter camera snobs who think that you need an expensive camera to take satisfying photos.

The Smena second series adopted the 40mm optics as standard as early as 1953. It needed twenty more years for Leica CL and Rollei 35 to adopt the same philosophy in their products.

LOMO was known in the photo camera field through the 1930 *Fotokor*, which was the first mass produced Soviet camera. The extraordinary *Reporter* of 1937 and being the developer and contributor of the *FED* in the first period through their *VOOMP Pioner* (1934), the *Gelgar Stereo Camera* and in the previous war years some Aero photogrammetric cameras and especially the famous *Photo Sniper* with its 300mm lens. Also pioneered bringing on light the first 35mm SLR camera the *Sport*, which was evolved from the 1929 *Gelvetta*. Other cameras were made, but special attention was directed to the learning photography by using such simple cameras as the *Uchenik* and *Cyclokamera* and *Rekord*, which were produced in smaller parallel factories. The *Smena* camera was aimed at children and its forerunners can be considered to be the *Liliput* (1937) and *Malyutka* (1940)



Conglomerate of factories united in 1962 under LOMO



The first Staff of LOMO: From left to right, top to bottom: Lieutenant-General A.N. Krylov and Engineer-General Y.N. Perepelkin were two of the marine military engineers who developed the optical and mechanical industry in St Petersburg at the beginning of the 20th century. They laid the cornerstone on which A.L. Gershun (bottom left picture), a professor at St Petersburg University, erected an optical and mechanical workshop which was the foundation of the Russian domestic optical industry. Major-General A.P. Meller (bottom right picture) was one of the founders of RAOOMP in 1910.

The way

Remembering the Soviet Education Minister Lunatcharski, still in 1933, "Every civilized man must know how to use a camera as often and as precisely as he uses a watch to know what time it is. Everyone in USSR must possess not only general training, but specific training in photography, and we must march toward this boot".

Today, photography is in the hands of everyone including untrained people, that way the general knowledge aimed in the past, went downstairs, as in everything today. The philosophy of divide to multiply, was put apart.

With no doubt, the Foto-GOZ was an indicator of the future on 35mm market. The camera was drawn having in mind the interests of the technical and experienced photographer. This project from 1925, foresees the future expansion of the 35mm film, and is the landmark of the direction of the future Soviet industry.

At this time, Russia was a poor men country, and a great culture. 35mm was the basis of the movie industry and movie making. As the mass production reduces the cost of unitary use, 35mm was the ideal format for everyone. During the industrialization process, a treasure of ideas came to life.



Foto-GOZ

f/2/60mm lens, double extension bellows, sliding back film chamber

GOZ decisively paved the way of 35mm. The well established German industry was slower in doing so, once the larger formats were already in spread use. Another camera was the Min of 1929 that resulted in the Gelvetta prototype of 1934 and the Sport of 1935, marketed from 1936, predating the German Exakta as the world's first 35mm SLR camera. The second era of the Five Year Plan has begun in 1933 and a variety of models came to light.



Foto GOZ and sliding magazine Sov. Foto. June 1927

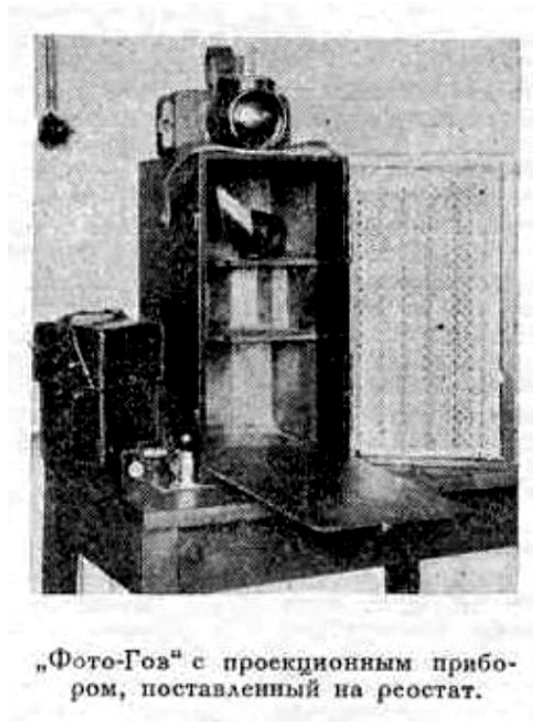


Foto GOZ adapted in the top of its projection device. At left rheostat. (Camera mounted on top up-side down)

During that era, GOZ commercialized the first camera to the public. There was the school cameras aimed to teenagers.



GOZ School Box Camera 1923?

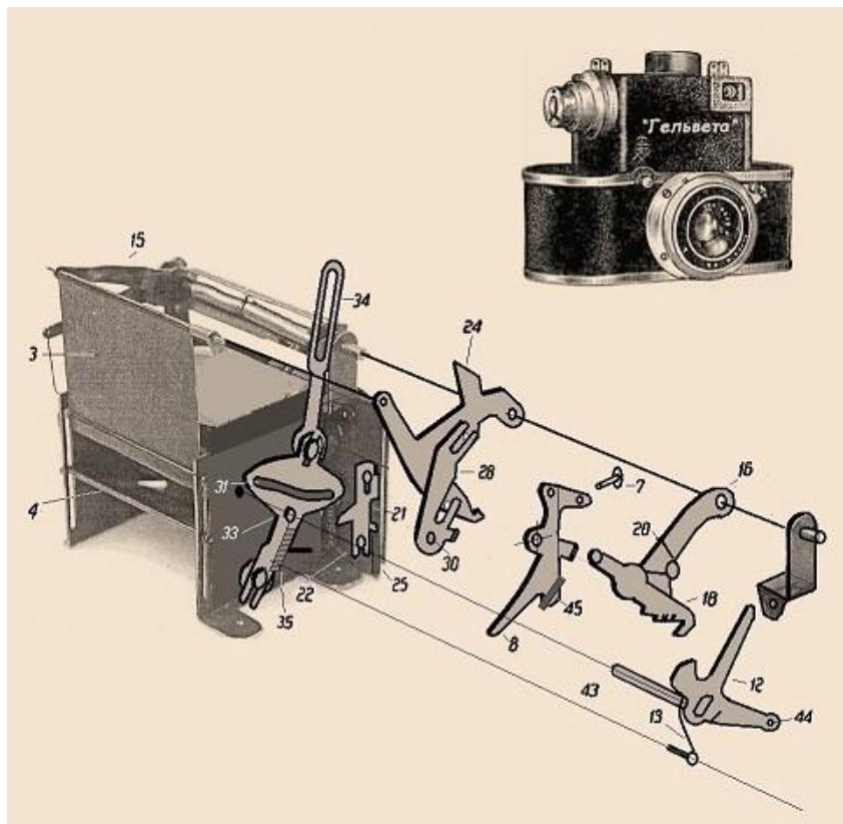
(LOMO document)

Around 1980s, the Modern Photography magazine said through an article of Jason Schneider "They did" – "Russians were the first in the SLR world and overcame developed countries in the world of

inventions. They had begun the era of the most important camera type of the XXth Century". -The Sport camera developed by A.O. Gelgar was also the first one to employ the metal vertical focal plane shutter.



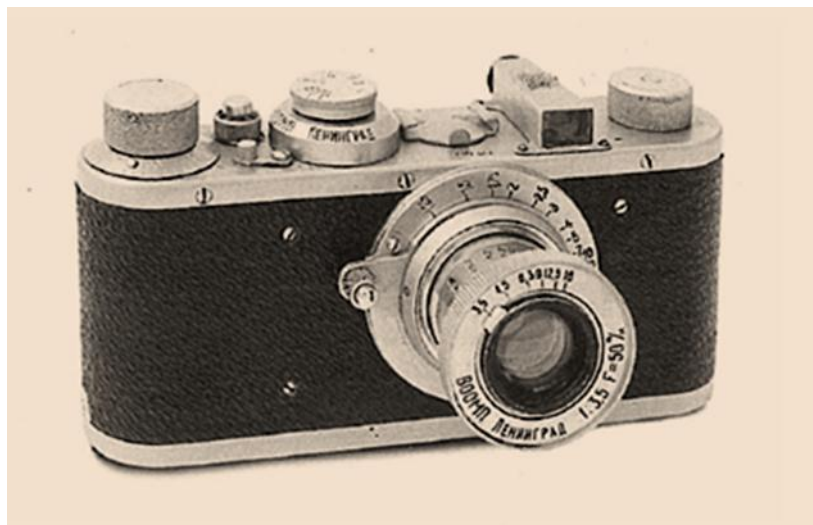
Gelvetta camera engravings on lens cap and Shutter diagram.



The cooperation of the Germans also brought the Leica largely known in Russia from 1929 through the distinctive journalistic work of Rodchenko, and GOMZ, was the first in producing the Pioneer which would later be born as the international famous FED of Kharkov. GOI Institute recalculated the original Elmar.



Pioner Camera first and second models





Pioner camera first and third model



At left GOI lens in Original German Elmar body and at right
GOI lens produced at VOOMP experimental factory



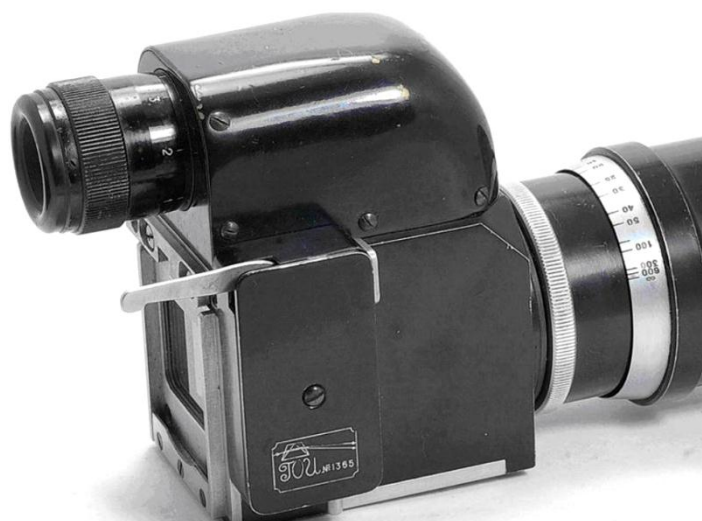
The same lens was used on Sport cameras shown in the next picture. The lens has now a resemblance to the then made Tessar for Contax.



Another landmark searched by collector world over is the famous Fotosnaiper (sic). They were made in two series, the first one using the Pioneer body, the second one using FED bodies. The first one begun around 1936/37 and the second in 1937 Both use the GOI 4.5/300mm lens (that later became the Tair 3) and differed each other by the reflex cage.

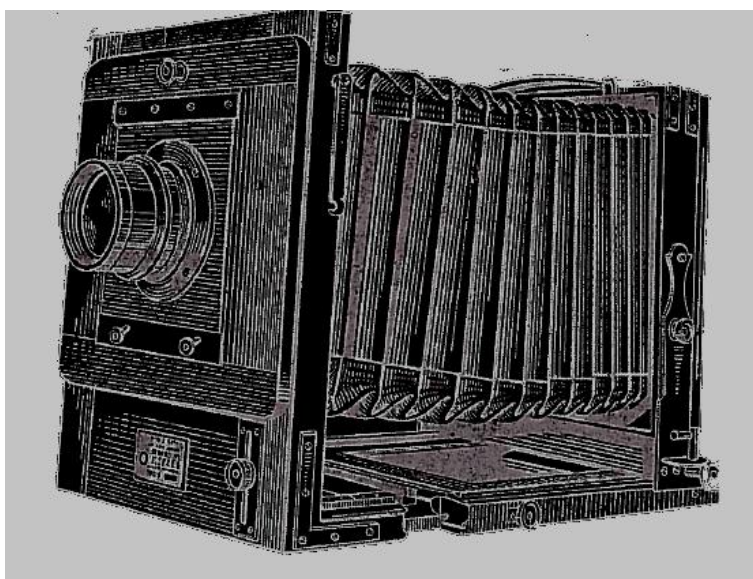


During the war Leningrad was in siege and suffered from shortage of materials, so, production was transferred to Krasnogorsk.



Above, case and complete Fotosnaiper FS-2. Down, reflex cage detail.

This camera became world famous through the pictures taken from Leningrad to the Finnish coast. It was used by the observation squadron RKKA during WWII.



Soyuzkino FK 13x18 from the early days

In the pre-WWII years GOMZ saw a large development and presented these cameras:



Stereo GOMZ 1938 also developed by Gelgar



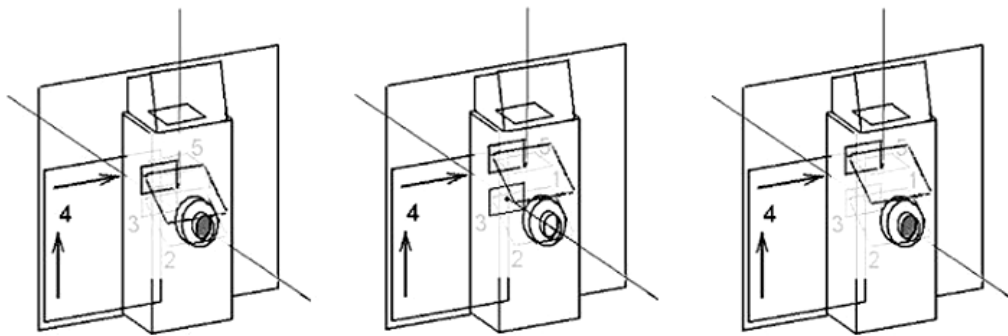
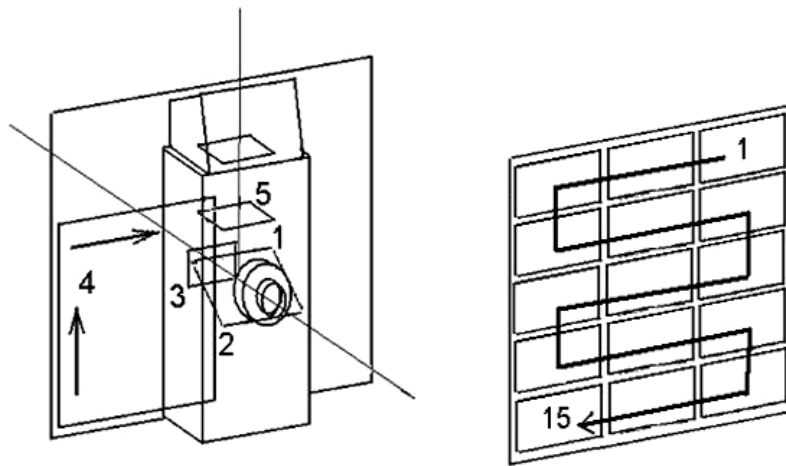
Fotokor 1929 one million produced up to 1940



Turist 1934 - Rare type with Compur shutter

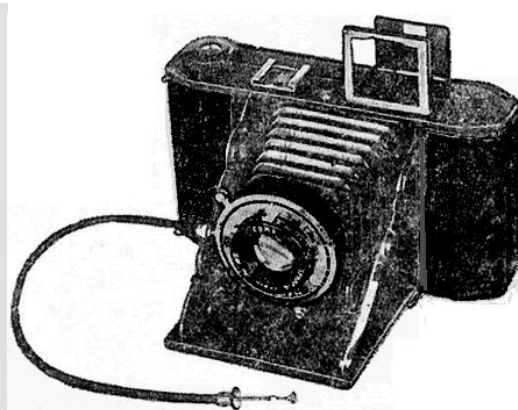


Liubimov Multiplikator 1938 and operating schematics





Reporter 1937 first run and serial model. Professional camera



Prototyping alterations on original Zeiss cameras.

Such as above

1940 no name 6x6 camera based on Nettar



and

Start based on Ikoflex also from 1940

Also

1939 Qvadrat 9x12 Revolving back similar to Linhof III

Objective Industar 55 4.5/140mm and TEMP shutter.

Reissued in 1957.

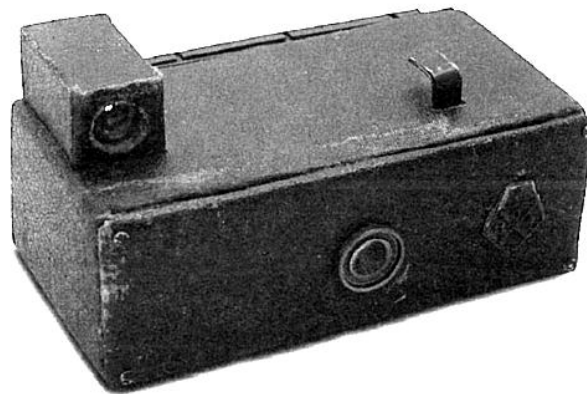


Three types of GOMZ Soviet shutters came to light:

GOMZ: based upon the German Vario (There was another identical version produced at Foto Trud Moscow called EFTE)

TEMP: Made by Progress and similar to Compur

MOMENT: Made by GOMZ an advanced Telma type with slow speeds and rim set dial. This shutter in simplified form and including some Klio solutions gave birth to subsequent ZT series used on Komsomoletz, Lubitel, Smena, Vypel, Estafeta, Yunost, Voskhod and some other cameras from LOMO and MMZ.



Box camera GOMZ with meniscus lens 24x24mm 1932

During these years came also popular type cameras as the Liliput and Maliutka using paper backed 35mm film, these were the forerunners of the pre-war Smena.



Above four versions of the Liliput (1937), down two versions of the Maliutka (1939).

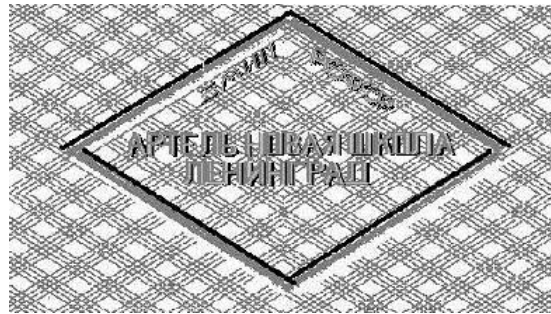




And finally the Smena original in 1939

From the beginning of the Five Year Plan up to the days before WWII, there were an expanding of parallel industries and every effort towards the knowledge of the science of photography was largely spread, mainly in Leningrad, still the "intellectual" Russia's capital.





Cyclokamera 1935

Artel Novaya Shkola



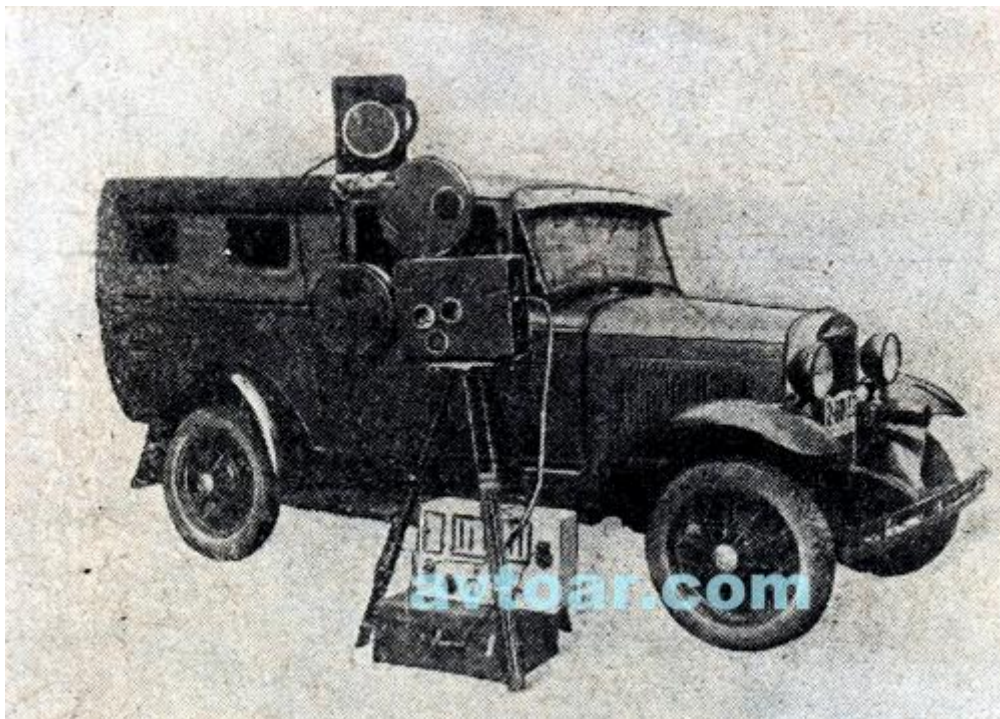
Article Uchenik Un carton Russe by Allan Berry (Nov-Dec 2000) Uchenik 1935

Artel Novaya Shkola

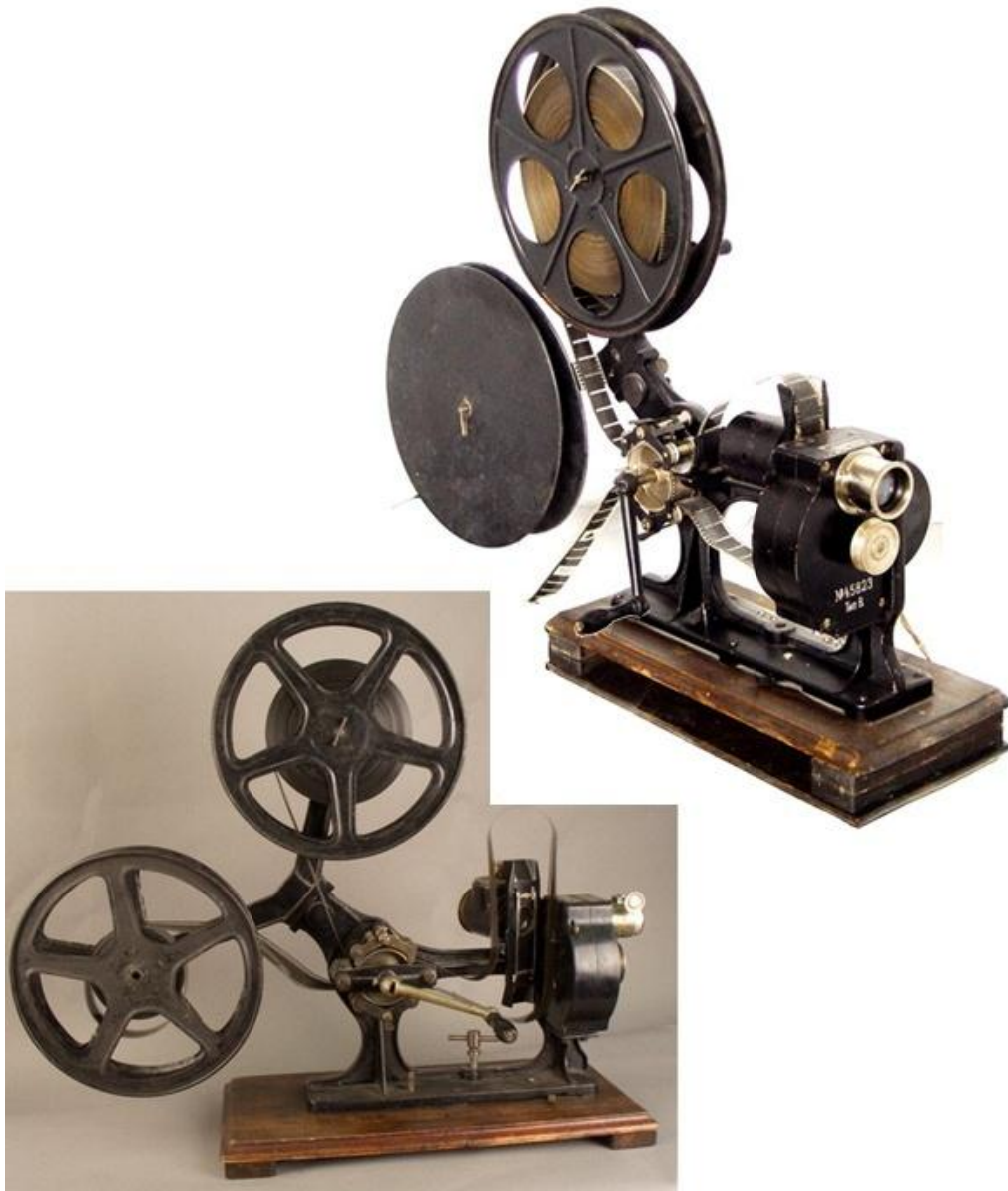


Rekord 1936 UPT Lengorso Metallokombinat Leningrad

During these years there was also grown the movie camera and projector manufacture and the following equipment appeared in the market, mainly due the government efforts of spreading culture and general knowledge to people, in every place of the country.

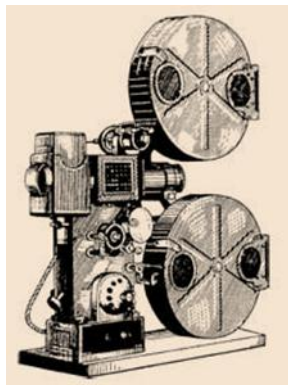


Type of the most widespread travelling cinema "Gekcord" around 1937- 1940 in a GAZ-4 pickup

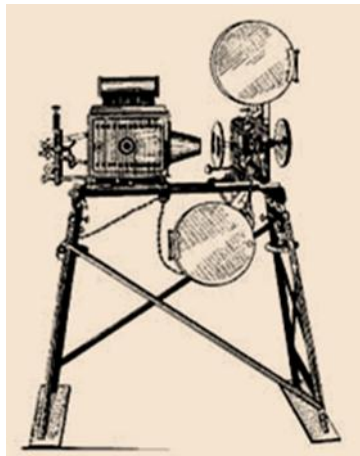


Movie table projector GOZ 1923

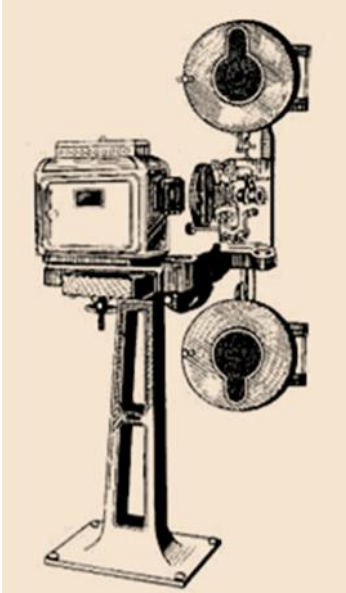
And also those projectors



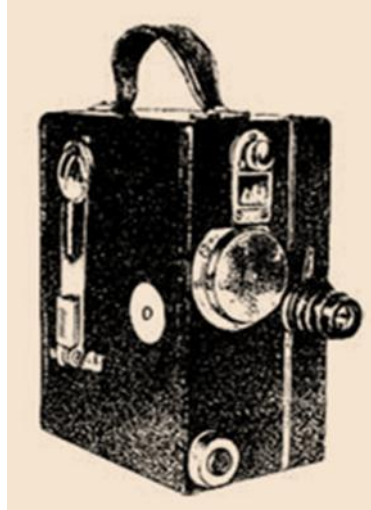
K25



TOMP-3



TOMP-4



KSK-16-15



1938 movie cameras KS1 Bell & Howell based and 16S-1 Siemens based



KN-1 sound portable projector

And by 1936 they began mass making all kinds of microscopes



The first OMZ produced microscope N° 001 at Polytechnic Museum Moscow

Around 1940 Progress was making not only simple microscopes, but also microscopes equivalent to the Zeiss "Large Universal Microscope", the "Large Routine Microscope", and the "Medium Routine Microscope", that is, all of the basic units of the Zeiss microscope line.

Progress also designed some of its own instruments. An example is a very compact medical field microscope. It had the basic frame of the standard type, but the base and stage folded, so that it could be fitted into a small, portable wooden case, lined with velvet and covered with leather. It is the sort of very nice instrument that makes one ask if all "modern" changes are good.

There is little information suggesting that either Progress or Zeiss did much development work during WW-II. We must assume, however, that ideas were formed in the brains of the scientists, whether or not they were put onto paper. But then things changed quickly. (after Prof. Mahlon Kelly)

