## FIRST AIRFIELDS OF SAINT PETERSBURG – FIRST AIRFIELDS OF RUSSIA

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## **Abstract**

The real story of creation and use of first Russian airfields located in Saint-Petersburg region.

Russia, without a doubt, is a modern aerospace state of the world with rich history of its own path of conquest of the Fifth Ocean. Airfields that started to spring up in all parts of Russia one hundred years ago became the first take-off points on this path and centers of expansion of aircraft industry of the country. Anyhow, any list of legendary airfields includes the first ones, from where our path to the Sky has been paved.

In those not-so-distant days Petersburg was the capital of Imperial Russia and, therefore, it was logical that such airfields had first appeared in the land of Saint Petersburg, those were: Gatchinsky, Korpusnoy and Komendantsky airfields.

Military men, for sure, were locomotive power in that direction. Nevertheless, public figures also contributed greatly into the history of generation of domestic airfield network, from where first military and then civil air units started their development.

Regular generation of the Russian Air Force (AF) began on October 27 (November 8), 1884, when formation of the first "regular" unit of military aeronauts was initiated in St. Petersburg by an order of Military Minister P. S. Vannovsky. In spring of 1885 the first military aeronauts were quartered in the territory of "Experimental Battery of Artillery Committee", i.e., on Volkovo Pole artillery practice ground. In 1888 a special parcel of land owned by the Society of peasants of Moscow Yamskaya Sloboda (Moscow coachmen's settlement) in Petersburg situated in the neighborhood of

buildings of former Experimental Battery was additionally allotted for construction of Training Regular Aeronautical Park (TRAP) and for its practical exercises.

As late as in a year after being quartered at Volkovo Pole, the first hot air balloon flight from there to Veliky Novgorod was performed on October 6 (18), 1885. It was the first successful flight in Russia and the first free balloon flight of military aeronauts of the Russian Army.

The first stage of formation of "regular" team of military aeronauts was accomplished on October 24 (November 5), 1885 with assignment of Lieutenant A. M. Kovanko as a "head of the team of military aeronauts with duties of company commander...".

TRAP was re-established as Training Aeronautical Park (TAP) on October 23, 1890, which became the first training center for the emerging Russian Air Force. The first in Russia wooden airship hangar was built in 1893 in the territory of TAP, which was called just "the stable for balloons". And the first metal and stone airship hangar was built here in 1909.

By that time heavier-than-air aircrafts had started asserting themselves in full as a new perspective means of transport that is worthy of special attention of military men.

To ensure more correct organization of the work in this direction the Military Council ordered to "re-form TAP" to Officers' Aeronautical School (OAS) on March 11, 1910 against a proposal of the Chief Engineering Department (CED). Eternal Head of TAP, A. M. Kovanko, Major General by that time, was assigned as Head of the school on August 4, 1910.

Two departments (presently referred to as faculties) were established in this first flying school: 1 – "Aeronautical" department, with a

training ground (summer camps) nearby the village of Salyuzi; and 2 – "Aviation" department, with training air fields: Voyennoye Pole (Military Field) in the town of Gatchina and military airfield (Korpusnoy) specially built for OAS in Saint Petersburg.

That was the way the aviation history of these territories began.

Voyennoye Pole was situated not far from Gatchina palace-and-park ensemble and had been a training ground for the Life-Guards of Cuirassier Regiment. According to CED's decision the first Russian military airfield was established here in autumn of 1909 that was later known as the Gatchinsky airfield. But it happened later, while at that time direction and a level ground was enough for a heavier-than-air aircraft to take off. Since the Military Field in Gatchina was level and wide enough, it allowed the air strip to be oriented considering the wind rose, i.e., practically in any direction dictated by weather conditions. After a while, when direction of predominant winds became known and thrust-to-weight ratio of airplanes was increased, the basic direction for take-off and landing was selected; besides, necessary constructions were built on the edge of the airfield: hangars, warehouses, staff office, etc., which, thus, shaped the site that we now call not just an airfield but an aerodrome.

As late as on September 22, 1909 four airplanes were delivered here from TAP-OAS workshops built at the TAP workshops by the order of the Military Department (five airplanes) issued in December of 1908 – the first Government order for the emerging Air Forces in our country.

Nevertheless, since the aviation was just breaking new ground, the aeronautics had not yet receded from its positions. Therefore, a training ground for military aeronauts was being deployed there at the same time. However, day by day the aviation was progressively going ahead. And this road was not paved with roses.

On October 10 (23) and 11 (24), 1909 public flights were performed by Russian national and French aviator Georges Legagneux operating a French-design Voisin biplane. He had successfully accomplished his flights a week before, on October 2 and 3 in another

former Russian city – in Warsaw. But he was not so successful in Gatchina. One of "reportages" said that: "... in the presence of 20 thousand viewers the Legagneux's white biplane ran over grass than it took off the ground a little, flew about 2 km and landed. Soldiers promptly brought the aeroplane to the start position. The second attempt failed. Only the third flight started in a luckier way. Aviator quickly left behind cars accompanying him, flew over the field and headed his aeroplane to a forest edge". Another newsman wrote that: "... a gust of wind swung the aeroplane when that was turning and throw that, nearly overturned, to a swamp.

Public left Gatchina disappointed". Nevertheless. "Vozdukhoplavatel" the (Aeronaut) magazine issued in 1909 described that event as follows: "...Meanwhile, despite the extremely heavy machine of Voisin system and not so much good 8-cylinder Antoinette engine and rather strong wind reaching up to 7 meters per second the aviator committed a beautiful flight covering at least 1.5 kilometer and reaching 10-meter height for a certain time. Taking into consideration that it was the first dynamic flight in St. Petersburg the results of that can be considered as enough satisfactory".

On April 23, 1910 General A. M. Kovanko appointed Staff Captain G. G. Gorshkov as person in charge of the Gatchinsky airfield and assigned ten enlisted men familiar with aeroplane design and engine maintenance.

Soon after then, as late as on May 3, 1910, the institution was established that is known by many people as the Gatchina Flying School. Nevertheless, independent history of this glorified educational institution started later, but at those days it was the Aviation Department of the Officers' Aeronautical School.

G. G. Gorshkov wrote to A. M. Kovanko on May 15, 1910: "...inform you that yesterday, May 14 of this year, works for stones removal from the airfield in Gatchina were completed, stones were removed and disposed and pits were backfilled. To fence all three warehouses with a watch box against onlookers from the side of railway station 150 sagenes<sup>1</sup> of barbed wire and

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 $<sup>^{1}</sup>$  1 sagene = 2.1336 m

80 poles are required. To secure warehouses and aeroplanes against fire, it is necessary to provide at least one fire-extinguisher for each one...". This date, May 15, 1910, became the birth day of the first military airfield in Russia, which also became the first flight training center of the Russian Air Forces.

In six days after opening of the Gatchinsky airfield, on May 21, 1910, Staff Captain G. G. Gorshkov accomplished his first training flight on Farman-IV airplane. And on May 24 (June 6), 1910 the first officially registered flight of Russian-design Gakkel-III aeroplane was performed at the Gatchina field (for the distance of about 200 m). Aeroplane was piloted by "flier" (uncertified aviator) V. F. Bulgakov.

On September 3, 1910, after taking off the Gatchinsky airfield. G. Gorshkov G. accomplished the first in Russia off-aerodrome flight via the path of Gatchina-Salyuzi-Gatchina. And the first long-range flight in Russia was performed during All-Russian Festival of Aeronautics held in autumn of 1910 at the Komendantsky airfield. On October 8, 1910, military aviator E. V. Rudnev together with mechanic S. Plotnikov on Farman-IV airplane accomplished a flight via the path from St. Petersburg to Gatchina and established Russian records of direct flight range and duration – 64 km in 56 minutes.

The first flight from Gatchina to St. Petersburg on the Russian-design aeroplane was performed by aviator G. V. Alekhnovich on October 3, 1911 within the framework of the First Military Contest of flying machines on Gakkel-VII airplane designed by St. Petersburg engineer Ya. M. Gakkel. After landing at the Korpusnoy airfield, where special contest commission composed of CED's representatives was sitting, Alekhnovich refilled his machine with gasoline and immediately flew back to Gatchina.

On May 12, 1911 the first class graduated from the Aviation department of OAS in Gatchina, which consisted of 7 military aviators, officers: S. M. Brodovich, A. N. Vegener, G.A. Galvin, L. A. Datskevich, N. N. Danilevsky, A. A. Karpov and B. N. Firsov.

Later on, in addition to hangars for 10–12 airplanes, a small town with workshops, gasoline storage, meteorological station and service premises emerged on the eastern end of the airfield. Take-off and landing strips were distinctly marked (along the Baltic railway), as well as the place for "riding" – so a special taxi track was called designed for training future pilots to operate aeroplanes on the ground.

Despite the fact that the airfield actually belonged to the temporary aviation department of OAS, beside that the Imperial All-Russian Aero Club (IARAC) settled at the Gatchinsky airfield by opening its flying school there on August 1, 1910. V. A. Lebedev, one of the first Russian aviators was appointed as its person in charge and chief pilot.

In 1910 private flying school "Gamayun" of the aircraft factory of S. S. Schetinin was opened there – "The First Russian Association of Aeronautics of Schetinin and Co" (FRAA). Many aviators and aviatresses, who are famous now, have graduated from that school: A. A. Agafonov, P. V. Evsyukov, V. V. Slyusarenko, K. N. Shimansky, F. F. Kolchin, N. G. Prokofyev (Seversky), L. V. Zvereva, E. V. Anatra, L. A. Galanchikova and others.

By that time aircraft workshops had been established at the Gatchinsky airfield, at which aeroplanes were repaired. Engineer Ya. M. Gakkel's workshop was accommodated in one of the hangars in 1910, where he worked at development of airplanes of his own design.

Besides flight training, the Gatchinsky airfield was used for the first in our country experiments on bomb-dropping from airplanes, trials of aircraft weapons and first drills for aeroplane-cavalry and infantry team building.

In September of 1912 the Permanent Aviation Department of OAS was established to replace the temporary one. It was intended for training officers and enlisted men for service in aviation units of the aeronautic squadron and for experiments and practical tests to be carried out to prove suitability of new flying machines for military purposes. Lieutenant Colonel S. A. Ulyanin was appointed as Head of the Department.

Nevertheless, weather in Gatchina did not allow aeroplanes that were fragile and low-

reliable those years to perform training flights in winter and CED decided to establish a branch of the Gatchina Flying School on Motokovskoye Pole in Warsaw.

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On July 19, 1914 the Aviation Department of OAS was renamed as the Gatchina Military Flying School (GMFS). And hence a new history of the airfield began. GMFS made its great contribution into preparation of flying personnel of Russia during the World War I and into generation of aviation units of Russian Air Force.

The history of the airfield continued after the Great Patriotic War: the first Soviet helicopter unit of the Leningrad military district was accommodated there. But then it shared the destiny of practically all historical airfields of the country. In the 1980s Gatchina building estate designed by young architects from the LENNIIPROEKT Institute was built in the territory of the airfield. Architects introduced the take-off-landing strip into the plan of the estate and preserved that as a peculiar monument.

Another airfield that initially belonged to the Aviation Department of OAS was the Korpusnoy airfield that became the first flight-test field and after 1917 – the first passenger aerodrome in Russia. Besides, it was the biggest military airfield in pre-revolutionary Russia. The length of its take-off-landing strip was up to 3 versts<sup>2</sup>.

In 1916 the V. A. Lebedev's Aeronautics Pant produced on the average one plane a day. Then the company was expanded and about 1200 persons were employed at that, who manufactured 45 planes monthly. In the years of the World War I V. A. Lebedev became the first businessman, who disclaimed his income from fulfillment of orders of the Military Department for the period of the war. In 1917 V. A. Lebedev was appointed as person in charge of the Komendantsky airfield.

On may 3 (16), 1912 the ceremony of opening of Imperial All-Russian Aero Club took place at the Komendantsky Airfield. Assembly of the first in the world multi-engine S-9 airplane, designated as "Le Grand", was commenced under the guidance of I. I. Sikorsky in February of 1913 in a hangar of that IARAC School leased by the RBVZ.

The giant was first run out on the airfield on March 4, 1913. Sikorsky personally tested his airplane. After preliminary taxing and running, when it was determined that the plane is well controlled by its steers and keeps the direction, he first performed a lift-off maneuver on March 15. After a long run that was about 400 m the airplane driven by two 100-hp Argus engines took off the ground. Sikorsky kept that at one-meter altitude for some seconds and then step off the gas. The next day the designer accomplished two more lift-off maneuvers in a straight line. But due to thawing weather the flying field of the Komendantsky airfield was turned into squelching mud, and it was suggested to transfer the military tests of "the giant" to a more dry ground – to the Korpusnoy airfield situated in the south of the city. By that time the Aeronautics Department of the Russo-Baltic Wagon Factory erected its assembly hangar next to army facilities.

Many famous flights were started and finished at the Komendantsky airfield in the earliest days of development of aviation. So, for example, on July 24 (12), 1912 Wright aeroplane of V. M. Abramovich landed there after covering 1500-verst range in 23 days starting from the Johannisthal airfield in Berlin suburbs (Germany) to Saint Petersburg, staying in air with its passenger (K. Hackstetter) totally about 17 hours and 26 minutes of flight time. Abramovich claimed to reporters surrounding him: "Machines shall be built not for beating old records but for vital benefit, and only in that case the aviation will take the place it deserves".

The history of the Komendantsky airfield was no less glorious in the Soviet period. The very last flights from there were performed in 1963, and from the beginning of the 1970s the former Komendantsky airfield became a site of major residential development. The first buildings were erected there in 1973. And the same year the first street there was named as Aerodromnaya.

Thus, the modern Saint Petersburg presently has lost its historical airfields except for memorial "Complex of Buildings of the Officers' Aeronautical School" preserved at Volkovo Pole. The glorious history of the first airfields of our Motherland is alive in toponyms of local highways and building estates making locals think and remember their history.

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<sup>&</sup>lt;sup>2</sup> 1 versta = 1.0668 kilometers