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Amateur Astronomy in Russia: Past, Present, and Future

With the Soviet Union's breakup behind them, Russian amateurs are growing in numbers. | **By Sergey Maslikov**

IF WINSTON CHURCHILL COULD CALL Russia and its peoples "a riddle wrapped in a mystery inside an enigma," it seems a safe bet that the development of amateur astronomy in my country remains largely unknown to most readers of *Sky & Telescope*. I hope to dispel some of that mystery by telling our story.

It has been said that the father of Russian amateur astronomers was Archbishop Aphanasy, who lived in the northern port city of Arkhangel'sk, only 150 kilometers (90 miles) from the Arctic Circle. In 1692 he set up an observatory equipped with several small refracting telescopes, but his opportunities to observe were limited by

his ecclesiastical duties — and the incursions of invading Swedish armies.

Meanwhile, the innovative czar Peter the Great was elevating Russia to the status of a great power. Although his methods were harsh and often brutal, he founded the capital city of St. Petersburg, established many schools, and laid the groundwork for the Russian Academy of Sciences, where some of Europe's finest scientists were invited to work. Peter the Great occasionally took the time to observe the heavens

Above: A gathering of amateur astronomers on a Leningrad sidewalk in 1933. Standing beside the boy is Alexander Soloviev, who was the deaf clerk at a mine near Nizhniy Novgorod. Soloviev discovered a variable star in Auriga in 1916, an event that launched him on a distinguished career as a professional astronomer. Unless otherwise credited, photographs were supplied by the author. *Facing page:* Now enjoying a post-Soviet renaissance, Russian amateur astronomers are building telescopes, holding star parties, and sharing observations via the Internet. In April skywatchers gathered in Zvenigorod, outside Moscow, for their third annual Astrofest.

through telescopes, and during his reign astronomy became quite fashionable. For a time it was not unusual for members of the nobility to build private observatories.

Several of Peter's successors also took an interest in astronomical observations. Empress Anna Ioanovna often invited the French astronomer Joseph Delisle to show her the rings of Saturn and other celestial showpieces through a long-focus Newtonian reflector. But it must be admitted that these were the activities of dilettantes, and no lasting contributions to science were made by 18th-century Russian amateurs.

But that would soon change. A naval officer named Platon Ya. Gamaleya independently developed the achromatic objective lens for refracting telescopes, an invention that historians in the West often attribute solely to the Englishmen Chester Moor Hall and John Dollond. Gamaleya also took an interest in meteorites, arguing that they were of asteroidal origin despite Antoine Lavoisier's 1790 pronouncement to the French Academy of Sciences that "stones cannot fall from the sky!"

In 1879 Vasilii Engelhardt, a well-to-do attorney from Smolensk, established an impressive private observatory in the city of Dresden (then in Saxony, now Germany). Engelhardt purchased a 12-inch refractor from the famous Dublin

telescope maker Thomas Grubb. With this impressive instrument Engelhardt became a devoted observer. Over an 18-year period he published three volumes of his fastidious observations of comets, asteroids, nebulae, and double stars. He bequeathed all of his astronomical equipment and 50,000 rubles to Kazan University, 600 km east of Moscow, where the observatory that bears Engelhardt's name is still operational today.

The generosity of another amateur also had consequences that endure to this day. In the late 19th century the preeminent observatory in Russia was located at Pulkovo on the outskirts of St. Petersburg. Pulkovo's high latitude of almost 60° created a pressing need for a more southerly observing station, so in 1906 staff astronomer Alexei Gansky was dispatched to the Crimean peninsula to search for a suitable site.

Shortly after his arrival, he came across a pair of domes. As it turned out, Gansky had stumbled upon the private observatory of a high-ranking government official named Nikolai Maltsov. At their first meeting, Maltsov offered the facility as a gift to Pulkovo Observatory and even threw in the surrounding land to permit future expansion. Today this facility, the Simeis Observing Station of the Crimean

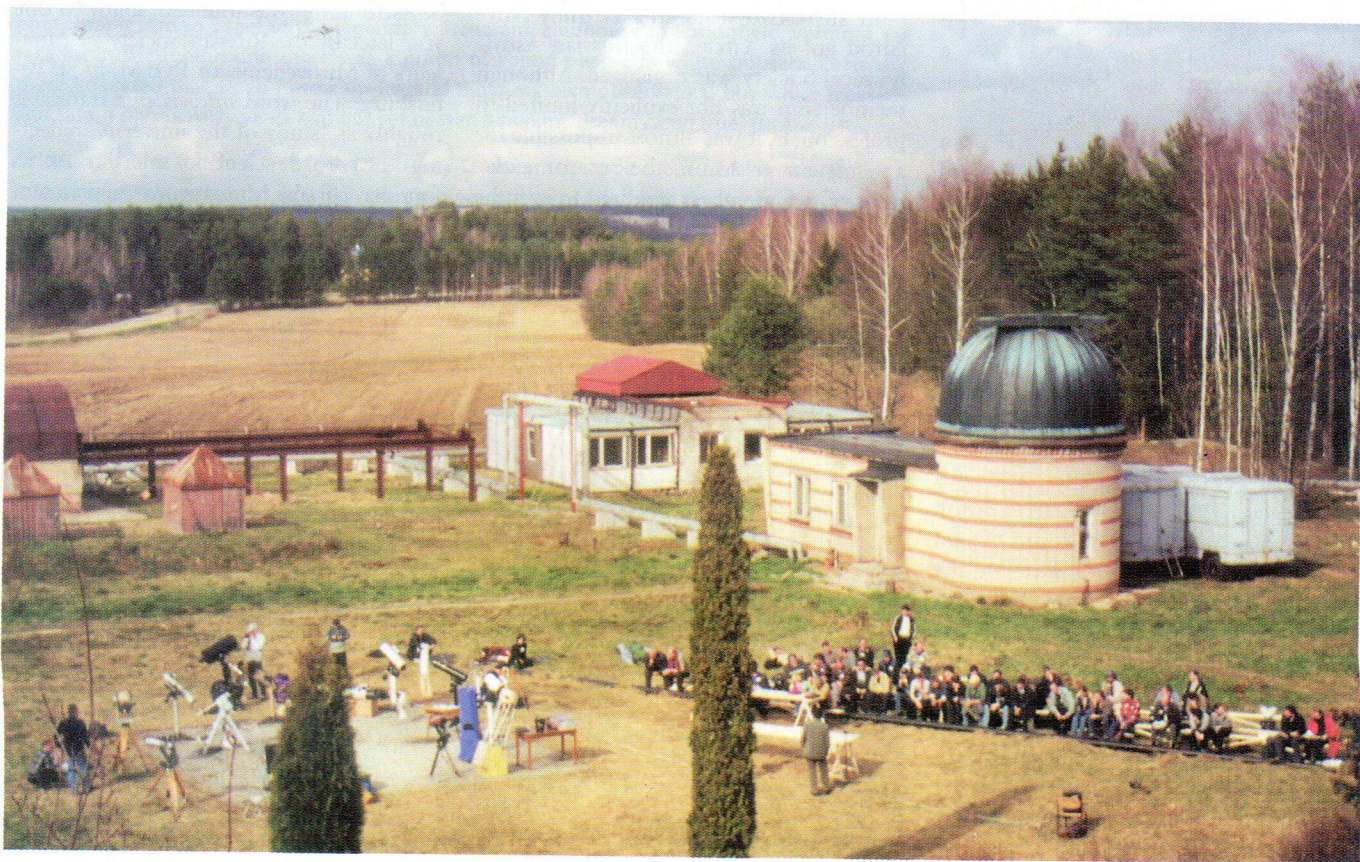
Astrophysical Observatory, is home to 24- and 40-inch reflectors operated by the Ukrainian Academy of Sciences.

Chasing the Moon's Shadow

One of the most accomplished Russian amateurs of the 19th century was Fedor Semenov, the son of a wealthy factory owner in Kursk. Although he was self-educated, Semenov managed to build a 4-inch refractor from scratch — a feat even today. His passion was solar eclipses. Semenov was awarded the Gold Medal of the Russian Geographical Society for calculating the visibility of all eclipses that would occur in the Northern Hemisphere between 1840 and 2001.

Nikolai Donich, a government worker, was a devoted eclipse chaser long before commercial airlines made world travel easy. In pursuit of the Moon's fleeting shadow, Donich traveled to such exotic locales as Sumatra in the Dutch East Indies (now Indonesia). Despite his amateur status, the St. Petersburg Academy of Sciences entrusted Donich to lead its 1905 eclipse expeditions to Spain and Egypt — he was even assigned a professional astronomer as an assistant!

On August 14, 1887, the path of totality passed through the heart of Russia and caused a surge of public interest in astron-



DMITRIY O. CHERHOVICH



Although astronomy developed slowly in czarist Russia, Ivan Kulibin (left, 1735–1818) and Fedor Semenov (1794–1860) helped foster interest among their contemporaries. Right: Apollinary Vasnetsov, an accomplished artist, often rendered astronomical events in his paintings. His *Shadow of the Moon Approaching Feodosiya* depicts the solar eclipse of 1914, which he observed from the shores of the Black Sea.

omy that sparked the creation of our country's first astronomical society. Residents of Nizhniy Novgorod chartered three steamships to travel 150 kilometers up the Volga to see the eclipse, and on the return trip a heated discussion arose among some of the passengers. Appalled by the tremendous ignorance of the rural populace they encountered, Platon A. Demidov, a prominent local attorney and banker, and two young schoolteachers decided to create a society for disseminating knowledge of astronomy to the general public.

But they faced many obstacles. Such a scientific society could only be established in a university city. Nizhniy Novgorod had cathedrals, monasteries, a kremlin, and a theater — but no university. Fortunately, Demidov's connections in St. Petersburg led to a waiver of this requirement, and the official charter for the "Nizhniy Novgorod Circle of Amateurs of Physics and Astronomy" was granted a year later. Demidov donated his personal library and a small telescope, and the membership raised funds to purchase a 4-inch Merz refractor.

The Nizhniy Novgorod Circle would survive the Bolshevik Revolution and the ensuing civil war and terror. Members published the results of their variable-star work, corresponded with foreign astronomers, and subscribed to foreign journals — activities that were quite unusual during those troubled times. They were — and are — perhaps best known for an astronomical calendar issued annually since 1895. When Soviet astronomers sent an

open letter to Pope Pius XI in 1930, condemning the Roman Catholic Church for burning Giordano Bruno at the stake and persecuting Galileo, the Vatican replied: "In the U.S.S.R. only the Nizhniy Novgorod astronomers, with whom we exchange publications, are known to us. Other persons calling themselves 'Russian astronomers' are unknown to us."

In 1890, two years after Nizhniy Novgorod got its "circle," the Russian Astronomical Society was organized. Although membership was not explicitly limited to professionals, it was almost impossible for an amateur to secure the recommendations of five members required to even be

considered for admission. One exception was a 15-year-old Kiev schoolboy, Andrei Borisyak, who in 1901 was the first to report the appearance of a nova in Perseus. For that discovery he was granted membership in the Russian Astronomical Society and presented with a Zeiss telescope as a gift by Czar Nicholas II.

In 1908 a "Moscow Circle of Amateurs of Astronomy" was founded, followed one year later by the Russian Society of Amateurs of Mirovedenie, or ROLM, in St. Petersburg. The word *mirovedenie* translates roughly as "study of the universe," reflecting the broad scientific interests of its founder, Nikolai Morozov. As punishment



JAMES G. BAKER

for his involvement in revolutionary activity, Morozov had to endure a staggering 22 years in solitary confinement, and after his release from prison in 1905 he devoted the remaining years of his life to science. With a membership of up to 700, ROLM established an observatory equipped with a 7-inch Merz refractor, issued regular observational reports, and published the popular magazine *Mirovedenie*.

The Soviet Era

The Bolshevik Revolution of 1917 brought tumultuous changes to every aspect of Russian life, astronomy included. The regimes of Lenin and Stalin demanded that scientific research be subordinated to the task of "socialist construction," and astronomers were obliged to take solemn oaths like "I swear that I will characterize the brightness changes of 150 newly discovered variable stars." Each new discovery supposedly demonstrated the superiority of socialism over capitalism. When the Petrograd astronomer S. M. Selivanov found a comet on September 1, 1919, state officials hailed the achievement worldwide.

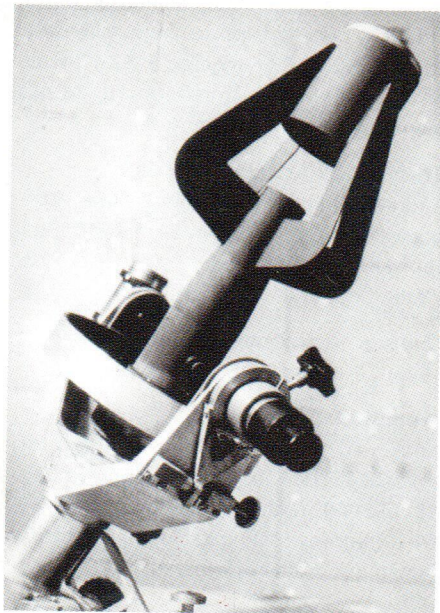
Boris Kukarkin, a Nizhniy Novgorod amateur, began to publish a bulletin called *Variable Stars* in 1928. This evolved into a professional journal, while Kukarkin him-

self became a well-known professional astronomer. During the same decade, members of the Moscow Society of Amateur Astronomers formed the "Collective of Observers." Several of its members, among them Boris A. Vorontsov-Velyaminov and Pavel P. Parenago, became world-famous authorities on astronomy. Some idea of the temperament of those times can be gleaned from the last sentence of Parenago's book *The World of the Stars*, which described Josef Stalin as "the greatest genius of all mankind."

During those dark days, many of the leading amateur figures were repressed. In 1928 the Russian Astronomical Society was dissolved, followed two years later by ROLM. However, *Mirovedenie* continued to appear for several years, and it carried some translations from foreign journals to keep readers apprised of astronomical developments in Western countries. Nevertheless, ideological content crept in. The emerging theories of an expanding universe were criticized as incompatible with Marxist-Leninist dogma. *Mirovedenie* ceased publication at the height of Stalin's Great Terror. Its final issue featured an editorial with the ominous title "For the Full Eradication of Sabotage on the Astronomical Front."

As a 10-year-old boy in 1947, future telescope maker Leonid Sikoruk was mesmerized by a photograph (*facing page*) of the legendary Stellafane clubhouse in Springfield, Vermont. He recalls, "In the foreground there was a group of young people in white trousers. Then and there I decided that when I grew up I would build my own observatory, buy white trousers, and take a photo. Forty years had not yet passed when my dream came true" (*below, left*).

Below, right: This tubeless 10.2-inch f/6 Ritchey-Chrétien telescope is one of Sikoruk's creations. It features a Nasmyth focus, in which the eyepiece is incorporated into the declination bearing.



Cosmic Magnifying Glass

The Hubble Space Telescope captured this spectacular image of Abell 2218, a cluster of galaxies that acts as a giant, cosmic magnifying glass. The cluster — which lies some 2 billion light-years away in the constellation Draco — is so massive that its enormous gravitational field deflects light rays passing through it, much as an optical lens bends light to form an image. 16 by 20 inches, printed on Kodak paper and suitable for framing. Shipped rolled in a sturdy cardboard tube.

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After *Mirovedenie* ceased publication, Soviet amateurs had no journal until 1965, when the popular bimonthly magazine *Zemlya i Vselennaya* (*Earth and Universe*) appeared. Nevertheless, its editors always placed greater emphasis on geology and meteorology than astronomy. In the magazine's heyday, its circulation exceeded 50,000, but in recent years it has plummeted to less than 1,000.

In 1932 amateur and professional astronomers throughout the Soviet Union were brought together by the All-Union Astronomical-Geodetical Society, generally known by its Russian acronym, VAGO. The first scientific society created

during the Soviet era, VAGO established branches in dozens of cities, and a central council in Moscow coordinated amateurs' visual observations of variable stars, meteors, and noctilucent clouds under the supervision of professionals. Incorporated into the Soviet Academy of Sciences in 1938, VAGO published observing manuals, organized eclipse expeditions, and held regular conferences and congresses. Participation in VAGO peaked during the 1980s, when it had about 70 widely scattered branches. A junior section, created in 1965, coordinated activities among isolated circles of young astronomers.

A Telescope-Making Tradition

The first Russian-made astronomical optic was probably crafted by Jacob Bryus, a member of Peter the Great's inner circle, who fashioned a concave mirror for a reflecting telescope in 1733. But our country's first true amateur telescope maker was Ivan Kulibin. A self-educated mechanic from Nizhniy Novgorod, Kulibin managed to get his hands on a Gregorian reflector in 1767. He was able to determine the formula of its speculum-metal mirror — a hard, brittle alloy of copper and tin — and he proceeded to build a machine for grinding and polishing mirrors and lenses. Kulibin also crafted flint glass for

"Gavarite pa russkii?" (Do you speak Russian?)

Thanks to the Internet, many amateur organizations in Russia can now routinely access a vast array of astronomical resources. But nothing compares to the joy of sharing experiences with other amateur groups around the world. Here is contact information for many clubs and societies in Russia; this list is maintained online at www.skypub.com/resources/directory/russia.html. (The telephone country code for Russia is 7.)

"Albireo" Astronomical Club

pl. Detey 1, 394000 Voronezh; 0732-55-38-02; rashozhev@opt.vsu.ru.

"Alcor" Astronomy Club

ul. Osipenko 32a, 443110 Samara; 8462-34-33-40.

"Alcyone" Astronomical Club

Volgograd Planetarium, ul. Gagarina 14, 400013 Volgograd; 8442-36-14-75.

"Almagest" Astronomical Club

ul. Sovetskaya 41, TSTDiyU, kab. 297, 428900 Chuvashiya; 8352-72-09-05.

"Altair" Association of Astronomical Clubs

Viktor E. Troshenkov, Murmansk Branch of AGO, ul. Zelenaya 82-95, 183010 Murmansk; 8152-56-57-65.

Astroclub

Novokuznetsk Planetarium, pr. Metallurgov 18A, p.o. 4318, 654000 Novokuznetsk; 3843-44-19-11.

"Astron" Club

pr. Lenina, 125, fizfak TGPU, 300026 Tula; 0872-25-20-09; root@wowa.tula.ru.

Astronomical Club

Mikhail V. Gorshechnikov, Vyatskiy State Pedagogical University, ul. Lenina 111, 610002 Kirov; aliot@aliot.kirov.ru.

Astronomical Club

Zheleznogorsk Station of Technical Youth,

pr. Kurchatova 3, 662990 Zheleznogorsk; 39197-22-914 or 39197-26-761; root@ksut.krasnoyarsk.ru.

Biysk Planetarium Astronomical Club

pr. Socialisticheskiy 1, 659322 Biysk; 3854-30-49-89.

"Cassiopeia" Astronomical Club

Arzamas State Pedagogical Institute, ul. Karla Marksa 36, 607220 Arzamas; 8314-79-08-59 (evenings).

"Centaur" Astronomical Club

Andrey V. Demidov, Public Institution of Additional Education, pr. Leningradskiy 341, korp.1, 163001 Arkhangel'sk; 8182-41-41-89 or 8182-47-57-01; smis@agtu.ru; <http://friends.pomorsu.ru/centaurus/>.

Chelyabinsk Astronomical Club

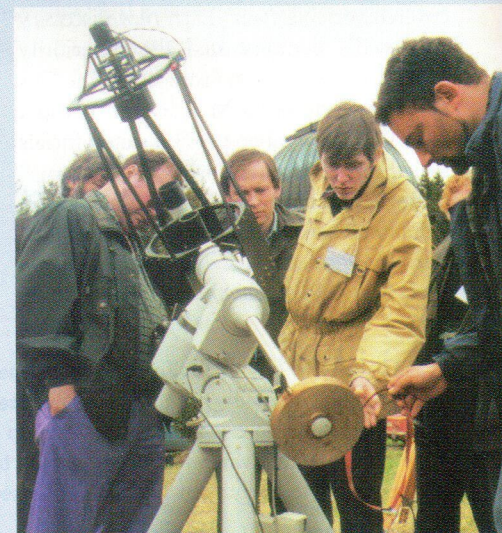
Andrey K. Kirillov, Chelyabinsk State Pedagogical Institute, pr. Lenin 69, 454080 Chelyabinsk; 3512-65-09-36; kirillov@cspi.urfu.ac.ru.

"Elberet" Astronomical Club

187500 Tikhvin; 81267-4-37-88.

"Fomalhaut" Society

Andrey T. Fomin, ul. Pogranichnaya 68, SakhGU YENS, kab. 116, ul. Pogranichnaya 68, 693000 Yuzhno-Sakhalinsk; 4242-72-86-19; andrey@sakhgu.sakhalin.ru; <http://fomalhaut.metastock.ru/>.



Members of the Moscow Astronomical Society check out the offerings at last April's Astrofest gathering.

"IKAR" Astronomical Club

Alevtina M. Kireeva, ul. Vershinina 17, kab. 601, 634041 Tomsk; 3822-55-77-70; kira@dtu.tsu.ru; <http://www.dtu.tsu.ru/ikar/>.

Krasnoyarsk Astronomical Club

Sergey V. Karpov, Regional Palace of Pioneers and Students, ul. Konstitutsii 1, 660049 Krasnoyarsk; 3912-26-58-53; fax: 3912-27-66-85; karpov@guno.cross.krasnoyarsk.ru.

"Lyra" Astronomical Club

Dept. of Astronomy, KGU, Kremlevskaya ul. 18, 420008 Kazan; 8432-64-30-92; gera.zhukov@ksu.ru.

"Meridian" Society

ul. Respublicanskaya 108, JAGPU, 150000

making achromatic objective lenses.

Despite the talent of men like Kubilin, Russia lagged many decades behind Europe and the United States in the manufacture of telescopes. Well into the 20th century, the domes of our great observatories housed instruments made by Germans like Fraunhofer, Merz, and Zeiss or Americans like Alvan Clark. It was only in 1904 that the first Russian telescope-making enterprise, "Russian Urania," was founded by Yuri Mirkalov. Before the firm's demise in 1917, its workshops produced more than a hundred telescopes and scores of observatory domes, though Mirkalov obtained all of the objective lenses abroad.

Yaroslavl'; 0852-22-27-70 or 0852-30-53-95; perov@gw.yspu.yaz.ru.

Moscow Astronomical Club

Andrey J. Ostapenko, ul. Bol'shoya Bronaya 7, q. 3, 103104 Moscow; 095-202-1618; andos@osp.ru; <http://www.geocities.com/astroinfinity/Index.html>.

Nagorskaya Amateur Observatory

ul. M. Gvardia 19, 613230 Nagorsk.

"Parsec" Astronomical Club

Palace of Children and Youth, ul. Irtyashskaya 1, 456780 Ozersk.

Pyatigorsk Branch of AGO

Alleya Stroiteley 8-75, 357532 Pyatigorsk; 87900-99-351.

"Quasar" Astronomical Society

4 mk-rn, School No. 8, 140300 Egor'evsk; 09640-39-449 or 09640-39-395.

Rostov Society of Amateur Astronomy

P.O. Box 3879, 344022 Rostov-na-Donu.

"Sirius-86" Astrospace Association

Yu. V. Golendukhin, ul. Lenina 76/5, 623730 Rezh; 34364-2-42-19; sirius@online.ural.ru; <http://home.ural.ru/~sirius86/>.

"Star Pilgrim" Club

Anatoliy A. Ksenofontov, ul. Budennogo 7A, kv. 87, 606026 Dzerzhinsk; 8313-29-51-63.

Tsiolkovskiy Astronomical Club

Sergey Savinov, Palace of Youth Activity, ul. Kirova 17, 426001 Izhevsk; sssa2000@izh.com; <http://astroclub.vov.ru/>.

Youth Astronomical School

Aleksander G. Sergeev, ul. Warsawsкая 122-125, 196240 St. Petersburg; 812-233-3112 (6:30 to 10:00 p.m.); yaseu@mail.ru; <http://yaseu.da.ru/>.

Swinburne Astronomy Online Short Course

Enrollments are now open for the Swinburne Astronomy Online 6 week short course on **Searching for Extrasolar Planets and Extraterrestrial Life**, commencing October 1, 2001. Participants around the world download custom made animated course content and interact via newsgroup discussions lead by a professional astronomer.

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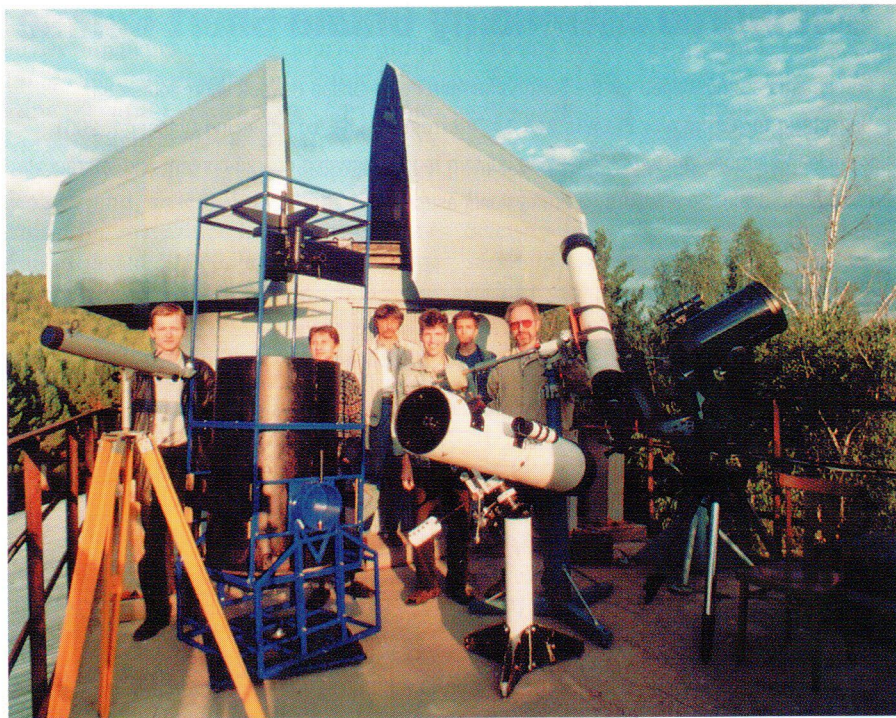
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Last year amateurs in the Siberian city of Krasnoyarsk constructed a 21-inch Dobsonian telescope (left of center) under the direction of Sergey Karpov. The rocker and ground board are made from steel framing, and the tube assembly folds in two for ease of transport.

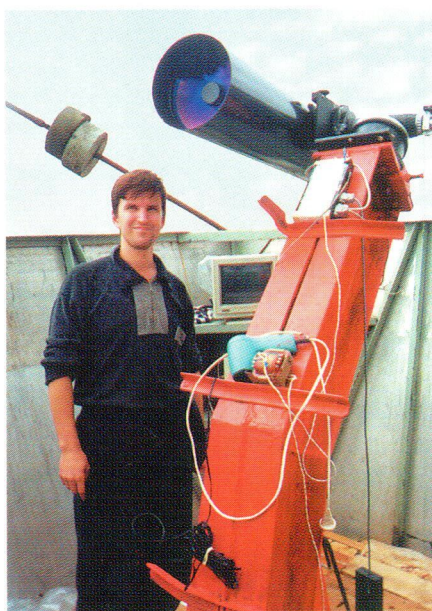
Newtonian reflectors were popularized in Russia by Aleksander Chikin. Four years after he ground his first mirror in 1911, Chikin published *Reflecting Telescopes: Making Reflectors by Means Available to Amateurs*. For decades this book served as the standard reference not only for amateurs but for professionals as well. The famous optical designer Dmitriy Maksutov, the inventor of the catadioptric (mirror-lens) telescope now used worldwide, was only one of many who found inspiration and direction in the pages of Chikin's little "bible."

During the 1930s amateur telescope making became popular in Russia, paralleling developments in the United States. A leading proponent of this effort was Mikhail Navashin, a geneticist and professor of cytology. His book *The Amateur Astronomer's Telescope* went through several editions. The Moscow artist Mikhail Shemyakin also played a prominent role, and under his direction VAGO published the digest *Amateur Telescopes*.

In Soviet times amateurs could construct a telescope at no cost simply by joining a local club of telescope makers,

Timur Kryachko tracks many kinds of objects from his small but well-equipped observatory in the northern Caucasus town of Arkhyz, not far from Russia's giant 6-meter reflector.

which existed in every large city. The better-equipped groups had machine tools for fabricating mirrors and accessories. Club members routinely produced 4- and 6-inch reflectors, and a few pursued larger apertures of up to 16 inches. Notable among these groups was "Dmitriy Maksutov," a telescope-making club started in 1973 by Leonid Sikoruk, a film director from Novosibirsk. Its members took on challenging telescope designs including Schmidt and Wright cameras,



Dall-Kirkham and Ritchey-Chrétien Cassegrains, and even a spectroheliograph. Sikoruk's 1982 book *Telescopes for Amateur Astronomers* remains popular to this day, and his documentary "Telescopes" was broadcast on television throughout the Soviet Union.

In 1980 Sikoruk persuaded the managers of a factory in Novosibirsk that produced artillery sights and rifle scopes to manufacture telescopes for amateur astronomers, an event that marked an important milestone for the Russian telescope-making movement. Bearing the brand name TAL, thousands of these instruments soon became widely available in shops. One or more of these found their way to every Russian school, astronomical club, and planetarium. Exports of the TAL series began in 1993, and a 6-inch Newtonian model was favorably reviewed in this magazine (*S&T*: December 1997, page 57).

Anatoliy Sankovich is another enthusiast who has turned his passion for telescopes into a commercial enterprise. Having fabricated numerous complex optical systems such as Wright-Schmidt cameras, Sankovich joined with other Moscow-area telescope builders to launch Svema-Luxe (www.telescope.newmail.ru/eng/eng.html). The company now supplies the INTES manufacturing cooperative with paraboloidal primary mirrors having apertures up to 20 inches.

One might have imagined that as the 20th century drew to a close, so had the possibilities for new optical configurations for telescopes. But in recent years P. P. Argunov of Odessa and Yuri Klevtsov of Novosibirsk have devised all-spherical catadioptric designs that promise to be more economical to produce than Maksutov-Cassegrains yet provide comparable performance. The Novosibirsk Instrument-Making Plant (www.telescopes.ru) has recently added an 8-inch aperture "Klevtsov" to its TAL line of amateur telescopes, an encouraging marriage of individual ingenuity and state enterprise in the emerging new Russia.

An Uncertain But Hopeful Future

With the disintegration of the Soviet Union in 1991, VAGO lost its "all-union" status, and the activity of some of its branches ceased. A black period for astronomy began. With rare exceptions, Russian amateurs who wanted first-rate telescopes had to make them with their own hands — yet few of the telescope-making

clubs remained, and the raw materials and accessories were no longer free. Under such adverse conditions, it might seem that amateur astronomy in Russia would slowly wither away.

Under the chaotic economic conditions that still prevail in our country, most Russians still struggle for their daily bread, and there is little money for hobbies. But despite these difficulties, we see many hopeful developments. Some former VAGO branches have survived as independent societies, and since 1995 many new amateur groups have formed. The prices of ready-made telescopes and accessories, though very high, are no longer completely out of reach.

Our growing numbers of amateur sky-watchers include one observer who is setting a high standard for observing excellence. From his site in the northern Caucasus Mountains, Timur V. Kryachko has discovered a dozen asteroids to date — one of which he found while serving in the Soviet army! Kryachko monitors variable stars, hunts for supernovae, and sometimes leads “expeditions” of amateurs to dark-sky sites in the Caucasus and Crimea.

Thanks to the Internet, amateurs across our vast country are communicating and forging bonds. School-sponsored astronomical “olympiads” also play an important role in swelling the ranks of young astronomers (*S&T*: March 2000, page 86). Winners at the local level travel to Moscow to compete for national recognition. Dobsonian reflectors, star parties, and Messier marathons — all foreign to us not too many years ago — are becoming increasingly popular. For the past three years the Moscow Astronomical Club, currently the largest amateur group in Russia, has sponsored an astronomical festival in Zvenigorod, 50 km west of Moscow (<http://astrofest.narod.ru/>). A handful of enthusiasts have also banded together to publish the monthly magazine *Zvezdochet* (*Stargazer*), which is devoted exclusively to amateur astronomy.

It is once again a time for astronomy and planetariums to flourish in Russia. The motto of Britain’s Royal Air Force, *Per ardua ad astra* (“To the stars through difficulties”), could certainly be ours as well.

SERGEY MASLIKOV is a staff member of the Tomsk Planetarium in Siberia. A regular contributor to Zvezdochet (www.astronomy.ru), Maslikov has a special interest in the history of astronomy. He thanks Thomas Dobbins for help in preparing this article.



Long-time amateur astronomers Michael Sandras (left) and Barry Simon at the Daily Living Science Center’s observatory in Kenner, Louisiana.

■ star trails | By David H. Levy

Crescent City Astronomers

THE CRESCENT CITY. THE BIG EASY. These are just two of the colorful monikers that describe one of the most fascinating cities I’ve ever been to — New Orleans. Bounded on one side by a crescent-shaped meander of the Mississippi River and on the other by Lake Pontchartrain, this largest city in Louisiana takes the definition of character to a new level. After all, what other metropolis would completely close down its streets in order to host a giant Mardi Gras parade with “The Constellations” as its theme? In February 1977 I personally enjoyed that parade, with giant floats representing the likes of Cygnus, Taurus, and Lyra, that wound its way through town.

New Orleans lives in style, and one of its astronomy clubs, the Pontchartrain Astronomy Society, or PAS (www.nightskydesign.com/pas/), is fully in tune with that style. One of the most dynamic amateur groups in the country, the PAS owes its success to its many active members. This month’s Star Trails highlights two of its live wires — Michael Sandras and Barry Simon.

As a youngster, Sandras traversed the far reaches of the universe at warp speed with *Star Trek*’s Captain Kirk and Mr. Spock. “This original TV series,” he says, “made me extremely interested in space

travel and astronomy.” Visits to the local library, as well as supportive parents who bought him his first telescope — a 60-millimeter refractor — furthered his interest. On the first clear night after he unwrapped his new scope, he aimed it at Saturn, took one look, and was hooked.

After completing high school in 1981 Sandras enrolled at the University of New Orleans (UNO), but he left before graduating to pursue a planetarium career. “Because I didn’t finish college,” he admits, “I’ve had to work very hard to prove myself.” He started out as an apprentice at Ep Roberts Instruments, a local telescope dealer. In 1989 he was hired as a telescope operator at UNO’s observatory. It wasn’t long before Sandras was offered a second job, as director of the Daily Living Science Center’s planetarium and observatory in the New Orleans suburb of Kenner. There he gives lectures to an average of 20,000 visitors a year. In addition, he is the president-elect of the Southeastern Planetarium Association.

A close friend of Sandras, Barry Simon is a hospital specialist with Novartis Pharmaceuticals. Simon spends his days visiting teaching hospitals in the New Orleans and Baton Rouge areas. His nights and weekends, however, are spent indulging in his passion for the night sky,