

## THE DEFENSIVE CAPABILITIES OF THE KAZAN KREMLIN AT THE END OF THE 17TH CENTURY

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### Introduction

The current article examines the medieval city of Kazan and the military defensive capabilities of the Kazan citadel at the end of the 17<sup>th</sup> century.

The socio-political situation in the former Kazan Khanate after the fall of Kazan was difficult. Mass popular movements, known as the Kazan or Cheremiss Wars,<sup>1</sup> delayed the final pacification of the Middle Volga region and the final recognition of Moscow's political leadership for decades.<sup>2</sup> The international situation was tense as well. The danger of an attack on the border from the south-east and south remained quite real, as the rulers of the Nogai Horde and the Crimean Khanate, not without reason, considered themselves to have been deprived of their due share.<sup>3</sup> Further, part of the Kazan nobility migrated to these regions.<sup>4</sup> Ivan IV's agents regularly informed him about attempts to form anti-Moscow coalitions.<sup>5</sup> Within this context, it is of particular interest to find out how long Kazan functioned as a military fortress, how long the government maintained the fortifications of the Kazan Kremlin in a good condition and

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<sup>1</sup> Kazan or Cheremiss Wars: uprisings of 1552-1557, 1571-1574, 1581-1585, 1591-1592 in the Middle Volga region.

<sup>2</sup> *Svod* 2011, p. 133-135, 137-141, 145-147, 165, 168-171, 177-181, 245-249, etc.; Kappeler 2001, p. 29; Bahtin 1998, p. 139-172; Ermolaev 1982, p. 16-37; Aiplatov 1990, p. 3-4; <http://www.vipstd.ru/nauteh/index.php/--gn12-06/555-a>, accessed 10 April 2013. Ivan IV and his retinue were probably reconciled to the likelihood of losing Kazan. Chronicler wrote: "... a tsarstvo oskudelo, a Kazani tsaryu i velikomu knyazyu ne zderzhati, uzshho yeye pokinet" (and the kingdom is depleted, Tsar and Grand Duke will not hold power over Kazan, and he will leave it) (*PSRL* 1904, p. 237).

<sup>3</sup> The Crimea Khanate: a medieval state in the Crimea, western Caucasus and Northern Black Sea region, emerging in the mid-15<sup>th</sup> century as a result of the collapse of the Golden Horde. The Nogai Horde - a state of pastoral Turkic people, emerging as a result of the collapse of the Golden Horde at the end of the 14<sup>th</sup>-beginning of the 15<sup>th</sup> century.

<sup>4</sup> Mustafina, Trepavlov 2006, p. 193, 196, 200, 206, 237, 241, 255, 269, 288, 304, 311.

<sup>5</sup> *Ibid.*, p. 187, 236-237, 331.

what these fortifications were like. This article aims to find answers to these interrelated issues. These aspects have never been studied by any domestic or foreign authors, and have only been alluded to in general studies.<sup>6</sup>

Chronologically, the earliest written records of the Kazan fortress are given in a number of Russian chronicles (the Nikon Chronicle, Lviv, the Royal Book, Kazan chronicles, excerpts from the Russian chronicles, etc.) and reflect events associated with military campaigns in the mid-16<sup>th</sup> century. However, the evidence is contradictory and poorly comparable.

Information about the Kazan fortress contained in the writings of A. Kurbsky, D. Fletcher, A. Oleariya and others confirms the existence of fortifications in Kazan. Hence, D. Fletcher, an Englishman who visited Russia in 1588 noted that

“in addition, the towns are very well protected by trenches, forts and guns, and there are garrisons of two to three thousand people in every town. In case of a siege they are supplied by a reserve of food for two or three years to come. Four fortresses: Smolensk, Pskov, Kazan and Astrakhan are very well built and can withstand any siege, and that is why they are revered as unassailable.”<sup>7</sup>

The descriptions of the city of Kazan are most valuable for our analysis of the subject under study.<sup>8</sup> Two descriptions are preserved in the scholarship. The first was carried out in 1565-1568, though the description of the fortifications (walls, towers and gates) was lost, except for the two final phrases.<sup>9</sup> The second description was made in 1675 and was carried out following the same principles as the one first.<sup>10</sup> The government thus reviewed the fortress's defensive capabilities in the event of a burst of social unrest in this explosive region. The third description analysed here was found in the deposits of the Russian State Archive of Ancient Acts (RSAAA, Moscow) and is little-known to scholars.<sup>11</sup>

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<sup>6</sup> Huttenbach 1988, p. 65-70; Meier 2003, p. 16-25; Kidirniyazov 1997, p. 52-53; Khairutdinov 2013, p. 199-202.

<sup>7</sup> Fletcher 1906, p. 98.

<sup>8</sup> There are also geodesic writings by K. Pestrikov 1739, a topographical description of Kazan county from 1785, and a panorama of the city created by A. I. Svrchin by camera obscura in 1763-1764. Different scholars referred to these to various extents: Husin, Sitdikov 2002, p. 3-151.

<sup>9</sup> Mustafina 2006, p. 43-44.

<sup>10</sup> *Opisanie* 1906, p. 3-11.

<sup>11</sup> RGADA, fund 396, opis 3, delo 53, list 1-44.

### Study findings

In the latter 16<sup>th</sup> century the citadel occupied 42,470 sq. *sazhen* (or Russian fathoms, one *sazhen* equalling 2.1336 m). It had five gates: the Spassky, Voskresenskie, Nikolsky, Sergievskie (or Tyumenskie) and Dmitrievskie (Zboylivye) gates. These gates, which were among the thirteen described in the last quarter of the seventeenth and in the beginning of the 18<sup>th</sup> century, were classified as passable and except for Sergievskie, later renamed to Preobrazhensky, all retained their former names. The walls of Kazan citadel were interspersed by so called blind and gate towers, these being wooden and stone structures. The total internal length of the Kazan citadel walls, including the length of the towers and gates, was 893 Russian fathoms (1,625.25 m). It is interesting to note that the citadel of Kazan was thus smaller than the wooden citadel of Sviyazhsk (1,200 Russian fathoms) and the predominantly stone citadel of Kolomensk (1,020 Russian fathoms). The length of wooden communications in the Kazan fortress (578 Russian fathoms or 1,051.96 m) is 1.8 times higher than the length of the stone communications (315 Russian fathoms or 573.3 metres).

By the beginning of the 18<sup>th</sup> century there were no wooden structures left in the Kazan Kremlin. The total length of the walls was reduced from 893 to 726 Russian fathoms. The difference of 167 Russian fathoms should not be seen as a result of displacement from the old ramparts. Rather the reason lay with the different standards of fathoms used over a period of 130-135 years. The state fathom approved by the Council Code of 1649 corresponded to 216 cm, while in the mid-16<sup>th</sup> century several varieties of Russian fathoms were used: the plain Russian fathom of 152 cm, the “swung” Russian fathom of 176 cm and the bigger Russian fathom of 248 cm.<sup>12</sup> Calculations show that the Russian fathom of 176 cm was probably used for this particular description. The first four gate-towers were located within the stone walls, and the fifth was under a wooden tower (*strelnya*). The remaining eight blind towers had probably been there since the khanate, as the scribes’ final inventory mentions *strelnyas* and towers, although the description was lost. The administration paid special attention to the gates, passage through which was carried out under guard; at night the mayor locked the gates, and the keys were given to the senior military governor.

The senior military governor carried out patrols and personally monitored the young Boyars who formed the guard. Unfortunately, the description of the placement and characteristics of cannon in the towers has been lost. However, in recent years there have been successful attempts to

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<sup>12</sup> Mustafina 2006, p. 28.

restore a detailed picture of the protective structures, to locate particular units and elements in the citadel, and to find out the placement of firearms by analysing earlier and later descriptions, archaeological and cartographic data.<sup>13</sup>

According to the description of 1675, the fortifications of Kazan in the 17<sup>th</sup> century represented a “ring” of fortified stone walls with towers, belted (except for the part adjacent to the Kazanka river) by the second line of the *ostrog* (fortress) and wooden walls. The latter consisted of a parallel (double) range of walls; its stability was ensured by transverse ties in the wooden walls arranged chequerwise. The towers of this defensive line were log cabins. The wooden walls adjoined ditches, sometimes filled with sand.<sup>14</sup> The protective properties of wooden walls have often been underestimated, due to the possibility that wood might catch fire and burn: but it should be borne in mind that non-combustible materials such as soil, sand, rocks, etc. were placed in between the two rows of walls and log cabins, which had perpendicular link beams. When a projectile hit such a wall, there was not enough time for the wood to catch fire, as only the edges of breach charred. The main striking force of the cannonball was “lost,” exploding inside the log, or got stuck inside and due to lack of oxygen did not explode at all. To cause a fire, the besieger had to strike repeatedly and accurately on the same spot, which was not so easy to achieve.

The length of the stone “city” walls in 1675 amounted to 830 Russian fathoms and 9 *vershok* or *top*, that is over 1,793 m.<sup>15</sup> By the beginning of the 18<sup>th</sup> century it was a little more than 1,568 metres. The walls were 4.32 metres wide and rose 8.64 m above the ground. They were covered with thin sawn planks. On the stone ramparts were twelve towers, four of them - the Spasskaya, Demetrienskaya, Nicholskaya, Preobrazhenskaya - designated as “gate towers.” In addition there was another tower, transformed into the Voskresenskie gates, not included in the final inventory.<sup>16</sup>

The comparison of the lengths of the citadel walls recorded in 1565-1568, 1675 and 1702 seem to indicate a decrease from 1,902 m (893 Russian fathoms) to 1,793.2 m (830 Russian fathoms and 9 *vershok*), then down to 1,568 m. If the difference in calculations made in the sixteenth and 17<sup>th</sup>

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<sup>13</sup> On findings by A. Starkov, A. Sitdikov, S. Sanachin, F. Husin, etc.: Zagidullin 2004, p. 23-47, 62-70, 93-112, etc.

<sup>14</sup> Sitdikov 2004, p 93-112.

<sup>15</sup> *Opisanie* 1906, p. 6.

<sup>16</sup> The list of the towers in the report of 1675 is the other way around, clock-wise: *Opisanie* 1906, p. 3-11.

centuries can be explained by the use of different approaches to the unit scale of *sazhen* or Russian fathoms, the mismatch in the data for the seventeenth and 18<sup>th</sup> centuries, 27 years apart, is due to the fact that the latter measurement was of the inside rather than the outside length. The outer lengths recorded for the citadel in 1675 and 1702 are practically identical. Therefore the layout of walls did not change in this period; if any changes took place, these were from 1568 to 1675. The number and style of towers remained unchanged (thirteen in all, comprising five rectangular gate towers, one rectangular blind and seven round towers). Hence it can be assumed that the placement of cannons on the fortress walls and towers referred to in the report of 1702 had not changed significantly, and indeed that it remained unchanged for 150 years.

The reference point for the 1702 report was the Spasskaya Tower, from which the remaining towers are consistently listed counter-clockwise. Out of the eight blind towers, seven towers are round and one is rectangular. Three towers (the Spasskaya tower and one on either side of it) are on the same relatively straight line.

The tallest tower stood opposite the Metropolitan stable yard (18 m), the lowest was the Spasskaya tower (7.38 m). However, comparison of heights should be made with strong reservations, because the towers were not built on a flat plane and their height was largely dictated by the nature of the terrain. Noteworthy is the uniformity of the walls and tower roofs (tent-type), indicating that the roofing was most likely carried out simultaneously.

The second circuit of fortifications ran from the Nikolskoye gate (north-west), turned sharply and ran back to the fortress on the opposite side, passing the Pyatninskaya church, and approached the Kazanka river or the fortress wall (north-east). There were 24 towers on this circuit before the fire, twelve of which survived (nine octagonal, two hexagonal, one rectangular). Six towers were passable or gate towers - the Tainitskaya, Zmeeva, Elyinskaya, Yamskaya, Varlaamovskaya, Prolomnaya. A section of the wooden walls and towers from Prolomnaya up to the northeastern end (running west/south/east) burnt down, and the *ostrog* wall was erected on the former structure. In place of the twelve towers, three wooden gate towers were built, the Voznesenskaya, Arskaya and Pjatnitskaya, all about the same size and design. In addition, there was a gate tower, the Schelskie Vorota between Arskaya and Pjatnitskaya.<sup>17</sup> Having noted the destroyed sections of the wall and described the ditches, the compilers of the catalogue specified the sizes, telling today's researchers the distance between

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<sup>17</sup> RGADA, fund 396, opis 3, delo 53, list 15.

the individual towers and helping define their precise localisation. From the Tainitskaya tower to an intermediate blind tower was 110.5 Russian fathoms (238.7 m), while from the intermediate blind tower between the Zmeevaya tower and Ilinskie gate was 70 Russian fathoms (151.2 m). From the Yamskie gate to the Ilyinskie gate was 200 Russian fathoms (432 m), from Varlamovskie to Yamskikie 75.6 m, and from Voskresenskie to Prolomnaya there 129.6 m. The depth of the moat varied from 1.44 to 4.32 m, the shallowest section being between the Zmeevaya tower and Ilyinskaya Church. The total length of the second line of fortifications was 5,071 m, the citadel accounted for more than 2,592 m and the *ostrog* wall was 2,479 m. The wooden town was 6.7 m high and 2.34 m wide. The Tainitskaya gate tower was the first tower in the circuit that ran from the Nikolskie gates of the fortress. The Zmeeva tower was built directly on the Bulak River, separated from the Tainitskaya tower by two blind towers, the first blind tower of which was passable (the Yaroslavskie gates); the second blind tower was called the Reshotochnaya tower.

On the Zabulachnaya side the fortifications presumably ran along the First Mokraya Street (Mokraya Sloboda) past the Ekinskaya Church towards Varlamovskaya street, turned towards the Bolshaya Varlamovskaya, along the boundary of Yamskaya Sloboda, crossed Sennaya Square and Sennaya Street and reached Evangelistovskaya street. They then presumably continued across the gated bridge over the Bulak and across Lyadskaya street, through Theatre Square to Popova Gora (today Tellman) towards Zasypkina Street and linked on to the Kremlin. Between the Ilinskie and Yamskie, and between the Yamskie and Varlasmovskie gates, there was only one blind tower for each intersection. Two blind octagonal towers were built successively in this circuit on the right bank of the Bulak, with access to Epiphany Sloboda through a wicket gate in the second blind tower. The final point of the citadel was Prolomnaya gate tower, leading to the gaol (5.4 m high).

There is no precise indication of where the three unfinished gaol towers stood, though judging by their names they stood at the beginning of Voskresenskaya and Arskaya (later Pokrovskaya) streets and opposite the Pjatnitskaya church. Unfortunately, the manuscript does not specify the location of any towers except for those on the Bulak. It is also inconsistent in describing the fortress' artillery; however, it offers unparalleled information about the defensive capabilities of Kazan and its suburbs.

The inventory of 1702 was compiled during the Great Northern War, in an atmosphere of recent defeat and frantic inquiry into measures to turn the tide of the war. Thus the main focus here was on the quality and

quantity of weaponry available. The inventory report states that the upkeep of the fortifications left much to be desired: not only were the walls very old, but they also showed traces of the last fire in 1694.<sup>18</sup> The stone walls were crumbling in places, the roof was dilapidated and partly burnt down.<sup>19</sup> Parts of the wooden wall (the second, front line of fortifications) were also dilapidated by the spring floods and significantly damaged by fire. The outer circuit of fortifications was severely affected by fires, with twelve out of twenty-four towers burnt down and the walls in between also burnt. The fire of 1694 reduced the length of walls to 355 m (from 5,426 m and 84.5 cm to 5,071 m) by 1702. The inventory records repairs to the burnt fortifications, with rafters for the future wall installed, and some burnt sections from Prolomnaya Street to the Kremlin replaced by *ostrog* walls. In general, the condition of the second line of fortifications was very poor. In place of the twelve towers that were burnt, the garrison built three log cabins. Some towers that survived the fire had no roofs, and by 1702 no construction work had yet started on the walls.<sup>20</sup> Consequently, there still was considerable demand for protective structures and the administration of Kazan could not neglect such precautions. However, this part of the fortifications was not fit for purpose, and the enemy could easily launch an assault using passages through the unrestored sections of fortress and the walls of the trading quarter.

Both the Kremlin and the second line of wooden fences had an elaborate system of weapon emplacements. There were three tiers of loopholes in the fortress towers, and the town walls had two levels of loopholes, with significantly more loopholes in the upper tiers (76 and 787, respectively) than in the lower (47 and 89 respectively); the bulk of weapon emplacements were in the top tier (83.6%, or 863 out of 1,032). This suggests a strategy of long-range bombardment, aimed at defeating attacking cavalry.<sup>21</sup> This particular placement of loopholes was certainly dictated by the presence of another, outer line of fortifications. In 1675, there were 494 loopholes in the towers of the wooden town and 5,134 in total in the town walls. While weapon emplacements in the tiers of the outer circuit towers were deployed almost evenly, the largest number - 175 - was observed in the middle tier (the lower tier had 152 loopholes, while the top tier had 167 loopholes). There are only 71 loopholes in the wall itself on the

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<sup>18</sup> N. A. Kudriavtsev oversaw the works personally; from 1706 he was special guardian of Kazan, and in 1709-1726 was the Vice-Mayor of Kazan.

<sup>19</sup> RGADA, fund 396, opis 3, delo 53, list 5-7.

<sup>20</sup> Ibid., list 7-11.

<sup>21</sup> *Opisanie* 1906, p. 3-11.

middle tier (2,652 in the upper and 2,411 in the lower). From this we can conclude that the outer circuit of gun placements was designed equally for long-range and short-range bombardment.

However, the existence of loopholes did not mean that the city of Kazan would have been able to meet the tactical challenge of holding off an attack. The outcome of battle depends on weapons and human resources. Judging by the report of 1702, there was a lack of artillery, arms and ammunition in Kazan. In total, there were 53 cannons of different calibres, 14 of which were copper (71.5% of all copper guns in Kazan and the county), 36 iron (74.3%) and 3 (42.8%) Zatin arquebuses (small-calibre guns). Cannons, shooting balls ranging from 819 g to 3.276 kg, were the major weapons of the citadel. The overwhelming majority of cannons in the outer circuit fired cannonballs weighing from 1.4 to 3.3 kg.<sup>22</sup> The most rapid-firing and long-range guns were placed on the front line of defence, providing a dense line of fire that was most advantageous against the Nogai and Crimean cavalry or similar forces. But we find that not all cannons were engaged in defence operations. Out of the 27 towers on both lines of defence and the two gates, three loopholes would inevitably remain disarmed. The arsenal stored in the Armory and Zeleyniy cellar seemed to be impressive: there were 12,578 usable cannonballs, not including 25 damaged during the fire. But the use of ammunition was often problematic, because the calibre of cannons and cannonballs did not match. There were no cannons to fire 9, 10, 15, 30, 32, 45-pound round balls, although these were held in stock, while cannons designed to fire 0.25 to 3.5 pounds cannonballs had no ammunition. As a consequence, out of 53 cannons in Kazan, only 26 were ready to fire. However, there was abundant gunpowder for guns and cannons, as well as enough lead and wick. The incompatibility of cannons and ball calibres was due to the fact that Kazan continued to play a coordinating role in distribution of weapons, repair and maintenance throughout Ponizovie. Thus in 1697-1698, nine cannons of 5 to 28 pounds calibre were brought to Kazan from the Zakamye towns (Zainsk, Novosheshminsk and Starosheshminsk) to be transferred to Simbirsk, and two damaged cannons were brought from Tsarevokokshaisk and Kurmysh, to be transported to Astrakhan for recasting.<sup>23</sup> Nonetheless, out of the 27 towers of both lines of defence and the two gates, three loopholes would inevitably have no cannons.<sup>24</sup>

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<sup>22</sup> RGADA, fund 396, opis 3, delo 53, list 39-44.

<sup>23</sup> *Ibid.*, list 17.

<sup>24</sup> *Ibid.*, list 14-15.



The situation with the amount of soldiers and their weapons was no better. This was caused by a number of factors: mobilisation of the adult male population for the Northern War and the construction of St Petersburg on the Neva River, the poverty, incompetence and youthful inexperience of serving soldiers, the increasing number of men evading military service, the need to react to violent social unrest in the Lower Volga and Ural regions which threatened to spread to Kazan and Simbirsk counties, building work on the fortifications in Sergievsk, etc.<sup>25</sup> All these factors resulted in increased demand for soldiers, and the government was forced to constantly move soldiers from one front to another. In the late 1690s there were two regiments of soldiers in Kazan. 34.3% of soldiers were armed with flintlocks, 16.1% with muskets, 15.5% with *samopals* (Russian arquebuses) and 11.8% with “Turkish” guns. In 1698-99 the soldiers were rearmed with flintlocks sent from Moscow, a total of 915 weapons including 196 barrels and parts. However, in 1704 Kazan’s soldiers had to give away 432 flintlocks to recruits sent to Voronezh, as the 300 flintlocks initially given to them from the treasury were not enough. This was a desperate measure, because the guns sent to Simbirsk were out of order.<sup>26</sup> By mid-February 1706 there were only 908 soldiers in Kazan instead of the projected 1,500, and instead of 1,379 Murzas and Tatars due to arrive from different towns, there were only 330.<sup>27</sup> However, two companies (260 men) of these 330 soldiers were sent under A. S. Sergeyev to Samara in April 1706. When rebels destroyed two villages of Kazan and Simbirsk counties, and news arrived of their intention to capture a series of forts, the garrison in Kazan was further reduced. By early May, 402 soldiers protected Kazan: but they apparently soon received new orders and left the city.

The defenders of Kazan could choose a matchlock or flintlock weapon requiring only minor repairs from among 278 guns, 16 gun locks and 1,399 gun barrels, only 2.4% of which were undamaged. There were not enough craftsmen to repair them. There were also 2,164 different guns and their elements delivered from 17 different cities or their suburbs awaiting repair.<sup>28</sup> Evidently there was no hope of providing all soldiers with guns.

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<sup>25</sup> Golikova 2004, p. 3-7, 10-11, 13-15, 25-30, etc.

<sup>26</sup> It is worth mentioning the diversity of weaponry that gives a very descriptive and detailed picture of the armaments in use not only in the garrisons of regional fortifications but in the Russian army in general. There were firelock and match-lock muskets, arquebuses, granushkas, “Turkish” guns, fusils, shoulder arms, pistols, halberds, cannons and Zatin arquebuses.

<sup>27</sup> RGADA, fund 108, opis 1, delo 1, list 1, 4-5.

<sup>28</sup> Ibid., fund 396, opis 3, delo 53, list 40.

Nor were there enough skilled commanders. In July 1706, A. D. Mamonov requested that F. A. Golovin send eight officers to take charge of an infantry regiment in Kazan as “many of that regiment’s officers are good for nothing .... Truly ... a lot are unfit even for lower ranks, let alone to be an officer.”<sup>29</sup> At the beginning of the 18<sup>th</sup> century Kazan would not have been able to withstand even a weakly organised insurgency, let alone a determined aggressor.

## Conclusions

In the 17<sup>th</sup> century Kazan still had two lines of defence: the actual citadel and the second, outer line of fortifications. The condition of the fortifications, especially of the wooden structures of the external defensive circuit was extremely poor, although repairs were undertaken after the fire of 1694. The city lacked soldiers, arms and ammunition. There was no permanent, experienced garrison and the officers in the regiments of incoming soldiers and dragoons were unskilled.<sup>30</sup> The government were absorbed by the problems of the Northern War and the uprising in Astrakhan and in Bashkiria, and hence had no special interest in maintaining Kazan.

Therefore it can be concluded that in the early 18<sup>th</sup> century Kazan would not have been able to withstand the onslaught of even a poorly organised force, let alone a prepared opponent. 72 years later during the Peasant Wars led by E. I. Pugachev, the rebels were able to breach the walls and on 12 July 1774 they captured the city, except for the Kremlin, where government forces took refuge. A fire broke out within the city and destroyed the “wooden town,” and troops led by Lieutenant Colonel I. I. Mihelson came to the aid of the forces inside the Kremlin.<sup>31</sup> The citadel withstood the attack. The question of changes to the condition of the fortifications in the 18<sup>th</sup> century is beyond the scope of this article. However, the preservation and promotion of historical and cultural heritage of the Republic of Tatarstan and of the city of Kazan make it imperative to continue research into the history of the city of Kazan and the Kazan Kremlin, and to find and analyse new documentary sources.<sup>32</sup>

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<sup>29</sup> Ibid., fund 108, delo 1, list 1-12.

<sup>30</sup> The same issues were present in Astrakhan (Golikova 2004, p. 67).

<sup>31</sup> Alishev 1973, p. 162-175.

<sup>32</sup> Khairutdinov 2013, p. 199-202.

## The Defensive Capabilities of the Kazan Kremlin at the End of the 17<sup>th</sup> Century

(Abstract)

The article studies the condition of the fortifications, artillery and small arms in the Kazan Kremlin, at the end of the 17<sup>th</sup> century. The socio-political situation in the former Kazan Khanate after the fall of Kazan was difficult. Mass movements lasting for decades delayed the final pacification of the Middle Volga region. Within this context, it is of particular interest to find out how long Kazan city functioned as a significant military fortress. The source base of the study comprised: 1. narrative sources, reflecting military campaigns in the mid-16<sup>th</sup> century; 2. descriptions of the city of Kazan by G. Sokovninym and A. Nikonovym in 1675, and by N. A. Kudryavtsev in 1702; 3. works by foreign travellers; 4) official letters by A. Dmitriev-Mamonov, a special government agent for military preparations in Kazan during the “Bashkir rebellion.” Analysis of the sources leads to the following conclusions. At the end of the 17<sup>th</sup> century Kazan still had two lines of defence: the citadel as such (the Kremlin) and the second, outer line of fortifications. The city lacked arms and ammunition. There was no permanent, experienced garrison. The government, absorbed by the problems of the Northern War and the uprising in Astrakhan and in Bashkiriya, showed no special interest in maintaining Kazan. However, the militia forces derived from the regular army, commanded by Boyar Prince P. I. Khovanskii, and twelve infantry regiments that arrived with M. Schepotev were ready to put down unrest in the region. Further analysis of the Kazan fortifications requires identifying new period source material.

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- Opisanie* 1906 - *Opisanie goroda Kazani (sten" i bashen) 1675 goda*, foreword G. Z. Kuntsevich, Kazan, 1906.
- PSRL 1904 - *Polnoye sobraniye russkikh letopisey*, Saint Petersburg, 1904.
- RGADA - Russian State Archive of Ancient Acts.
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**Keywords:** city of Kazan, the Kazan Kremlin, fortifications, fortress walls, defensive capabilities of the Kazan fortress.

## LIST OF ABBREVIATIONS

AA	- Acta Archaeologica. Copenhagen.
AAL	- Asien Africa Lateinamerika. Zeitschrift des Zentralen Rates für Asien-, Afrika- und Lateinamerikawissenschaften in der DDR. Berlin.
AAMT	- Advances in Archaeological Method and Theory. Orlando.
AAnt	- American Antiquity. Society for American Archaeology. Washington.
ABM	- Alaska Business Monthly. Anchorage.
Acta Asiatica	- Acta Asiatica. Bulletin of the Institute of Eastern Culture. Tokyo.
AO	- Arkheologicheskoye otkrytiya (1965-2013). Moscow.
AOASH	- Acta Orientalia Academiae Scientiarum Hungaricae. Institute of Oriental Studies. Budapest.
AP	- Arkheologiya Podmoskov'ya. Materialy nauchnogo seminarov. Institute of Archaeology Russian Academy of Sciences. Moscow.
ArchOttoman	- Archivum Ottomanicum. Wiesbaden Ottoman Archives. Wiesbaden.
Ars Judaica	- Ars Judaica. Bar-Ilan University. Ramat Gan.
Art-menedzher	- Art-menedzher. Business magazine considering culture and art as a resource for the social and economic development of society and offering various technologies and methodologies of management of this process. Moscow.
Bibliosphera	- Bibliosphera. The Siberian Branch of the Russian Academy of Sciences. Novosibirsk.
BKF	- Baltiiskii filologicheskii kurer. Immanuel Kant Baltic Federal University. Kaliningrad.
BM	- Byulleten' Moskovskogo obshchestva ispytateley prirody. Otdel biologicheskoy. Moscow Society of Naturalists. Moscow.
BMMS	- Byulleten Muzeya Marka Shagala. Marc Chagall Museum. Vitebsk.
Byiliye godyi	- Byiliye godyi. Sochi State University. Sochi.
CAn	- Current Anthropology. Chicago.
CHR	- The Canadian Historical Review. University of Toronto Press. Toronto.

CIS	- Culturulogicheskie issledovania Sibiri. Omsk State University. Omsk.
Comparativ	- Comparativ. Leipziger Beiträge zur Universalgeschichte und vergleichenden Gesellschaftsforschung. Universität Leipzig, Global and European Studies Institute. Leipzig.
CRJ	- Classical Reception Journal. The Open University (UK). Oxford.
Den'gi	- Den'gi. Publishing House "Kommersant." Moscow.
EDV	- Ekonomicheskaya zhizn Dalnego Vostoka. Geographic Society. Khabarovsk, Amur.
EHQ	- European History Quarterly. University of London. London.
EJNH	- European Journal of Natural History. The Russian Academy of Natural History. Moscow.
Ethnos	- Ethnos. Journal of Anthropology. London.
Études/Inuit/Studies	- Études/Inuit/Studies. Association Inuksiutiit Katimajit Inc. Québec.
EZ	- Evolucijazni na Zemle. Tomsk State University. Tomsk.
Femida	- Femida. Media Corporation "ZAN." Almaty.
Florilegium	- Florilegium. The journal of the Canadian Society of Medievalists. Ottawa.
Forsait	- Forsait. Higher School of Economy. Moscow.
Francia	- Francia. Forschungen zur westeuropäischen Geschichte, hg. vom Deutschen Historischen Institut Paris (Institut Historique Allemand). Paris.
Fundamental Research	- Fundamental Research. Russian Academy of Natural History. Moscow.
Genetics	- Genetics. Genetics Society of America. Bethesda (USA).
Genetika	- Genetika. Russian Journal of Genetics. Moscow State University. Moscow.
Geologiya i geofizika	- Geologiya i geofizika. Institute of Geology and Geophysics of the Siberian Department of the Science Academy in the USSR, Novosibirsk. Published by the Siberian department of the Science Academy in the USSR. Novosibirsk.
Gyanovashchya	- Gyanovashchya. Dnepropetrovsk State University. Dnepropetrovsk.
HN	- Hraniteli naslediya. Altay State Pedagogical Academy. Barnaul.
HZ	- Historische Zeitschrift. Johann Wolfgang Goethe-Universität Frankfurt am Main.
Karavan	- Karavan (newspaper). Almaty.
KAS	- Der Konrad-Adenauer-Stiftung - Auslandsinformationen. Berlin.

KPZ	- Kazanskij pedagogicheskij zhurnal. Institute of Pedagogy and Psychology. Kazan.
IAIAND	- Istoriko-arkheologicheskie issledovaniya v g. Azove i na Nizhnem Donu v 2006 g., Don.
Istoriografiya	- Istoriografiya i istochnikovedenie istorii stran Azii i Afriki. Leningrad State University. Leningrad.
Istoriya i sovremennost'	- Istoriya i sovremennost'. Moscow.
Izvestia Ugo	- Izvestija Ugo-Zapadnogo Gosudarstvennogo Universiteta. Kursk.
IzvSamarsk	- Izvestiya Samarskogo nauchnogo tsentra RAN. Samara.
JBAA	- Journal of the British Archaeological Association, British Archaeological Association. London.
Kulturnoe nasledie	- Kulturnoe nasledie. Altai State University, Altai Territory, Barnaul.
Lesnoi Zhurnal	- Lesnoi Zhurnal. Izvestiia Vysshikh Uchebnykh Zavedenii. Bulletin of Higher Educational Institution. Arkhangelsk.
LKK	- Literatura i kultura v Kitae. Moscow.
LSJ	- Life Science Journal. Acta Zhengzhou University Overseas. Zhengzhou University. New York.
JAMT	- Journal of Archaeological Method and Theory. New York.
JAR	- Journal of Archaeological Research. Journal of Archaeological Research. New York.
JISV	- Jekonomicheskie i istoricheskie issledovaniya na Severo-Vostoke SSSR. Economic and historical research in the North-East of the USSR. Magadan.
KT	- Kazakhskaya tsivilizatsiya. University Kaimar Almaty. Almaty.
Marketing	- Marketing. Centre for Marketing Research and Management. Moscow.
MBD	- Molodyye v bibliotechnom dele. Youth in Library Science. Moscow.
MEJSR	- Middle-East Journal of Scientific Research. International scientific journal published by the international digital organization for scientific information (IDOSI).
Memoirs SAA	- Memoirs of the Society for American Archaeology. Society for American Archaeology. Washington DC.
MENP	- Materialy po evolyucii nazemnykh pozvochnykh. Moscow.
MIA	- Materialy po istorii i archeologii SSSR. Moscow, Saint Petersburg.
MIFFK	- Materialy po istorii fauny i flory Kazahstana. Kazakhstan.

Mir bibliografii	- Mir bibliografii. Moscow.
Mir obrazovaniya	- Mir obrazovaniya - obrazovanie v mire. Scientific-Methodological Journal. Moscow Psychology and Sociology Institute. Moscow.
MNKO	- Mir Nauki, Kul'tury, Obrazovaniya. Gorno-Altaysk.
Molodezh' Tatarstana	- Molodezh' Tatarstana. Newspaper. Kazan.
MUSEUM	- MUSEUM. UNESCO.
Narodnaya shkola	- Narodnaya shkola. Saint Petersburg.
Nauchnoye obozreniye	- Nauchnoye obozreniye, series 2, Gumanitarniye nauki. Lomonosov Moscow State University. Moscow.
Nauch.-tekhn. Inform	- Nauchnaya i tekhnicheskaya informatsiya. Russian Academy of Sciences. Moscow.
Naukovedeniye	- Naukovedeniye. Institute of History of Natural Sciences and Technics named after S. I. Vavilov of the Russian Academy of Sciences. Moscow.
Neues Leben	- Neues Leben [newspaper]. Berlin.
NIV	- Novyy istoricheskiy vestnik. Obshchestvo s ogranichennoj otvetstvennost'yu "Izdatel'stvo Ippolitova." Moscow.
NKOGK	- Obshchestvo i gosudarstvo v Kitae: XXXIX nauchnaia konferentsiia. Moscow.
NNZ	- Novgorod i Novgorodskaya zemlya. Istoriya i arkhologiya. Veliki Novgorod.
Novosti	- Russian News Agency "Novosti." Moscow.
NT	- Nauchnyi Tatarstan. Academy of Sciences of the Republic of Tatarstan. Kazan.
NTB	- Nauchnyye i tekhnicheskiye biblioteki. The State Public Scientific and Technical Library Russia. Moscow.
Odyssey	- Odyssey. Russian Academy of Sciences, Institute of Universal History. Moscow.
ONS	- Obshchestvennuyye nauki i sovremennost. Russian Academy of Sciences. Moscow.
OT	- Otechestvennyye zapiski. Saint Petersburg.
Panorama iskusstv	- Panorama iskusstv. Sovetskii khudozhnik. Moscow.
Pervye amerikancy	- Pervye amerikancy. First Americans (Almanac). Russian Society of Indianists. Saint Petersburg.
PGI	- Problemi Gumanitarnih Issledovaniy. Russian State Institute for Regional Issues in Northern Caucasus. Pyatigorsk.
Polar Record	- Polar Record. A Journal of Arctic and Antarctic Research. Scott Polar Research Institute. Cambridge (UK).
Politische Wissenschaft	- Politische Wissenschaft. Deutsche Hochschule für Politik Berlin.



Polzunovskiy vestnik	- Polzunovskiy vestnik. Altay State Technical University. Barnaul.
Pozdneplejstocenovye	- Pozdneplejstocenovye i rannegolocenovye kul'turnye svyazi Azii i Ameriki. Institute of History, Philology and Philosophy. Novosibirsk.
Prizrenie	- Prizrenie i blagotvoritel'nost' v Rossii. Izdanie Vserossijskogo sojuza uchrezhdenij, obshhestv i dejatelej po obshhestvennomu i chastnomu prizreniju. Saint Petersburg.
Problemi filosofii	- Problemi filosofii. Presidium of the Russian Academy of Sciences. Moscow.
Proceedings Volgograd	- Proceedings of the Volgograd State Pedagogical University. Volgograd.
PsZ	- Psikhologicheskij zhurnal. Institute of Psychology of the Russian Academy of Sciences. Moscow.
PT	- Perspectives on Terrorism. The Terrorism Research Initiative (TRI) headquartered in Vienna, and the Center for Terrorism and Security Studies (CTSS) headquartered at the University of Massachusetts' Lowell campus. Massachusetts.
RA	- Rossiiskaia Arkheologiya. Moscow.
Reka vremen	- Reka vremen. Moscow.
Rivista di Bizantinistica	- Rivista di Bizantinistica. Bologna.
RossEconom	- Rossiski ekonomicheskij jurnal. International Academy of Business and Management. Moscow.
Rossiyskaya Gazeta	- Rossiyskaya Gazeta. Russian government daily newspaper. Moscow.
SA	- Sovetskaja Arkheologija. Institute of Archaeology, Russia, Moscow. Moscow.
SC	- Sviyazhskie chteniya. Sviyazhsk.
Scientometrics	- Scientometrics. Akadémiai Kiadó. Budapest.
Serdalo	- Obschenacionalnaya gaseta Respubliki Ingushetiya "Serdalo." Nazran.
SGV	- Saratovskie gubernskie vedomosti. Saratov.
Shagalovskii sbornik	- Shagalovskii sbornik. Marc Chagall Museum. Minsk.
SI	- Sociologicheskije issledovaniya. Science Institute of Sociology of the Russian Academy of Sciences. Moscow.
Soziale Geschichte	- Soziale Geschichte. Zeitschrift für historische Analyse des 20. und 21. Jahrhunderts. Bremen.
Spectrum	- Spectrum. The Kazakhstan Institute for Strategic Studies. Astana.
SS	- Sibirskaya stolitsa. Tobolsk State Historical and Architectural Museum-Reserve. Tobolsk.

SSM	- Social Sciences and Modernity. The Presidium of the Russian Academy of Sciences "Science." Moscow.
SV	- Sovremennaya filologiya. Ufa.
SZ	- Sociologicheskiy zhurnal. Moscow.
Tarih Dergisi	- Istanbul Üniversitesi Edebiyat Fakültesi Tarih Dergisi. Istanbul.
TKA	- Tulski kraevedchesky almanah. Tula.
Tradizionnaya kultura	- Tradizionnaya kultura. An academic almanac representing the perspective direction in complex study of ethnoculture: national outlook, pedagogics, life, mythology, customs, ceremonies, poetry and music. Moscow.
Trudovaya pomoshch'	- Trudovaya pomoshch'. Izdanie Popechitel'stva o trudovoj pomoshhi. Saint Petersburg.
Vestnik AAJ	- Vestnik arheologii, antropologii i jetnografii. Institute of Problems of Development of the North, Russia. Tyumen.
Vestnik Chelyabinsk	- Vestnik Chelyabinskogo gosudarstvennogo universiteta, Istoriya. Publishing house of Chelyabinsk State University. Chelyabinsk.
Vestnik Chuvashskogo	- Vestnik Chuvashskogo gosudarstvennogo pedagogicheskogo universiteta im I. Ya. Yakovleva. I. Y. Yakovlev Chuvash State Pedagogical University. Cheboksary.
VestKrasno	- Vestnike Krasnoyarskogo gosudarstvennogo pedagogicheskogo universiteta imeni V. P. Astafeva. Krasnojarskiy gosudarstvennyj pedagogicheskij universitet im. V. P. Astafeva. Krasnojarsk.
Vestnik Kazak	- Vestnik Akademii nauk Kazakhskoy SSR. Academy of Science of the Kazakh SSR. Kazakhstan.
Vestnik RAN	- Vestnik Rossiyskoy Akademii Nauk. Russian Academy of Sciences. Moscow.
Vestnik Samara	- Vestnik Samarskogo gosudarstvennogo universiteta. Samara State University. Samara.
Vestn Tomsk Gos Univ.	- Vestnik Tomskogo gosudarstvennogo universiteta. Kul'turologiya i iskusstvovedeniye. Bulletin of Tomsk State University. Tomsk.
Vestnik Semej	- Vestnik gosudarstvennogo universiteta imeni Shakarima goroda Semej. Shakarim State University of Semej.
Vestnik Ufa	- Vestnik Vostochnoy ekonomiko-yuridicheskoy gumanitarnoy akademii. East Economic-Legal Humanitarian Academy. Ufa.
Vestnik VyatGGU	- Vestnik Vyatskogo gosudarstvennogo gumanitarnogo universiteta: Vyatka State University of Humanities. Kirov.

Vizantiysky vremennik	- Vizantiysky vremennik. Institute of General History of the Russian Academy of Sciences. Moscow.
Voprosy Istorii	- Voprosy Istorii. Russian academic journal for historical studies. The Institute of Russian History of the Russian Academy of Sciences. Moscow.
Voprosi Literaturny	- Voprosi Literaturny. Writer's Union of the USSR. Moscow.
Voprosy filosofii	- Voprosy filosofii. Russian Academy of Sciences. Moscow.
VTP	- Istoricheskiye, filosofskiy, politicheskiye i yuridicheskiye nauki, kul'turologiya i iskusstvovedeniye. Voprosy teorii i praktiki. Tambov.
WASJ	- World Applied Sciences Journal. International Digital Organization Scientific for Information "IDOSI Publications" UAE. Dubai.
Zapiski	- Zapiski Vostochnogo otdeleniya Russkogo arkhologicheskogo obshchestva. Archaeological Society. Saint Petersburg.
ZDMG	- Zeitschrift der Deutschen Morgenländischen Gesellschaft. Berlin Magazine of the German East Society. Berlin.