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Russia marches South: army reform and battlefield performance in Russia's Southern campaigns, 1695-1739

Stoyanov, A.

Citation

Stoyanov, A. (2017, April 26). *Russia marches South: army reform and battlefield performance in Russia's Southern campaigns, 1695-1739*. Retrieved from <https://hdl.handle.net/1887/48241>

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Issue Date: 2017-04-26

APPENDIXES

PART I, CHAPTER I

Map 1 - Russia's Expansion 1478 – 1578

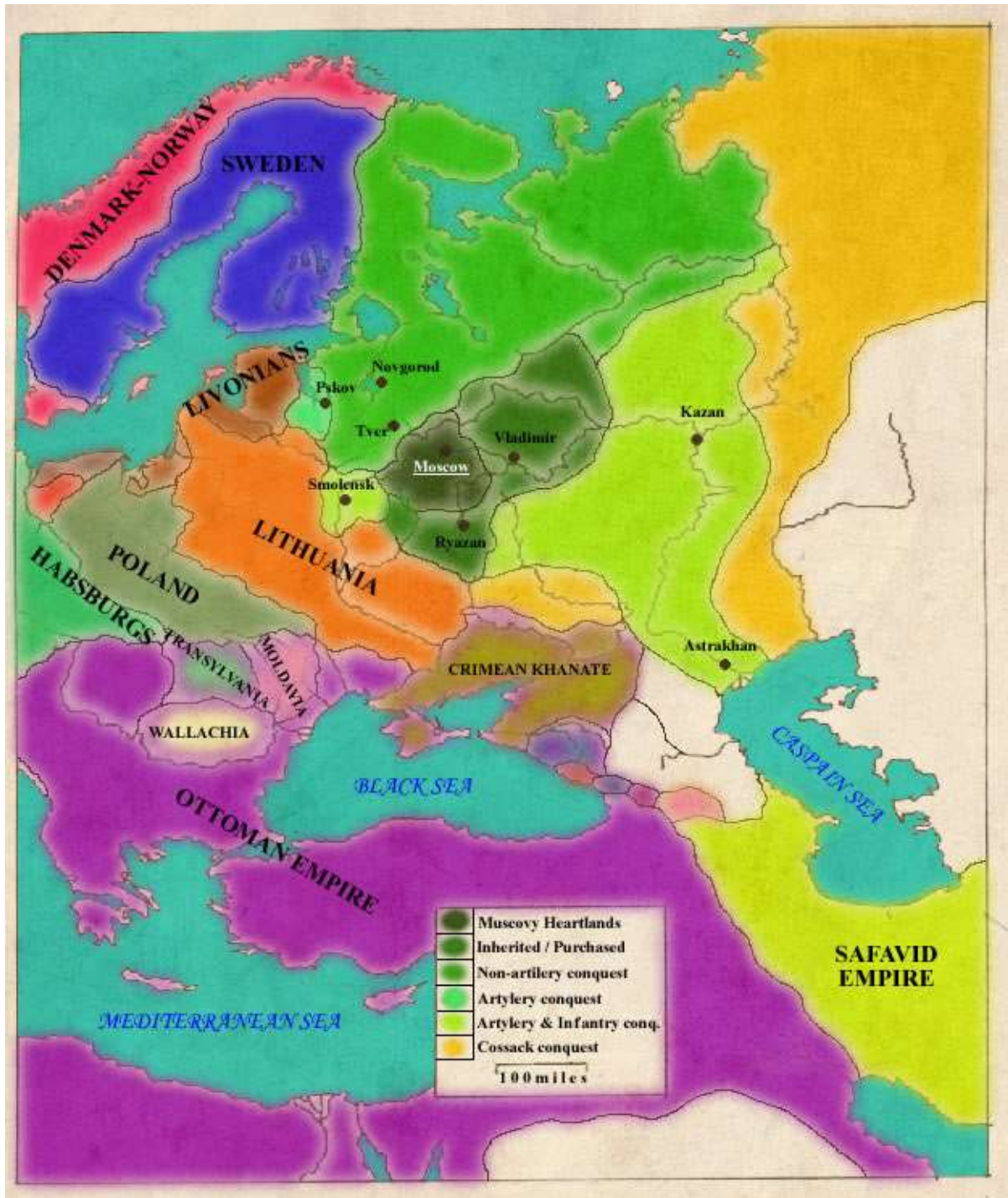


Table 1**Army growth in Russia 1631 – 1722**

Year	J. Keep <i>Soldiers of the Tsar</i>	W. Fuller <i>Strategy and Power (1)</i>	R. Hellie <i>The Petrine Army</i>	C. Duffy <i>Russia's Military Way</i>	B. Davies <i>Empire and Military</i>	Russian data
~ 1590	~ 110,000		~ 110,000			110,000 (3.1) 150,000 (3.2) 300,000 (4)
1631	~ 35,000 (2)	29,000			90,000 (20)	34 558 (17)
1650s				138 755 (12)		160,000 (21)
1681	190,938		215,000	200-300 000 (13)	245,000 (20)	214,600 (18)
1687						112,902 (19)
1689		112,000 (6)	~110,000 (6)	Up to 300,000 (14)		117,446 (19)
1695/6			~ 90,000 (7)	150,000		
1700		40,000	34-45,000 (8)	34,000 (8)	280-300,000 (20)	
1705		60,000				
1709			42,000 (9)	200,000 (15)		
1711/1712	174,757	100,000	44,000 (10)	144,464 (16)		
1713			13-16,000 (11)			
1720	177,029					
1724		130,000	210-265,000 (5)			253,000 (22)
1725	304,000 (5)				289,000 (23)	
1730					226,000	
1732					230,354	
1736					240,405	

Notes:

- (1) Fuller regards only field army and does not include garrison and supporting troops.
- (2) 17,400 strong new model regiments, which comprised half of the total active army. This figure applies only for the forces that participated in the Smolensk Campaign; see J. Keep, *Soldiers of the Tsar*, 81.
- (3.1) S.M. Seredonin
- (3.2) A.A. Zimin
- (4) I.A. Korotkov
- (5) Including the navy personnel. Otherwise ~ 289,000.
- (6) This was a field army under Golytsin for the Crimean Campaign. Fuller estimates the Russian forces at 100,000 for the Crimean Campaign of 1687.
- (7) This was a field army under Peter I for the Azov Campaign
- (8) Only the army at Narva
- (9) Only the army at Poltava
- (10) Only the army at Pruth
- (11) Only the army in Finland
- (12) War-time army; see C. Duffy, *Russia's Military Way to the West*, 6-7.
- (13) In the 1670s
- (14) Duffy quotes Pososhkov (1951, 262)
- (15) This figure is for 1707. Duffy gives 45,000 for the Battle of Poltava.
- (16) This is the number of regular forces, including 58,000 garrison troops.
- (17) The field army of M. Shein in the 1631 campaign. A.V. Chernov, *Vooruzhennyye sily Russkogo gosudarstva v XV-XVII v.v.*
- (18) The total paper strength of Aleksey's army, Ibid.
- (19) These are the field armies' paper strength for the two Crimean Campaigns. Ibid.
- (20) Brian Davies, *Empire and Military Revolution in Eastern Europe*, 62-3. For 1625-1631, he gives a total of 90,000 for the entire Muscovite army; For 1681 he estimates a total of 245,000, not including the Ukrainian Cossacks. The figure for 1700 is for the entire army prior to the Narva Campaign.
- (21) A.V. Volkov, *Voyny i Voyska Moskovskogo Gosudarstva*, 356
- (22) According to L.G. Beskrovnyy.
- (23) Not including naval personnel. Davies uses Keep's estimates.

Table 2**Number of Recruits for the Russian Army 1700 – 1740**

Year	Number of recruits according to Beskrovnyy	Other estimates	Notes
1700	33,234	-	32,130
1701	-	-	No recruitments were carried out. Conscription of serfs and free men was used.
1702	-	-	
1703	-	-	
1704	-	-	
1705	44,539		
1706	19,579	12,572 (not including the fleet and the supply train)	12,579 for the army, 6,000 for the supply train, 1,000 for the navy
1707	12,450	13,135	
1708	11,289	12,739	Anisimov gives a higher number of recruits, including 550 from the War department. The 11,289 soldiers, given by Beskrovnyy were enlisted by the Pomesnchiye department as noted in Anisimov.
1709	15,072	15,000	
1710	17,172	9,600	Anisimov states, that state expectations were for 14,200 recruits, but only 9,600 were actually enlisted. Beskrovnyy presents a completely different picture.
1711	51,912	50,000	There were three recruitments in this year.
1712	-	-	
1713	37,958	-	There were two recruitments for the army (20,416 men and then 16,342 in the second) and 1,200 men for the fleet.
1714	500	-	All for the fleet. They were recruited from the sea areas.
1715	12,395	-	From them 1,500 were for

			the fleet.
1716	250	-	They were sent to the Prussians as grenadiers.
1717	2,500	-	They were all sent to the fleet.
1718	15,389	-	For the fleet and the army.
1719	14,112	-	
1720	4,000	-	They were recruited from the children of soldiers and NCOs
1721	19,755	-	
1722	-		
1723	10,118	-	
1724	20,550	-	
1725	-	-	
1726	22,795	-	
1727	34,425	-	There were two recruitments – 16,640 and 17,785 men.
1728	15,016	-	
1729	23,698	-	
1730	16,000	-	
1731	-	-	There was recruitment for the fleet, but no actual numbers are given.
1732	18,654	-	
1733	50,569		
1734	35,000		A new rule was introduced, regarding the minimum height of the recruits.
1735	-		
1736	45,167	~40,000 (A. Bayov)	For the war against the Ottoman Empire.
1737	51,960		4,000 of them were Bashkir cavalymen
1738	34,071		
1739	31,450		These were taken in a single recruitment. However, several other local recruitments were carried out, but no numbers are given for them.
1740	41,131		They were enlisted in 2 recruitments – 21,131 and 20,000 men.
TOTAL	762,710		

Source: L.G. Beskrovnyy, *Russkaya armiya i flot v XVIII veke* (Moscow: Voenizdat, 1958)

Table 3
Russian and European Army Growth (1590-1715)

Year	Russia	France	England	Sweden	Netherlands	Spain	Austria
1590s	110,000 (1)	80,000	30,000	15,000	20,000	200,000	-
1630s	35,000	150,000 (5)	-	45,000	50,000	300,000	-
1650s	138,755 (2)	100,000	70,000	70,000	-	100,000	-
1670s	130,000	120,000	-	63,000	110,000	70,000	25,000
1700s	170,000 (3)	400,000 (6)	87,000	100,000	100,000	50,000	50,000 (8)
1710s	253,000 (4)	350,000 (7)	75,000	110,000	130,000	30,000	100,000 (9)

Source: G. Parker, “The Military Revolution 1550 – 1660 A Myth?”, in C.J. Rogers (ed.) *The Military Revolution Debate* (Oxford: Westview Press, 1995), 44; P. Kennedy, *The Rise and Fall of Great Powers* (New York: Vintage Books, 1989), 99 (For the 1710s numbers only); For Russian figures, see Table 1 above

Notes:

- (1) Taken from Table 1; Both Keep and Hellie accept this figure; see Table 1 above
- (2) According to C. Duffy; see Table 1 above.
- (3) Keep gives 174,757 for 1711-12; Duffy estimates the active army at 144,464 soldiers; see Table 1 above.
- (4) Beskrovnyy places the entire Russian army following the regulations of 1711 and 1720 at 253,000. L.G. Beskrovnyy, *Ruskaya armiya i flot*, 39-50.
- (5) John Lynn gives 125,000 as the actual number of the French army for 1635 – 1642; see J. Lynn, *Recalculating French Army Growth* in TMRD, 133.
- (6) Lynn estimates 340,000 during the Nine Years War; Ibid., 132.
- (7) Lynn estimates 255,000 during the War of the Spanish Succession, Ibid., 132.
- (8) Tim Blanning estimates 100,000 for Austria in 1700; see T. Blanning, *The Pursuit of Glory: Europe 1648 – 1815* (London: Penguin UK, 2007), 603
- (9) Tim Blanning estimates 110,000 for Austria in 1710; Ibid.

Table 4
The Russian Military Expenditure Tables

Army type	1711		1720		1724	
	Size	Cost	Size	Cost	Size	Cost
General Staff	184	91,000	360	163,000	360	163,000
Cavalry	43,824	765,000	39,501	1,389,000	41,674	
Guards	62,454	882,000	5,817	156,000	5,817	245,000
Infantry			57,956	1 427 000	58,754	
Garrison	64,769	452,000	69,896	961,000	69,313	3,840,000 (2)
Artillery	3,526	195,000	3,526	195,000	4,526	300,000
Other	-	-	-	-	124,150 (1)	2,144,000
Total	174,757	2,385,000	177,029	4,291,000	304,000	6,692,000

Source: J. Keep, *Soldiers of the Tsar: Army and Society in Russia, 1462–1874* (Oxford: Clarendon Press, 1985), 136-8; Prices are in *rubles*.

Notes:

(1) Includes “Lower Corps” (*Nizovoy korpus* – the army occupying Persian provinces in the south Caspian Sea); Ukrainian frontier force; irregular troops; naval forces.

(2) This figure is the total expenditure for the cavalry, infantry and garrison troops.

Table 5
Annual Military Expenditure and State Revenue in Russia in rubles

Year	State Revenue	Expenditure		
		Total State Expenditure	Military	% of the Revenue
1680	1,500,000*		750,000*	50%
1701	3,546,000****		1,839,000*	52%
1704	-	3,032,082	1,439,832****	40.9% (3)***
1710	3,133,879***	3,077,110*****	3,000,000(1)*****	95%
1711	3,200,000**	4,268,000 (2)	4,000,000 (2) **	125%
1712	-	-	3,356,900	
1720	6,499,000*****	5,556,000*****	4,291,000** (5)	66%
1723	6,042,000****	4,725,000****	-	-

1724	8,556,000*****	6,243,000****	5,403,348	63%
1725	10,186,000*****	10,141,000 *_	6,541,000 *_	66% (4)
1729	-	-	5,412,263*****	-
1734	-	9,424 000 *_	6,731,000 *_	
1736	-	-	5,466,932*****	-

Sources: J. Keep, *Soldiers of the Tsar*, 136-8; L. Hughes, *Russia in the Age of Peter the Great* (New Heaven and London: Yale University Press 1998), 136-8; C. Duffy, *Russia's Military Way to the West*, 36; S.G. Strumilin, "K voprosu ob ekonomike Petrovsko epokhi" in L.G. Beskrovnyy (ed.), *Poltava: K 250-letiyu Poltavskogo srazheniya; sbornik statey*, (Moscow : Akademia nauk, 1959); L.G. Beskrovnyy, *Russkaya armiya i flot v XVIII veke*, 118.

Notes:

* C. Duffy estimate

** J. Keep estimate

*** L. Hughes estimate

**** S. Strumilin estimate

***** B. Davies estimate

***** Beskrovnyy's estimate

*_ Troitsky's estimates

(1) C. Duffy estimates the war expenditure for 1710 at 3,000,290 or around 93 per cent of the State Revenue. Lindsey Huges estimates a total military expenditure of 3,834,418 rubles. Davies claims that the war expenditure for 1710 was 2,544,000 or 83% of the total state expenditure for that year. In the dissertation are used Beskrovnyy's estimates, which include naval personnel as well.

(2) Includes 1,260,000 rubles cost for supplies and forage. Without these, the total war expenditure is 2,740,000. This is 90% of the total state expenditure for 1711, which is 3,008,000 rubles.

(3) This is the percentage from the total state expenditure for 1704 which was 3,032,082 rubles.

(4) According to Beskrovnyy, the total war expenditure was 5,970,000 rubles or 66 per cent of the total revenue.

(5) Beskrovnyy estimates the expenditure at 4,000,000 rubles.

PART I, CHAPTER 2

Table 1

Growth of the Kapukulu Ocakları Forces (1514-1769)

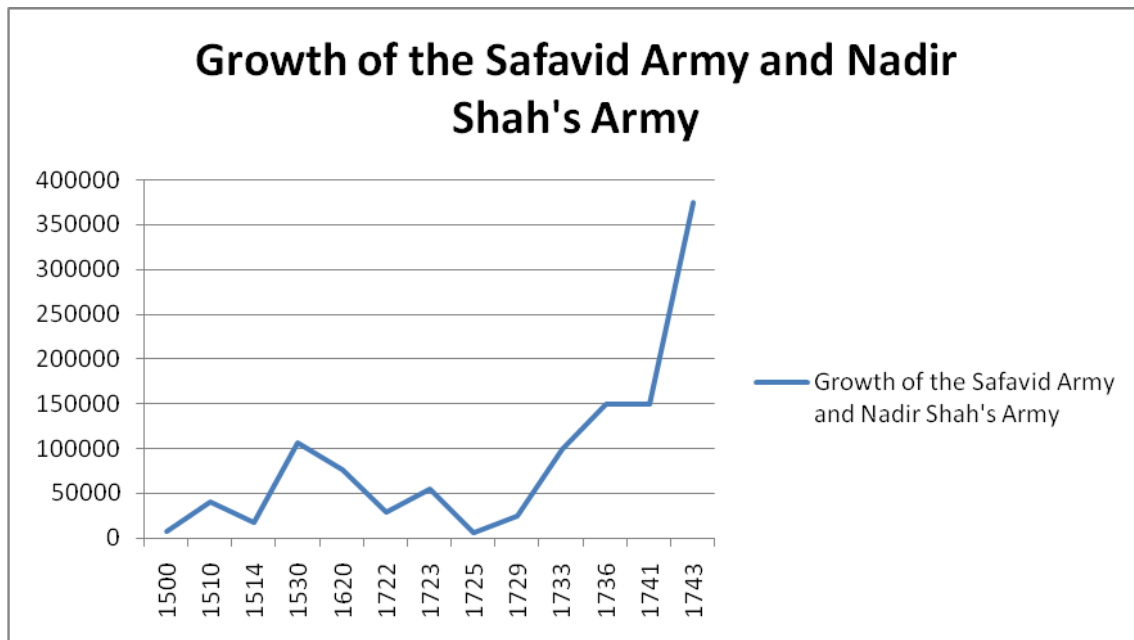
Year	Ágoston		Murphey		Inalcık
	Yeniçeri	Artillery	Yeniçeri	Total Kapukulu Ocakları	Total Kapukulu Ocakları
1514	10,156	1,171	-	-	16-30,000
1526	7,886	2,162	7,886	18,689	
1567-68	12,798	2,671	-	-	
1574	-	-	13,599	29,175	30-70,000 (2)
1597	-	-	35,000	62,000 (1)	
1609	37,627	7,966	37,627	75,868	
1660-61	54,222	6,488	53,849	98,342	50-60,000
1665	49,556	-	-	-	
1669	51,437	8,014	-	-	
1670	49,868	-	39,470	70,296	
1680	54,222	-	-	-	-
1687	-	9,122	-	-	-
1698-99	-	15,307	-	-	-
1702	-	4,201	-	-	70,000 (3)
1738-39	-	19,430	-	-	
1769	-	5,222	-	-	

Sources: G. Ágoston, *Guns for the Sultan – Military power and Weapons Industry in the Ottoman Empire* (Cambridge: Cambridge University Press, 2005); R. Murphey, *Ottoman Warfare 1500-1700* (London: University College London Press, 1999); Inalcık, H., “Military and Fiscal Transformation in the Ottoman Empire, 1600-1700”, *Archivum Ottomanicum* 6 (Mouton, 1980), 283-339

Notes:

- (1) This figure does not include the artillery corps
- (2) For the 1590-1630 period
- (3) For 1704

Table 2



Sources: M. Axworthy, “The Army of Nader Shah”, *Iranian Studies* 40, 5 (2007), 639; ; Abraham of Yerevan, *History of the Wars, 1721 – 1738*, trans. by G.A. Bournoutian (Costa Mesa: Mazda Publishers, 1999); *Encyclopedia Iranica – Army – Safavid Period* (<http://www.iranica.com/articles/army-iii>); L. Lockhart , “The Persian Army in the Safavid Period”, *Der Islam: Journal of the History and Culture of the Middle East* 34, 1 (1959), 89-98

Notes:

For 1530 - Including non-combatants. Of these, 84,000 were part of the qizilbash tribesmen.
For 1722-25 - These figures are given by Abraham of Yerevan for the army of Tahmasp II. In addition, he gives different numbers for the garrisons, loyal to Tahmasp and conquered by the Ottomans. However, some of these figures (for example the 85,000 garrison of Tabriz) are a clear exaggeration, and are therefore not included.
For 1736 – Axworthy gives the number between 120,000 and 180,000. For the purposes of the chart, 150,000 are given as a middle ground.
For 1743 - This number represents the total field forces of Nadir Shah for his campaign against the Ottoman Empire. This number does not include the garrison troops, left to protect Persia proper. Another suggested figure is 200,000 troops, not counting the detachments, send to occupy other (apart from Mosul and Kirkuk) Ottoman strongholds in Iraq.

Table 3

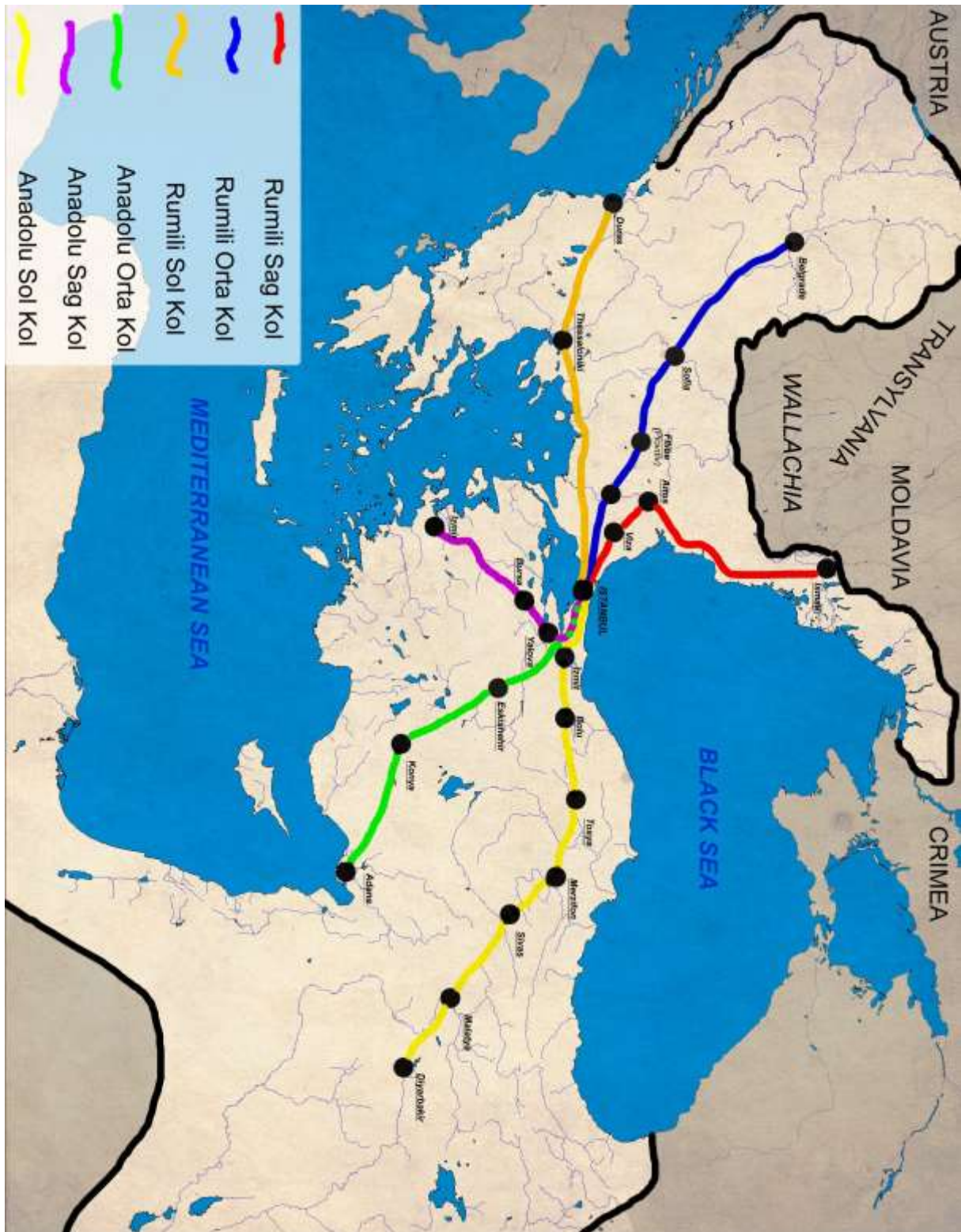


Source: M. Haneda, "The Evolution of the Safavid Royal Guard", *Iranian Studies*, 22, 2-3 (1989), 57-85.

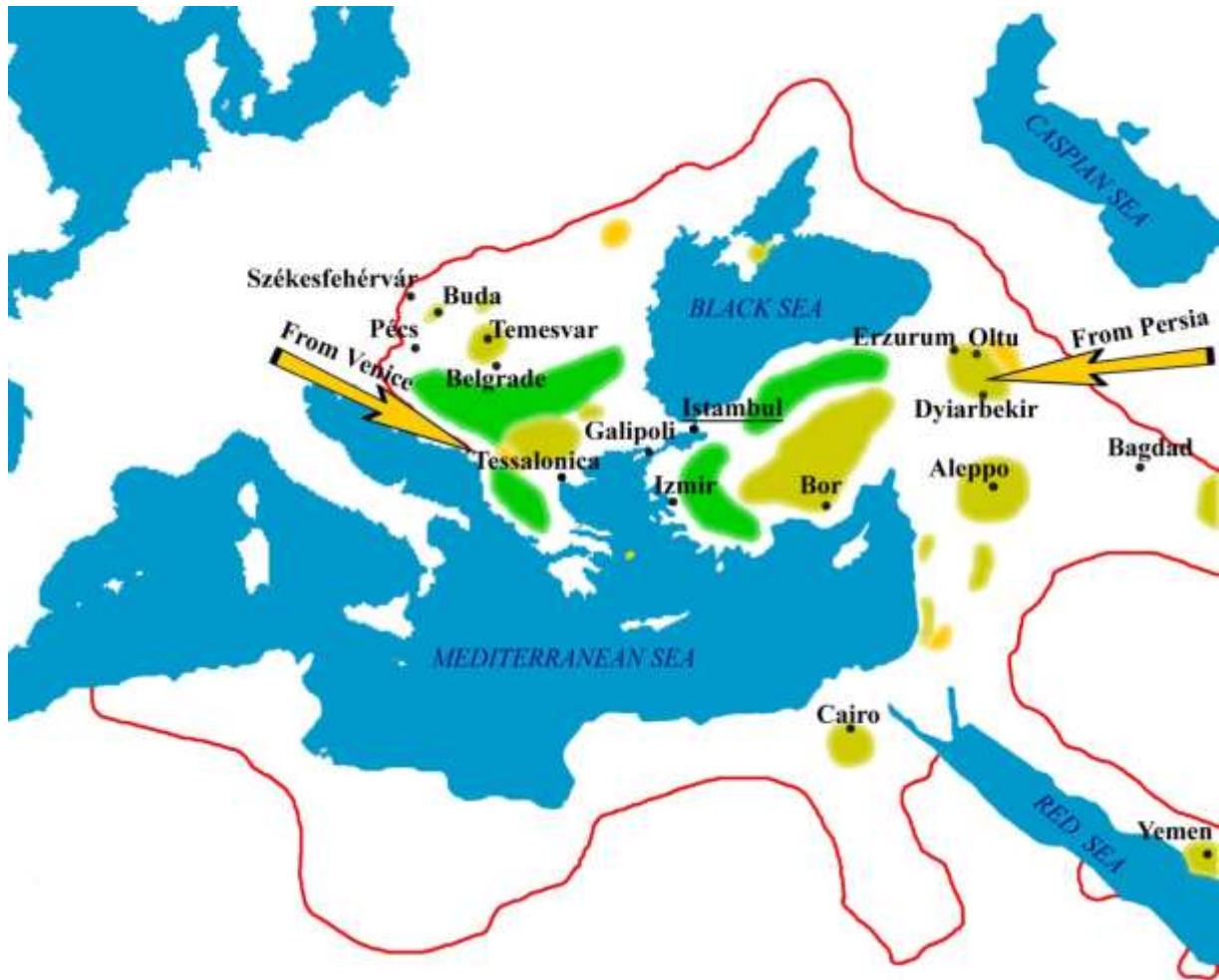
Notes:

For 1620 – Haneda notes that the qurchis under Abbas were between 10,000 and 15,000. For the purposes of the chart a middle ground of 12,000 is used.

Map 1 – Military Roads in the Ottoman Empire



Map 2 - Gunpowder Production in the Ottoman Empire



The map shows the disposition of the main sources and the production centers for the Ottoman gunpowder industry. The cities indicate the places where there were one or more gunpowder mills (*baruthane*). The regions producing saltpeter are in light brown. The regions producing sulfur are in dark yellow. The wood deposits are in green. The boundaries refer to the Ottoman Empire and its vassals in 1680.

Sources: G. Ágoston, *Guns for the Sultan*; G. Ágoston, "Gunpowder for the Sultan's Army: New Sources on the Supply of Gunpowder to the Ottoman Army in the Hungarian campaigns of the 16th and 17th Centuries", *Turcica*, 25 (1993), 75-96.

PART II, CHAPTER 3

Map 1 – The First Azov Campaign (1695)



Map 2 – The Second Azov Campaign (1696)

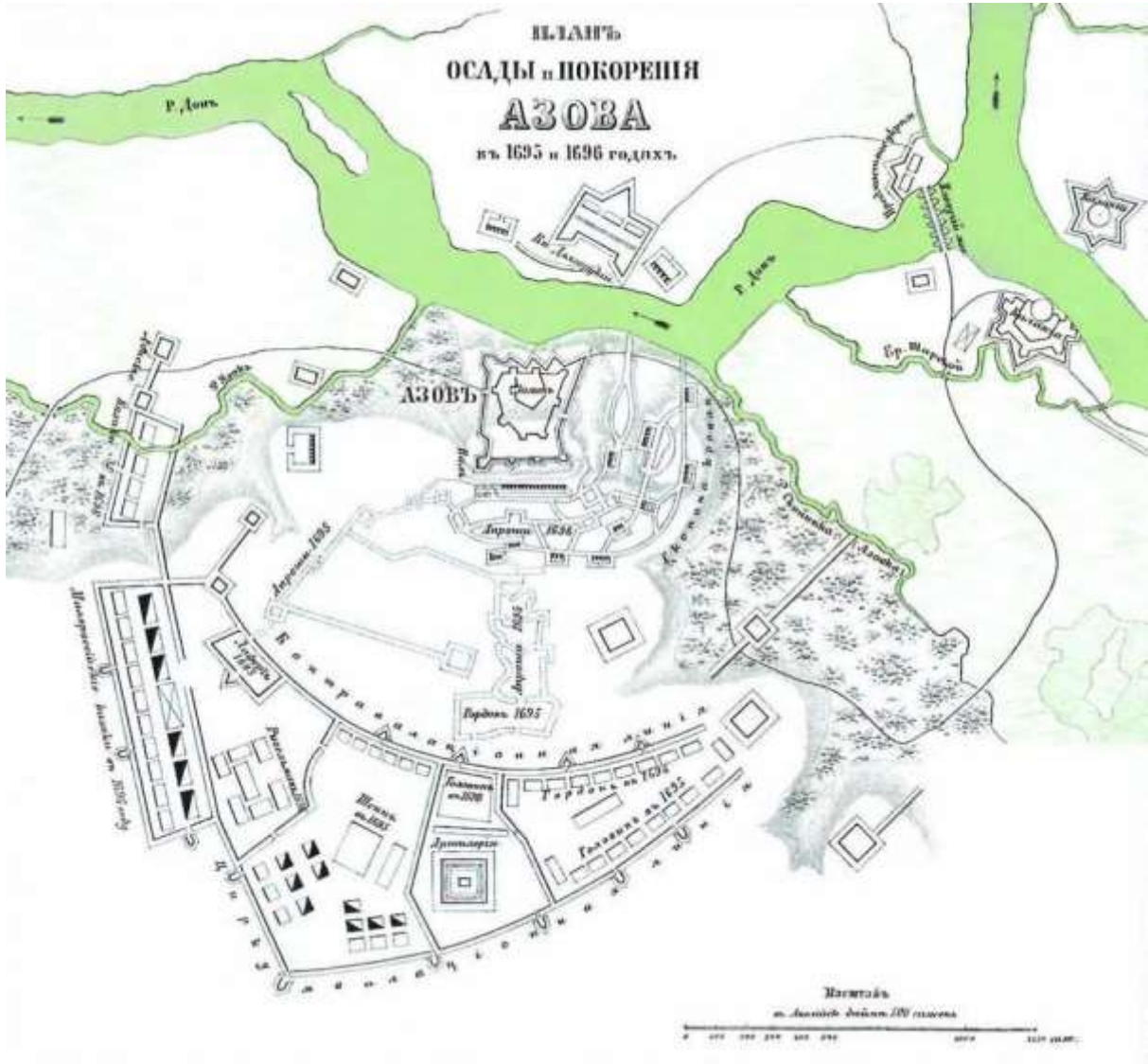


Map 3 - The Third Azov Campaign (1697)



Scheme – The Two sieges of Azov (1695, 1696)

Source: Bobrovskiy, P.O., *Istoriya 13 Leyb-grenaderskago Yerevanskogo Ego Velichestva polka za 250 let, vol. 1* (St. Petersburg, 1892)



Scheme – The encirclement at Stănileni (1711) Source: Porfiryev, E.I., *Petr I osnovopolozhnik voennogo iskusstva russkoy regulyarnoy Armii i flota* (Moscow: Voennoe izdatelstvo, 1952)

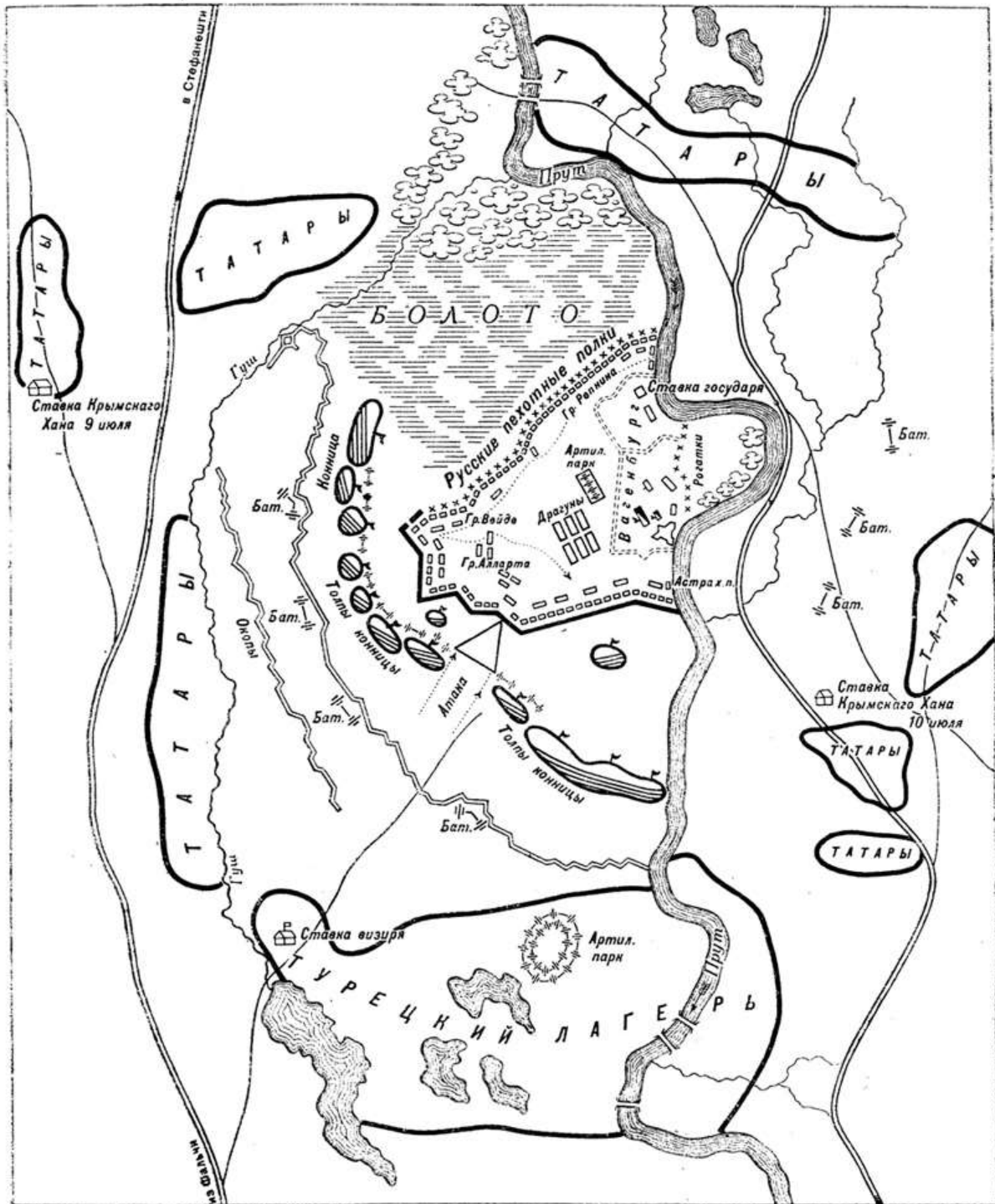


Схема 7. Операция на р. Пруте.

PART II, CHAPTER 4

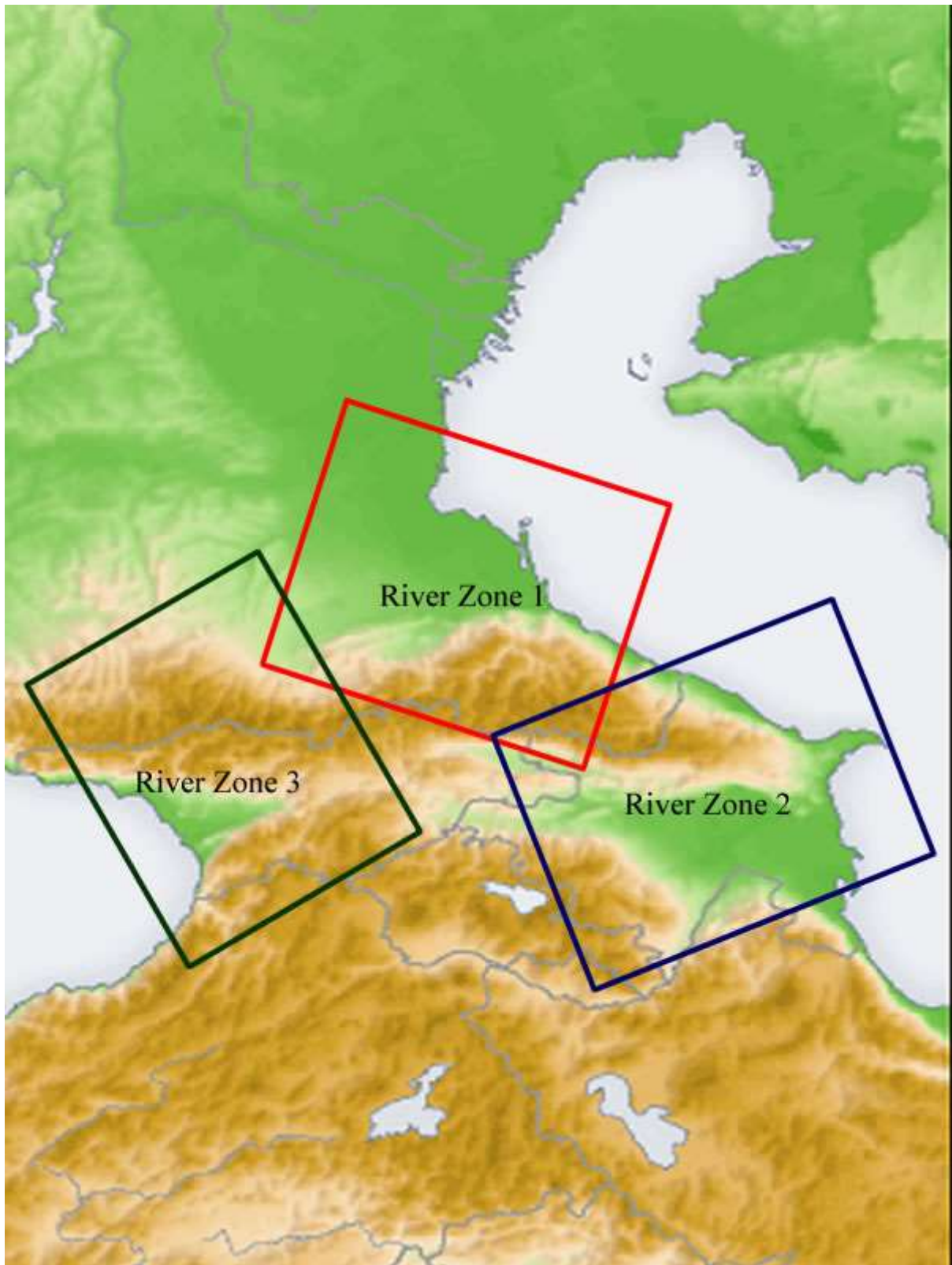
Map 1 – Europe and the East in 1721



Map 2 – The Persian Campaign(1722-1723)



Map 3 – The Caucasus and the Caspian – Topography and Rivers



Map 4 – Main Roads, traversing the Caucasus region

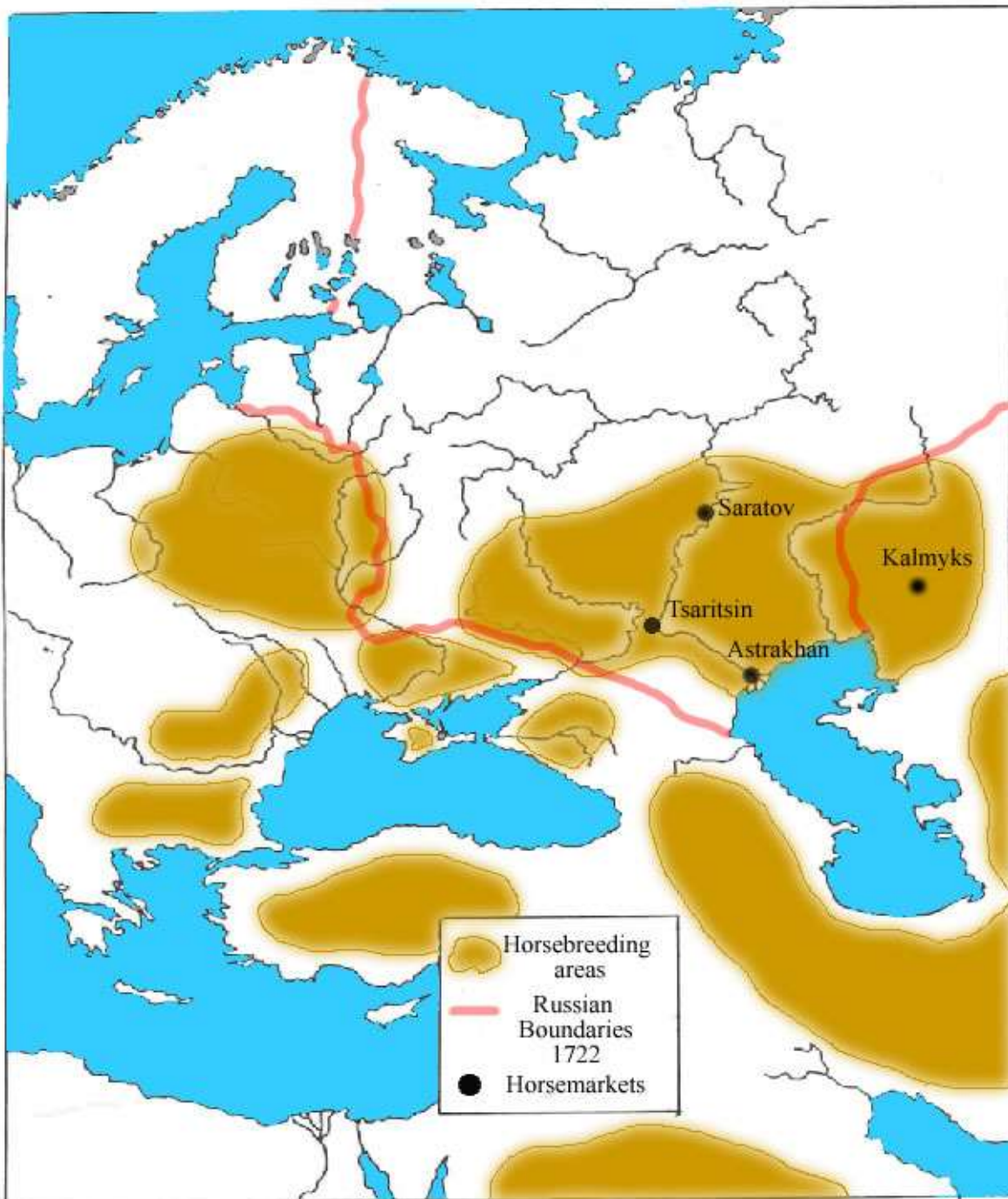


Map 5 – Political map of the Caucasus in 1722, prior to the Persian Campaign



The map is based on the overall literature, used in this paper

Map 6 – Horsemarkets and Horsebreeding areas



Sources: *Pokhodnyy Zhurnal 1722* (St. Petersburg, 1855); G. Ágoston, *Guns for the Sultan*; R. Murphey, *Ottoman Warfare*; R. Matthee, “Unwalled Cities and Restless Nomads: Firearms and Artillery in Safavid Iran” in C. Melville (ed.), *Safavid Persia: The History and Politics of an Islamic Society*, (London and New York: I.B. Tauris, 1996), 389-417.

Map 7 – Harbor Locations, targeted by Peter during the 1722-23 campaign



Sources: V.P. Lystsov, *Persidskiy Pokhod Petra I: 1722 – 1723* (Moscow, 1951); I.V. Kurukin, *Persidkiy pokhod Petra Velikogo. Nizovoy korpus na beregakh Kaspiya, 1722-1735* (Moscow: Kvadriga, 2010).

Map 8 – Maximum extent of Russian control in the Caspian region (1724)



The thick black line represents the main state borders, while the thinner lines represent the borders of the vassal states.

Table 1 – Russian army strenght at the beginning of the Persian Campaign

Army	S. Solovyev	P. Bruce	L. Lockhart	V. Lystsov	I. Kurukin
Infantry	22,000	33,000	22,000	21,495	18,602
Dragoons	9,000	7,000	9,000	8,757 ⁽²⁾	8,786
Cossacks	20,000	20,000	20,000	16,300	16,300
Kalmyks	30,000	40,000	55,000 ⁽¹⁾	4,000	4,000
Sailors	5,000	-	5,000	-	-
Total personnel	86,000	100,000	111,000	50,552	48,057⁽³⁾
Vessels	-	250	274	+87	447 ⁽⁴⁾
Guns	-	-	-	-	+196

Notes:

(1) – 20,000 Kalmyks and 35,000 Tatars

(2) - Lystsov does not give an exact number but states that there were 7 dragoon regiments. Taking a regular regimental strenght of 1,251 troops, officers and servants, the “paper” strenght of the supposed 7 regiments is calculated.

(3) - Including 369 artilerymen

(4) – This figure includes all boats and ships used during the campaign. Many of the vessels were quite small and were used to transport bagage and supplies.

Table 2 - Weather Conditions during the 1722 Campaign

<u>Notes:</u>		
Bold Text – The text given in bold is drafted from Peter’s personal entries in the 1722 campaign journal		
(Text) – The text in normal brackets is drafted from the First Addition to the 1722 campaign journal		
{Text} – The text in curly brackets is drafted from the Second Addition to the 1722 campaign journal		
‘ – ‘ indicates that there is no information on the climate in any of the Journal entries		
<i>Text [P.Bruce]</i> – The text in italics, followed by [P.Bruce] is drafted from the Memoirs of Peter Henry Bruce		
Date	Weather	Notes
18.07.1722	North – northwestern Wind; (Clear weather)	Sailing Volga
19.07.1722	Southern Wind; Later - Thunders; (The weather was calm. west-south wind. Sunshine with some light rain.)	Sailing Volga
20.07.1722	Weak south-southwestern wind; (Dead-wind, clear skies)	Sailing Volga
21.07.1722	Dead-wind until 7 p.m., then the wind turns into east-north-east; Thunders, strong wind and heavy rainfall in the evening and during the night; (Strong wind until 2 p.m.; Small rainfall in the evening. Had to stay on anchor during the night, because of the weather. The wind was southeastern)	Entering the Caspian Sea
22.07.1722	North-western wind in the mornig. After 6 a.m. the wind turns south-south-east; (The weather was clear; The wind was south-eastern)	Sailing Caspian Sea
23.07.1722	Eastern wind that turns east-north-east; During the day the wind made following the course of the ships very hard. Storm and hevay rain; (southeastern wind in the morning. Storm between 10 and 12 a.m.; at noon the wind turned northern and made sailing possible)	Reached Terki and stayed in the gulf of Terki until 26.07; Part of the fleet got lost at sea, due to lack of experienced navigators and compasses (P.Bruce)
24.07.1722	Northern wind; (Waited for the rest of the fleet to join before sailing south)	In the bay of Terki
26.07.1722	Weak east-north-east wind; (Tail-wind during the day. Storm in the evening)	Sailing from Terki to Agrakhan bay
27.07.1722	North-north-western wind; (...); <i>Favorable breeze [P.Bruce]</i>	Reached Agrakhan bay
28.07.1722	Eastern wind (...)	Landed the troops
29.07.1722	Eastern wind; (Eastern wind)	Fortifying the landing until 04.08
30.07.1722	1 p.m. – west-south-west wind (eastern wind)	In Agrakhan bay
31.07.1722	North-north-eastern wind; (north-western wind)	In Agrakhan bay
01.08.1722	Strong western wind after midnight. After 8 a.m. north-western wind; after noon – north-north-western wind; After 1 p.m. – Temperate north-eastern wind; 8 p.m. – western wind; (...)	In Agrakhan bay

02.08.1722	Strong western wind and light rainfall after 1 a.m.; (...)	
04.08.1722	- ; <i>The heat was so intolerable that numbers of our men dropped down by the way</i> [P.Bruce]	Fortifications built
05.08.1722	-	The army marches from the fortified camp
06.08.1722	... (Great heat during the day, the army had to stop for rest in the afternoon)	Reached the Sulak River
07.08.1722	Great storm from north-west that raised the level of the Sulak River. The storm continued until 11.08 (...)	Preparing to pass the river
08.08.1722	... (Strong eastern wind during the entire day. Made crossing the river very slow – it took the entire day and part of the night for most of the army to cross)	The army stops
09.08.1722	... (A great storm with very strong wind that made crossing the river very burdensome)	Trying to cross the river
10.08.1722	-	Still crossing the river
11.08.1722	- ; <i>(We marched thirty wrests, notwithstanding the infinite heat, which made many of our men drop on the way</i> [P. Bruce]	Marching toward Tarki
12.08.1722	-	Reached Tarki
13.08.1722	-	Stayed in Tarki
14.08.1722	-	Stayed in Tarki
15.08.1722	-	Stayed in Tarki
16.08.1722	- ; <i>We marched ... in a scorching heat</i> [P.Bruce]	Marched from Tarki to the Manas River
17.08.1722	- ; <i>I was reduced to walk on foot, which was extremely fatiguing in this hot climate</i> [P. Bruce]	Marched from the Manas to Old Buinaksk
18.08.1722	- ; <i>We lost, this day, a number of horses, by heat...</i> [P.Bruce]	Entered the domains of Utamysh. Reached the Inchi River.
19.08.1722	Had to give the horses some rest at noon [presumably because of the heat].(...)	Battle with the sultan of Utamysh (3 p.m.)
20.08.1722	-	The Cossack-dragoon forces return to camp
21.08.1722	-	Reached the Bushbugam River
22.08.1722	-	Reached the Darbakh River
23.08.1722	-	Entered Derbent
24.08.1722	Great north-eastern storm that sunked 12 vessels and destroyed part of the provisions for the army (...)	In Derbent
25.08.1722	... ; (...) ; { <i>Storm from the North in the evening, that sunked some of the boats – this probably refers to the storm from the previous day. The storm probaly lasted throughout the entire 24/5 night</i> }	P. Bruce dates the storm on 25.08.
26.08.1722	-	In Derbent

27.08.1722	-	In Derbent
28.08.1722	2 a.m. – very strong and hot western wind - <i>It was so hot that it seemed as we were in a bath</i>; (...); {Strong and hot western wind, that soon abated}	In Derbent
29.08.1722	... ; (...); {Substantial rainfall}	Held council for the future of the campaign
30.08.1722	... ; (...); {The day was cloudy and gloomy; there was substantial rainfall during the night)	The infantry passes the Milyukent River
31.08.1722	... ; (...); {Gloomy and Rainy}	The Usmiy refuses to provide supply for the army
01.09.1722	... ; (...); {Cloudy in the morning, clear skies in the afternoon}	
03.09.1722	-	A fort was erected on the Darbakh River
04.09.1722	-	Problems with some of the vessels
06.09.1722	-	The army begins its march back
07.09.1722	-	Leaving Derbent
08.09.1722	9 p.m. – storm; (...); {Fine weather with weak wind during the day; Strong wind and a storm in the evening and during the night} ; <i>The heavy dews now began to fall in the night-time, which rendered it very cold [P.Bruce]</i>	Sending envoys to Astrakhan and the fortified camp at Agrakhan
09.09.1722	The wind calmed in the evening but during the night there was again a very strong northern wind; (...); {The storm from the previous night continued during the morning; The storm stopped at noon, and it continued raining; At 3 p.m. a new storm began with a very strong and very cold northern wind. The storm continued during the evening and throughout the night. }	Reached the Bushbugam River
10.09.1722	- ; <i>We rested on the 10th, in the night of which, the hills were very thick covered with snow, which made it exceedingly cold.. [P.Bruce]</i>	Reached the Inchi River
11.09.1722	... ; (...); {The skies were clear but it was cold during the entire day); <i>The night...was bitter cold [P.Bruce]</i>	Reached the place, where they fought the Utamysh army on 19.08
12.09.1722	- ; <i>The wind blew so hard this day, that we were almost blinded by the sand and dust.. [P.Bruce]</i>	A Cossack detachment defeated a Dagestan band. A 10,000 Dagestani force which followed the march of the Russians; The army reached Old Buynaksk and camped there.
13.09.1722	-	The army stayed at

		Buynaksk to acquire food for the horses since there were no natural pastures in the area.
14.09.1722	- ; <i>We were reduced so low by the continuous marching, the watching and the cold... [P.Bruce]</i>	Reached the Manas River. The population of Buynaksk refused to supply the Russians and allied with the Utamysh; The army was exhausted from the march, the cold and the constant state of alert because of the enemy forces that followed the Russian march.
15.09.1722	-	Reached Tarki and bought forage for the horses.
16.09.1722	-	Left Tarki
18.09.1722	... (The morning was cloudy; In the afternoon the weather was warm)	Reached the Sulak River
19.09.1722	-	Began building the St. Cross fort
20.09.1722	-	Finished building bridge over the Sulak
24.09.1722	-	Enemy raid destroyed a position near the Derbakh River
25.09.1722	-	The St.Cross fort was completed
26.09.1722	-	Began marching toward the seaside camp
27.09.1722	-	Boarding the fleet
28.09.1722	-	Sending envoys to Georgia
29.09.1722	... ; (...); {The Wind was south-south-east}	Peter sailed to Terki
30.09.1722	... ; (...); {South-western wind until noon; Dead-wind from north-north-west in the afternoon. In the evening there was mist}	Peter left Terki for Astrakhan
01.10.1722	... ; (...); {Weak wind from south-south-east}	Sailing the Caspian Sea; Bruce describes the weather as “fine”;
02.10.1722	... ; (...) ; {The wind changed from northwestern to northeastern}	Sailing the Caspian Sea; Bruce describes

		the weather as “fine”
03.10.1722	Great Storm from north-west. The storm ended before 7 p.m. At 7 p.m. “the sky in the South became light, as if a great fire was burning. The shining went to the West of the horizon and then to the north. The Night became bright, as if the coast around the fleet was lightened by fires”. The phenomenon lasted for 2 hours. Peter contributes this occurrence to a meteor, passing through the sky; (...); {There was a East-North-East wind in the morning; The wind became Southern at noon and again East-South-Eastern in the afternoon; Sometime after 3 p.m. a storm began, that sunk some of the boats and lasted until the evening; After the storm, there was a great brightness in the sky for some time, and when it disappeared, the night became very dark}	Reached the mouth of the Volga; The storm sunk at least 7 galleys from the main fleet and many of the men on board drowned (P.Bruce)
04.10.1722	The day was windy. The wind shifted its direction from north to west; (...); {The weather was windy during the morning and the early afternoon, the wind shifting from north to east and then from north to west; At 1 p.m. a powerful wind came out from the north-west and the fleet had to anchor. The storm lasted until 5 p.m.; At 8 p.m. a new storm began, which continued until midnight}	Peter entered Astrakhan; Most of the fleet remained at sea because of the storms;
15.10.1722	-	The entire army reached Astrakhan

Table 3 – Weather Summary for the 1722 campaign

Total days of campaign	Total days at sea	Total days in march	Total days in “rest”	Total number of storms	Storms at sea	Storms during marching	Total days of heat
87	27	23	30	13	5	8	8
Total days with calm weather		Total days of bad weather (rain, cold, storms)		Storm per days at sea		Storm per marching days	Heat per days marching
14		20		1 per 5.4 days at sea		1 storm per 2.87 days	1 per 2.87 days in march
Notes:							
<p>The Journal and the Memoirs of P. Bruce do not give information on the weather during the days, in which the army was not marching (i.e. the days spent in Tarki and Derbent). Therefore the storm/day ratio is calculated taking only the days in which the army was moving.</p> <p>After 08.09.1722 the temperatures at night fell drastically and the night became extremely cold.</p>							

Sources: *Pokhodnyy Zhurnal 1722* (St. Petersburg, 1855); P.H. Bruce, *Memoirs of Peter Henry Bruce, Esq. - a military officer in the services of Prussia, Russia, and Great Britain, containing an account of his travels in Germany, Russia, Tartary, Turkey, and the West Indies, &c, as also several very interesting private anecdotes of the Czar, Peter I of Russia*, (Dublin, 1783).

Table 4 – Distances and march speed (1722)

Day	From - To	Distance	Notes
18-19.07.1722	Astrakhan – Troytskiy dyke	25 verst (26.5 km)	The army is sailing from Astrakhan to the Caspian Sea
19.07.1722	Troitski dyke – Dvortsoviy dyke	30 verst (31.8 km)	Sailing the mouth of Volga
26.07.1722	Terki-Agrakhan	50 verst (53 km) (not the entire distance but only for the day)	Sailing the Caspian Sea
27.07.1722	Terki-Agrakhan	-	Reached Agrakhan bay
05-06.08.1722	Agrakhan-Sulak	31 verst (32.86 km) (entire distance)	Marching from Agrakhan to the Sulak River (Bruce states that the army marched 25 verst on 04.08 and additional 5 verst on 05.08)
06.08.1722	Agrakhan-Sulak	15 verst (15.9 km) (only that day)	Peter reached the Sulak River
11.08.1722	Sulak-wells before Tarki	26 verst (27.56 km)	Marched the entire day from 5 a.m.; P.Bruce claims that the army marched 30 verst this day. This is to great extent impossible, since the Journal claims that the wells were 8 verst from Tarki and not 11. However, after estimating a march of 26 verst the first day, the Journal claims a total of 37 verst for the entire route from the Sulak to Tarki. In this particular case it is better to rely on the

			Journal since the distance is confirmed in two separate sections.
12.08.1722	Night camp - Tarki	11 verst (11.66 km) (for four hours)	Reached Tarki
11-12.08.1722	Sulak River - Tarki	37 verst (39.22 km)	Total Distance
16.08.1722	Tarki – the Manas River	25 verst (26.5 km)	Marched the entire day from 5 a.m. Distance is also confirmed by P.Bruce
17.08.1722	the Manas River – Old Buynaksk.	14 verst (14.84 km) (only in the morning); 30 verst (31.8 km) the entire distance (P.Bruce)	Marched to Old Buynaksk until 9 p.m.; Reached Old Buynaksk, where there was a well. Peter went further 5 verst to explore the mountain
18.08.1722	Old Buynaksk – the Inchi River	25 verst (26.5) km	This distance is included only in P. Bruce. However, it fits the general daily pattern of the Russian march both in distance and in time.
19.08.1722	The Ichi River- Utamysh	+20 verst (+21.2 km) (This distance was covered by the dragoons and the Cossacks, following the retreating forces of the Sultan of Utemish. This was the distance between the battlefield near Buynaksk and the “capital” of Utamysh.	Battle against the army of Utamysh.
21.08.1722	The Inchi River – the Bushbugam River	27 verst (28.62 km)	Marched the entire day from before 6a.m. to 6 p.m. with a brief rest at noon.
22.08.1722	The Bushbugam River – the Derbakh river	15 verst (15.9 km)	Marched with several rests.
23.08.1722	The Derbakh River - Derbent	15 verst (15.9 km)	Only appears in P.Bruce’s Memoirs
24.08.1722	Derbent camp – the Milyukent River	13 verst (13.78 km)	Peter send a detachment further south from Derbent to cross the Milyukent River and to look for a suitable place to

			build a port, since Derbent was considered inappropriate
30.08.1722	Derbent camp – the Milyukent River	13 verst (13.78 km)	Peter sent his infantry toward the position, previously established by the detachment. There, the army was better supported by the navy. The infantry covered the distance in 3 hours .
06.09.1722	The Milyukent River - Derbent	13 verst (13.78 km)	The army returned to Derbent, beginning its march in the morning and reaching the city at noon.
06.09-13.09.1722	Derbent – Old Buynaksk	82 verst (15 verst/15.9 km on 07.09; 15 verst/15.9 km on 09.09; 24 verst/ km on 11.09)	The army followed its old route; Rested on 08.09 and on 10.09; Reached the Inchi River on 11.09 (P. Bruce)
14.09.1722	Old Buynaksk – the Manas River	30 verst (31.8 km)	The army marched the entire day. The speed was the same as during the march south.
15.09.1722	The Manas River – Tarki	25 verst (26.5 km)	Marched the entire day from “early morning”. Probably maintained the same speed as on the way south.
16.09.1722	Tarki – Wells on the road to the Sulak River	10 verst (10.6 km)	Began march at 3 p.m.; Distance confirmed by P.Bruce
17-18.09.1722	Wells – the Sulak River (St.Cross Fort)	52 verst (km) – 27 verst on 17.09; 25 verst on 18.09	Had to extend their route to overcome a swamp, being misled by a local guide. Stopped several times because of lack of water and to give rest to the troops.
01.10.1722	St. Cross - Agrakhan fortified camp	30 verst (31.8 km)	Noted only by P. Bruce
South March distance		221 verst (234.26 km)	11 days of marching;
Medium marching speed per day		20 verst (21.2 km)	-

Northern March	242 verst (256.52 km)	12 days of marching
Medium Marching speed per day	20.1 verst (21.3 km)	-
The entire campaign (From the departure of the Agrakhan fortified camp until the return to Agrakhan fortified camp)	Total distance covered:	Days of Campaign
	463 verst (490.78 km)	43
	Overall MMS	Days Marching
	20.1 verst (21.3 km)	23

Notes: 1 verst = 500 sazhen = 1.06 km; MMS – Medium Marching Speed per day

Sources: *Pokhodnyy Zhurnal 1722* (St. Petersburg, 1855); P.H. Bruce, *Memoirs of Peter Henry Bruce, Esq.*

Table 5 - Engagements during the 1722 campaign

Date	Place	Casualties	Notes
23.07.1722	Endirey, Circassia	70, a dozen wounded/ 89 killed, 115 wounded	Russian cavalry destroyed the main settlement of the Endirey, killing 300 enemy fighters and burning 3,000 houses. (Bruce estimates the number of killed Endireys at 5 000); Kurukin estimates the Russian casualties at 89 killed and 115 wounded.
19.08.1722	Near the Inchi River, Dagestan		The Russian army was attacked by the forces of Utamysh (6-12,000). 500-700 enemies were killed and 30-40 were captured (and later 26 were executed). The Cossacks and dragoons managed to capture the capital of Utamysh and to plunder it.
12.09.1722	Near Buynaksk, Dagestan	2 captured	Cossack vanguard was attacked by enemy skirmishers during the entire night. The Cossacks captured 3 Tatars (P.Bruce)

14.09.1722	Fort on the Derbakh River, Dagestan	130 (entire garrison)	Attacked for four days by 10,000 troops of Usmi, Utamysh and Surkhai; The defenders managed to kill 400 from the Dagestani army.
19.09.1722	Fort on the Milyukent River, south of Derbent, Shirvan	5 killed, 8 wounded	Managed to repulse a four-day siege of Dagestani forces.
20.09.1722	Near Buynaksk, Dagestan	???	A detachment of 1,000 Cossacks and 4,000 Kalmyks killed 500 enemy troops and captured 350; Also captured 7,000 cows and 4,000 sheep.
21-22.09.1722	Fort on the Milyukent River, near Derbent, Shirvan	7 killed	The Russians managed to repulse the enemy assaults and killed 80-100 enemies, among which 3 “paşas”; Part of the fort was damaged due to the heavy rains and the enemy fire. The commander of the fort decided to abandon the position and retreat with all his men and supplies to Derbent. The retreat took place on the 27.09.1722
Total Russian Combat Casualties	212- 241 killed, 20-123 wounded, 2 captured	Total Enemy Combat Casualties	1,926 – 2,126 killed, 357-367 captured
Sources: <i>Pokhodnyy Zhurnal 1722</i> (St. Petersburg, 1855); P.H. Bruce, <i>Memoirs of Peter Henry Bruce, Esq.</i> ; I.V. Kurukin, <i>Persidkiy pokhod Petra Velikogo. Nizovoy korpus na beregakh Kaspiya, 1722-1735</i> (Moscow: Kvadriga, 2010).			

Table 6 - Fortifications, built or strengthened during the 1722 campaign in Dagestan and 1723 campaign in Persia

Fortress	Garrison	Notes
Tarki	2,000 regular, 1,000 Cossacks, 31 cannons	<i>Well fortified, with ramparts and bastions in the modern style (Bruce)</i>
Agrakhan landing base	200 /300 regular troops and 1,500/1,600 Cossacks	Left to protect the landing base and the fleet.
the Derbakh River	110 regulars and 20 Cossacks	The garrison was destroyed by the Dagestani forces on 14.09.1722
the Milyukent River	200 regulars and 300 Cossacks (P.Bruce)	Built between 25.08-05.09. Consisted of <i>“four battalions, surrounded by a moat, into which water from the river [Milyukent] was led”</i> (P.Bruce, who commanded the building of the fort); Abandoned after enemy raid on 21-22.09.1722
St. Cross	1,384 soldiers (729 regular, 655 irregular), 21 cannons, sufficient gunpowder and ammunitions	P.Bruce, who drew the plans for the fort describes it as follows: <i>“the plan consisted of five bastions, and two demi-bastions next the river on the south-side, with ravelins and a palisaded covered way; on the north-side were six bastions, also with ravelins and a palisaded covered way; the two sided to communicate by a bridge in the middle, over the river”</i> Bruce states that Peter left brigadier veterani with 18,000 (7,000 dragoons, 5,000 regular infantry and 6,000 Cossacks) troops to finish the fort and protect the works.
Derbent	1,321 soldiers + 300 Cossacks/ 3,000 troops, 150 cannons; These forces were strengthened by 1,200 Cossacks, two infantry battalions and 20 cannons in	Additional 300 Cossacks were sent to two field fortifications near Derbent; P. Bruce estimates a total of 3,000 garrison troops, 100 iron and 50 brass cannons of 12 and 9 pounds, along with

	the spring of 1723	an abundant supply of ammunitions and gunpowder. However, the numbers given by Bruce might be exaggerated. Otherwise, they might include a number of cannons that were already in Derbent (this is evident in the Journal).
the Inchi River	100 regulars and 200 Cossacks	Noted only in P.Bruce
Resht	3,110 troops, +24 guns	By June 1723
Baku	4 regiments (5,000 troops)	By July 1723; According to Lockhart, the army that marched against Baku numbered 3,000.
Total garrison troops	16,715 /18,094 soldiers, +96/+246 cannons (14,715/16,094 according to Lockhart's account)	In addition, there was a field force of some 22,000 Cossacks and dragoons near St. Cross fort.
Sources: <i>Pokhodnyy Zhurnal 1722</i> (St. Petersburg, 1855); P.H. Bruce, <i>Memoirs of Peter Henry Bruce, Esq</i> ; V. Lystsov, <i>Persidskiy Pokhod Petra I</i> ; I.V. Kurukin, <i>Persidkiy Pokhod Petra Velikogo</i> .		

Table 7 – Russian Garrisons as of 01.10.1724

Place	Infantry and dragoons	Place	Infantry and dragoons
Astrakhan	2,483	Rest	3,974
Agrakhan fortified camp	421	Catherinople Fort	182
St. Cross fort	6,147	Kesker	1,396
Derbent	2,686	New fort	440
Baku	3,017	Peribazar	178
Near Anzali	51		
Total number of troops		20 975	

Source: V.P. Lystsov, *Persidskiy Pokhod Petra I: 1722 – 1723* (Moscow, 1951), 149.

Table 8 - Supplies and provision problems during the Persian Campaign

Date	Type	Notes
21.07.1722	Brigadier Veterani reports that the horses are dying out in the steppe, because of the weather; The supplies of the cavalry were depleted;	Noted by I. Kurukin (p.61)

28.07-04.08.1722	<i>Circassian and Dagestan Tatars</i> came to sell oxen, camels, horses and wagons to the army	The Journal does not mention this, but P. Bruce reports that the army purchased the goods on the prices, set by the “Tatars”. He, himself, bought a wagon and two horses.
05.08.1722	<i>“The Tartars brought such quantities of grapes, melons, oranges, pomegranates, apples, pears etc. and our people devoured them so voraciously, that many were seized with fevers and fluxes”</i> (P.Bruce)	Having marched for three days in the heat, the soldiers were surely starving for the refreshment which fruits offered. At this early stage of the campaign it is unlikely that the army lacked food supplies, thus it was not hunger but heat and exhaustion that made the troops so “voracious”.
06.08.1722	Over 7,000 oxen (<i>Additional note to the Journal III</i>) and 600 carriages brought by the shamkhal Adil Girei and sultan Mahmut of Aksay; Peter was given 6 horses as a personal gift; <i>“The governor of Gorski and the governor of Axay rought his majesty nine Persian horses with rich furniture, six hundred wagons, drawn by two oxen each and 150 oxen to be killed for the army”</i> (P.Bruce)	These provisions were arranged before the departure from Astrakhan; The gift of oxen for the army’s feast is also confirmed by an <i>Additional note to the campaign journal IV</i> (100 oxen are mentioned there, together with 7 horses for Peter).
11.08.1722	The army remains without water the entire day, because the wells (in reality only 10), which the shamkhal had to arrange were badly dug and the water inside was muddy; Several horses died from eating poisonous herbs. The camels and oxen did not suffer from it. (P.Bruce)	As with the oxen and the carriages, the shamkhal was supposed to provide water supplies for the Russian army on its way to Tarku.
12-23.08.1722	The water supply was provided from old wells, which were well-dug	Peter did not rely on Girei’s support any more during his march south.
16.08.1722	The army replenishes with water from Manes rivers, but since there was no forage for the horses, they were sent upstream to the mountain for pasture. There, part of the	This event is noted only in P.Bruce’s memoirs.

	animals was stolen by the Tatar forces, which were following the Russian movement since the departure from Sulak river.	
18.08.1722	The citizens of Derbent refused to sell their cattle to the Russians; Some of the horses died from fatigue, lack of forage and water.	Locals said that they cattle only enough to meet their own needs. It seems that the Russians needed additional cattle for food and to pull the supply train and the carriages; The death of the horses was again noted only in Bruce.
24.08.1722	1,500 horses died from eating poisonous grass; The oxen and the camels were not affected, since they did not eat from it.	This is noted only in P.Bruce's Memoirs.
26.07.1722	The flour, rescued from the destroyed ships was distributed to the soldiers and backed into sukhari.	Noted in P.Bruce's Memoirs.
27.08.1722	The army was transferred to the Milyukent River in order to receive provisions from the fleet – bread and sukhari and also to gather fruits from the local orchards.	A storm destroyed part of the supply fleet off Derbent. Peter noted that the army had provisions for only one month. The Russians tried to use local fruits to compensate the lack of other food.
10.09.1722	Extreme cold and snow in the evening. The army lacked winter uniforms and suffered greatly.	Noted only in P.Bruce's Memoirs
13.09.1722	Several hundred horses died by eating poisonous grass.	Noted only in P. Bruce
01-15.10.1722	Insufficient food supplies on the ships, returning from Agrakhan.	Noted only in P.Bruce's Memoirs.
Sources: <i>Pokhodnyy Zhurnal 1722</i> (St. Petersburg, 1855); P.H. Bruce, <i>Memoirs of Peter Henry Bruce, Esq.</i> ; I.V. Kurukin, <i>Persidkiy pokhod Petra Velikogo</i> .		

Table 9 – Medicine support for the campaign (1724)

Place	Number of beds
Astrakhan	3,000
St. Cross fort	1,000
Derbent	1,000
Baku	2,000

Source: V. Lystsov, *Persidkiy Pokhod Petra I: 1722 – 1723* (Moscow, 1951), 211.

Table 10 – Casualties during the Persian Campaign (1722 – 1724)

Year	Died	Drowned	Killed	Removed from service	Deserted	Total
1722	2,779	17	193	382	93	3,464
1723	3,752	5	33	6	75	3,871
1724	3,652	24	41	441	52	4,210
Total	10,183	46	267	829	220	11,545

Source: V. Lystsov, *Persidskiy Pokhod Petra I: 1722 – 1723* (Moscow, 1951), 241.

Table 11 – Additional Military Expenditure for the Persian Campaign of 1722

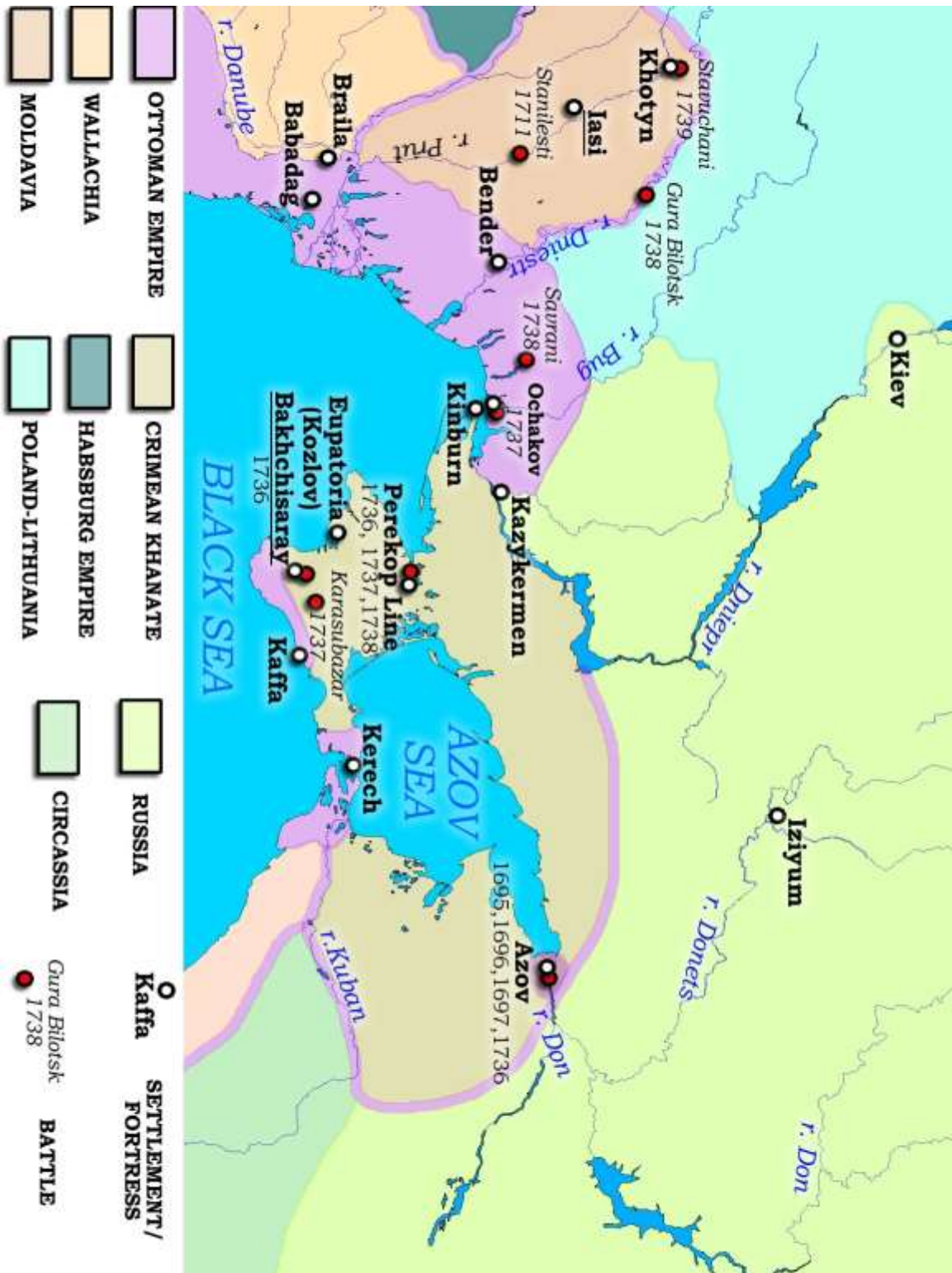
For	Money (in rubles)
Provisions	320,048
Admiralty	323,057 ⁽¹⁾
Total for ships, guns and munitions	681,574
Gifts for the Kalmyk khan	6,000
Gifts for the Kalmyk horsemen	25,000
The embassy in Istanbul	17,500
Resin for Astrakhan	1,413
Medications	13,512
Total military expenditure 1722	1,045,000

Notes: (1) Not all of this money was spent on the Persian Campaign

Source: I.V Kurukin, *Persidkiy pokhod Petra Velikogo*, 84.

PART II, CHAPTER 5

Map 1 – The Russo-Ottoman War of 1736-1739



Map 2 – the campaign of 1736



Map 3 – The campaign of 1737



Map 4 – The campaign of 1738



Map 5 – the campaign of 1739



**Table 1 -1 – Dnieper Army
Supposed and actual army strength during the 1736-1739 campaigns**

Year	1736		1737		1738		1739	
	SS	AS	SS	AS	SS	AS	SS	AS
Reg. infantry	24,372	28,238	50,580	28 reg.	50,580	22 reg.	34,826	58,000
Dragoons	19,665		25,851	20 reg.	25,850	18 reg.	19,760	
Land Militia	10,000	10,000	9,693	9 reg.	9,693			
Guard infantry			2,757		3,158			
Guard cavalry			401	2 sq.			3,124	
cuirassiers				1 sq.	600	600	965	
hussars	500	300		1,600	900	900	1,000	
Cossacks & Kalmyks	30,030	18,540	13,000 (1)	13,000	13,500	3 reg. (5)	14,800	
Other			2,842 (2)	3,000	4,000 (3)		6,430	
Artillery	66		389		733 (4)		606	262
TOTAL	85,067	58,078	105,124	60-70, 000	108,281	50 – 80, 000	91,111	63,800 / 60-65,000

SS – Supposed strength

AS – Actual strength

Source: Bayov, A.K., *Russkaya armiya v tsarstvovanie imperatritsy Anny Ioannovny – Voina Rossii s Turtsiey v 1736-39, vol. 1-2* (St. Petersburg, 1906)

Notes:

(1) including hussars and Wallachians

(2) Artillery men

(3) 3,000 artillery men and 1,000 regular Cossacks

(4) 262 guns of different caliber, 11 mortars, 16 howitzers, as well as 444 smaller mortars

(5) Several thousand joined later

**Table 1 - 2 – Don Army
Supposed and actual army strength during the 1736-1739 campaigns**

Year	1736		1737		1738		1739	
	SS	AS	SS	AS	SS	AS	SS	AS
Reg. infantry	24,372	5,800	33,720	20 reg.	25,290	15 reg.	23,745	7 reg.
Dragoons	5,175	1,250	16,003	13 reg.	8,569	7 reg.	8,593	6 reg.
L. Militia					6,462	6 reg.	6,804	3 reg.
Cossacks & Kalmyks	8,000	2,200	15-16,000	10-12,000	25,000	13,385	15,000	4 reg.
Other	6,770 (1)							
Artillery	284	135	32		170 (4)	25	146	
TOTAL	45,352	9,250 (2)	63,723 (3)	35,630	65,321	53,706 (5) 30-35,000 (6)	54,147	>25,000 (7)

SS – Supposed strength

AS – Actual strength

Source: Bayov, A.K., *Russkaya armiya v tsarstvovanie imperatritsy Anny Ioannovny – Voina Rossii s Turtsiey v 1736-39, vol. 1-2* (St. Petersburg, 1906)

Notes:

- (1) Garrison foot and dragoon regiments
- (2) This number would eventually rise to 11,874 in May 1736 and to 28,000 by the end of June
- (3) 9 000 were to be left as a garrison of Azov
- (4) 86 regimental guns, 16 siege guns, 4 mortars, 4 howitzers and 60 smaller mortars
- (5) If the regular regiments were with the supposed strenght
- (6) In Manstein's account. This would presume undermanned regiments. Given the lack of troops in the Dnieper army, Manstein's estimate seems more plausible.
- (7) Less than 25,000, probably no more than 20,000, due to the fact that regiments were incomplete. In August he commanded 17,850 troops at Perekop.

BIBLIOGRAPHY

Primary Sources in Russian:

Maykov, T.S. (ed.), *Gistoriya Sveyskoy Voyny (Podennaya zapiska Petra Velikogo)*, vol. 1-2 (Moscow, 2004)

von Minich, K.B., *Zapiski feldymarshala grafa Miniha* (Moscow: Fond Sergey Dubov, 1997)

Ryzhenkov, M.R. (ed.), *Patrik Gordon – Dnevnik 1690-1695* (Moscow: Nauka, 2014).

Pisyma i bumagi imperatora Petra Velikogo, vol. 1; 11 (St. Petersburg, 1887; Moscow, 1962)

Pokhodnyy Zhurnal 1695-1701 (St. Petersburg, 1853)

Pokhodnyy Zhurnal 1711 (St. Petersburg, 1854)

Pokhodnyy Zhurnal 1722 (St. Petersburg, 1855)

Pokhodnyy Zhurnal 1723 (St. Petersburg, 1855)

Ruban, V.G., *Pokhod boyarina i bolyshago polku vovody Alekseya Semenovicha Sheina k Azovu, vzyatie sego i Lyutika goroda i torzhestvennoe ottudy s pobedonosnym voinstvom vozvrashchenie v Moskvu* (St. Peterburg, 1773)

Sbornik Russkogo Istoricheskogo Obshtestva, vol. 11 (St. Petersburg, 1873)

Solovyev, S.M., *Istoriya Rossii s drevneyshikh vremen 17-18*, IX (Moscow, 1963)

Zapiski brigadira Moro-de-Braze (Kasayushchiesy do Turetskogo pohoda 1711 goda) – translated into Russian by A.S. Pushkin (<http://rvb.ru/pushkin/01text/09petr/1183.htm>)

Zapiski datskogo poslannika v Rossii pri Petre Velikom – printed in Russian in 1899 and reprinted in 2001 (<http://www.vostlit.info/Texts/rus11/Jul/frametext10.htm>)

Zhelyabuzhskiy, I.A., “Dnevnye zapiski” in *Rozhdenie Imperii* (Moscow: Fond Sergeya Dubova, 1997)

Zhurnal ili podennaya zapiska blazhennyya i vechnodostoynyya pamyati gosudarya imperatora Petra Velikogo s 1698 goda dazhe do zaklyucheniya neyshtatskago mira (St. Petersburg: Akademia nauk, 1770)

Primary Sources in English and French:

Abraham of Yerevan, *History of the Wars, 1721 – 1738*, trans. by G.A. Bournoutian (Costa Mesa: Mazda Publishers, 1999)

Bruce, P.H., *Memoirs of Peter Henry Bruce, Esq. - a military officer in the services of Prussia, Russia, and Great Britain, containing an account of his travels in Germany, Russia, Tartary, Turkey, and the West Indies, &c, as also several very interesting private anecdotes of the Czar, Peter I of Russia* (Dublin, 1783)

Lemercier-Quelquejay, C., “An Unpublished Document on the Campaign of Peter the Great in the Caucasus”, *Journal of the Royal Asian Society*, vol. LIV (London, 1967), 174 – 8

Kurat, A.N. (ed.), *The Dispatches of Sir Robert Sutton, Ambassador in Constantinople, 1710-1714* (London: Royal Historical Society, 1951).

von Manstein, C.H., *Contemporary Memoirs of Russia from the year 1727 to 1744* (London, 1856)

Marsigli, L.F., *L'Etat Militaire de l'Empire Ottoman* (Amsterdam, 1732)

Secondary Sources in Russian and Bulgarian:

Artamonov, V.A., “O russko-krymskikh otnosheniyakh kontsa XVIIv. – nachale XVIII v.”, *Obshtestvenno-politicheskoe razvitie feodalnoy Rossii* (Moscow, 1985), 71-85

Avtokratov, V.N., “Voennyy prikaz (u istorii komplektovaniya i formirovaniya voysk v Rossii v nachale XVIII v.)”, in L. G. Beskrovnyy (ed.), *Poltava: K 250-letiyu Poltavskogo srazheniya; sbornik statey* (Moscow: Akademia nauk, 1959), 228-45

Azanchevskiy, M.P., *Istoriya Leib-gvardii Preobrazhenskogo polka* (St. Petersburg, 1859)

Bayov, A. K., *Kurs istorii russkogo voennogo iskusstva: Vypusk II, Epokha Petra Velikogo*, (St. Petersburg: Tipografiya Gr. Skachkov, 1909)

-- , *Russkaya armiya v tsarstvovanie imperatritsy Anny Ioannovny – Voina Rossii s Turtsiey v 1736-39, vol. 1-2* (St. Petersburg, 1906)

Beskrovnyy, L. G. (ed.), “*Poltava: K 250-letiyu Poltavskogo srazheniya; sbornik statey* (Moscow: Akademia nauk, 1959)

-- , *Russkaya armiya i flot v XVIII veke* (Moscow: Voenizdat, 1958)

-- , *Khrestomatiya po Russkoy voennoy istorii* (Moscow, 1947)

Bobrovskiy, P.O., *K dvuhsotlyatiyu uchrezhdeniya regulyarnykh voysk v Rossii (1699-1700 po 1899-1900)*, (St. Petersburg: Tipografiya Glavnago Upravleniya Udyalov, 1899)

-- , *Istoriya 13 Leyb-grenaderskago Yerevanskogo Ego Velichestva polka za 250 let, vol. 1-2* (St. Petersburg, 1892)

Bogoslovskiy, M.M., *Petr I. Materialy dlya biografii, 1672-1697, vol 1* (Gospolitizdat, 1940)

Brandenburg, N., “Kubanskiy pokhod 1711”, *Voennyy sbornik* 3 (1867), 29-42

Chernov, A.V., *Vooruzhennyye sily Russkogo gosudarstva v XV-XVII v.v.* (Moscow, 1954) (http://nozdr.ru/militera/research/chernov_av/index.html - accessed on 15th August, 2016)

Dirin, P., *Istoriya Leibgvardii Semenovskogo polka* (St. Petersburg, 1883)

Erdniev, U.E., *Kalmyki - Istoriko-etnograficheskie ocherki* (Moscow: Kalmyk Book Publishing, 1985)

Georgieva, Ts., *Enicharite v balgarskite zemi* (Sofia, 1988)

Kersnovskiy, A.A., *Istoriya Russkoy Armii, Tom Perviy – ot Narvy do Parizha, 1700-1814* (Moscow, 1992)

Khronologicheskoy ukazately voennykh deystviy russkoy armii i flota (1695-1800) (St. Petersburg, 1908)

Kirpichnikov, A.N., *Voennoe delo na Rusi v XIII-XV vv.* (Leningrad: Nauka, 1966)

- Kulinich, A.A., “Deyatelnosty russkogo komandovaniya v Prutskom pokhode 1711 goda”, *Istoricheskie, filosofskie, politicheskie i yuridicheskie nauki, kulyturologiya i iskusstvovedenie. Voprosy teorii i praktiki* 5, 43 (Gramota, 2014), 109-13
- Kurukin, I.V., *Persidskiy pokhod Petra Velikogo. Nizovoy korpus na beregakh Kaspiya, 1722-1735* (Moscow: Kvadriga, 2010)
- Lukyyanov, P. M., “Proizvodstvo Porokha v Rossii v pervoy chetveri XVIIIv.”, in L. G. Beskrovnyy (ed.), *Poltava: K 250-letiyu Poltavskogo srazheniya; sbornik statey* (Moscow: Akademia nauk, 1959), 199-209
- Lystsov, V.P., *Persidskiy Pokhod Petra I: 1722–1723* (Moscow, 1951)
- Manoylenko, Yu.Ye., A.S. Manoylenko, “A bomb after a bomb were lodged into the midst of the hostile army...”. The artillery of B.Kh. Minikh in the Stavuchan battle”, *Voенно-istoricheskiy zhurnal* 8 (2014), 61-3
- Mantran, R. (ed.), *Istoriya na Osmanskata imperiya* (Sofia, 1999)
- Maslovskiy, D.F., *Materialy k istorii voennogo iskusstva v Rossii* (Moscow, 1889)
- Mihneva, R., *Zemya izvan vremeto – Rusiya i Osmanskata imperiya. Antologiya na promyanata (kraya na XVI – nachaloto na XVIII vek)* (Sofia, 2003)
- Moryakov, V.I., *Istoriya na Rusiya IX-XVIII vek* (Sofia: Paradigma, 2007)
- Pavlenko, N.I., “Produktsiya uralyskoy metallurgii v nachale XVIII v.”, in L. G. Beskrovnyy (ed.), *Poltava: K 250-letiyu Poltavskogo srazheniasrazheniya; sbornik statey* (Moscow: Akademia nauk, 1959), 190-98
- Penskoy V.V., “Voennaya revolyutsiya i razvitie voennogo dela v Osmanskoy imperii v XV-XVII v.”, *Vostok*, vol. 6 (Moscow, 2007), 30-40
- Petrukhintsev, N.N., *Tsarstvovanie Anny Ioannovny: formirovanie vnutripoliticheskogo kursa i sudyby armii i flota* (Aleteyya, 2001)
- Porfiryev, E.I., *Petr I osnovopolozhnik voennogo iskusstva russkoy regulyarnoy Armii i flota* (Moscow: Voенnoe izdatelstvo, 1952)
- Priymak, Yu.V., “Kuban campaign of P. M. Apraksin's troops in 1711 (From the History of the Ottoman-Russian wars 1710-1713)”, *Nauchnye problemy gumanitarnykh issledovaniya* 1 (2012), 88-94;
- , “Diplomatic, Military and Political Activity of Russia in the Sea of Azov and the Northwest Caucasus in the context of Kuban Campaign in 1711”, *Nauchnye problemy gumanitarnykh issledovaniy* 11 (2011), 43-8.
- Sakharov A.N. (ed.), *Istoriya Vneshney Politiki Rossii konets XV v. – 1917*, vol. 1-2 (Moscow, 1998)
- Sanin, O.G., “Krymskoe Khanstvo v Russko-turetskoy voyne 1710-1711 goda”, “*Istoriko-publitsisticheskiy alymanakh “Moskva-Krym”*”, vol. 2 (Moscow, 2000), 76-87
- Shefov, N., *Bitvy Rossii* (Moscow: ACT Moskva, 2006)
- Shirokorad, A., *Russko-Turetskie voyny, 1676-1918* (Moscow, 2000)
- Stoilova, T., *Tretiyat Rim – Mirnite resheniya na Ruskata imperska politika v Yugoiztochna Evropa prez XVIII vek* (Sofia, 2001)
- Stoyanov, A., *Velikata Severna vojna – Triumfat na Petar I* (Sofia: Millenium, 2015)

- Strumilin, S.G., “K voprosu ob ekonomike Petrovsko epokhi”, in L. G. Beskrovnyy (ed.), *Poltava: K 250-letiyu Poltavskogo srazheniya; sbornik statey* (Moscow: Akademia nauk, 1959), 179-89
- Tarle, E.V., *Russkiy flot i vneshnyaya politika Petra I* (Brask, 1994)
- Tatarnikov, K.V., *Russkaya polevaya armiya 1700-1730. Obmundirovanie i snaryazhenie* (Moscow: Lyubimaya Kniga, 2008)
- Troitskiy, S.M., “Istochniki dokhodov v byudzhete Rossii v seredine XVIII veke”, *Istoriya SSSR, vol. 3* (1957), 176-98
- Tsagareli, A.A., *Snosheniya Rossii s Kavkazom v XVI – XVIII v.* (St. Petersburg, 1891)
- Urlanis, B.Ts., *Voyny i narodonaselenie Evropy* (Moscow, 1960)
- Ustryalov, N.G., *Istoriya tsarstvovaniya Petra Velokogo. Poteshnye i Azovskie pokhody, vol. 2* (St. Petersburg, 1858)
- Vodarskiy, Ya. E., “Legendy Prutskogo pokhoda Petra I”, *Otechestvennaya Istoriya* 5 (2004), 3-26
- Volkov, V.A., *Voyny i Voyska Moskovskogo Gosudarstva* (Moscow: Eksmo, 2004)
- Volkovskiyy, N.L. and D.N.Volkovskiyy (eds), *Vse Voyny – Mirovoy istorii po Kharperskoy entsiklopedii voennoy istorii, 1500-1750, vol. 3* (Moscow and St. Petersburg, 2004)
- Yuht, A.I., “Russkaya promyshlennosty i snabzhenie armii obmundirovaniem i amunitsiyey”, in L. G. Beskrovnyy (ed.), *Poltava: K 250-letiyu Poltavskogo srazheniya; sbornik statey* (Moscow, 1959), 210-27
- Zvegintsov, V.V., *Russkaya Armiya 1700-1763, vol. 1* (Paris, 1967)

Secondary Sources in English:

- Acemoğlu, D. and J. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (New York: Crown Publishers, 2012)
- Acer, Z., “Place of Reforms in Western Structuring Process of Ottoman State and Their Effect on Modernization (1718-1789)”, *Zeitschrift für die Welt der Türken* 2, 1 (2010), 135-46 (<http://www.dieweltdertuerken.org/index.php/ZfWT/article/viewFile/105/zaacer>)
- Ágoston, G., “Military Transformation in the Ottoman Empire and Russia, 1500–1800”, *Kritika: Explorations in Russian and Eurasian History* 12 (2011), 281–320
- , *Guns for the Sultan – Military power and Weapons Industry in the Ottoman Empire* (Cambridge: Cambridge University Press, 2005)
- , “Gunpowder for the Sultan’s Army: New Sources on the Supply of Gunpowder to the Ottoman Army in the Hungarian campaigns of the 16th and 17th Centuries”, *Turcica* 25 (1993), 75-96
- Aksan, V., *Ottoman Wars, 1700-1830: An Empire Besieged* (New York: Routledge, 2007)
- Allen, W.E.D. and P. Muratoff, *Caucasian Battlefields – A History of the Wars on the Turco-Caucasian Border, 1828-1921* (Nashville, 1999 – reprinted from the Cambridge, 1953 edition)

- Anderson, M.S., *Peter the Great* (London, 1978)
- Axworthy, M., “The Army of Nader Shah”, *Iranian Studies* 40, 5 (2007), 635-46
- Barrett, T.M., *At the Edge of Empire: The Terek Cossacks and the North Caucasus Frontier, 1700 – 1860* (Oxford and Colorado: Westview Press 1999)
- Benningsen, A., “Peter the Great, the Ottoman Empire and the Caucasus”, *Canadian-American Slavic Studies* 8, 2 (1974), 311-8
- Black, J., “A Military Revolution? A 1660-1792 Perspective”, in C. J. Rogers (ed.), *The Military Revolution Debate* (Oxford: Westview Press, 1995), 95-117
- Boeck, B.J., *Imperial Boundaries: Cossack Communities and Empire-Building in the Age of Peter the Great* (Cambridge: Cambridge University Press, 2009)
- Börekçi, G., “A Contribution to the Military Revolution Debate: The Janissaries Use of Volley Fire during the Long Ottoman-Habsburg War of 1593-1606 and the Problem of Origins”, *Acta Orientalia Academiae Scientiarum Hungaricae* 59, 4 (2006), 407-38
- Bushkovich, P., “The Politics of Command in the Army of Peter the Great”, in David Schimmelpennick van der Oye and Bruce W. Menning (eds), *Reforming the Tsar’s Army. Military Innovation in Imperial Russia from Peter the Great to the Revolution* (Cambridge: Cambridge University Press, 2004), 253-73
- Childs, J., *Warfare in the Seventeenth Century* (London, 2001)
- Davies, B.L., *Empire and Military Revolution in Eastern Europe: Russia’s Turkish Wars in the Eighteenth Century* (New York & London: Continuum, 2011)
- , *Warfare, State and Society on the Black Sea Steppe, 1500-1700* (New York: Routledge, 2007)
- Dixon, S., *The Modernization of Russia, 1676–1825* (Cambridge: Cambridge University Press, 1999)
- Duffy, C., *Russia’s Military Way to the West: Origins and Nature of Russian Military Power, 1700–1800* (London: Routledge, 1981)
- Encyclopedia Iranica* (1985-present) (<http://www.iranica.com/>)
- Faroqhi, S.N (ed.). *The Cambridge History of Turkey, vol. 3 – The Later Ottoman Empire, 1603-1839* (Cambridge: Cambridge University Press, 2006)
- Farrokh, K., *Iran at War: 1500–1988* (London: Osprey, 2011)
- Ferrier, R.W., “Trade from the Mid-fourteenth century to the end of the Safavid Period”, in *Cambridge History of Iran, vol. 6* (Cambridge: Cambridge University Press, 1986), 412 – 90
- Floor, W., *The Afghan Occupation of Safavid Persia, 1721–1729* (Paris: Peeters Publishers, 1998)
- Foran, J., “The Long Fall of the Safavid Dynasty: Moving beyond the Standard Views”, *International Journal of Middle East Studies* 24, 2 (1992), 281-304
- Fuller, W.C., *Strategy and Power in Russia, 1600–1914* (New York: The Free Press, 1992)
- Haneda, M., “The Evolution of the Safavid Royal Guard”, *Iranian Studies* 22, 2-3 (1989), 57-85
- Hartley, J., “Russia as a Fiscal-Military State, 1689-1825”, in C. Storrs (ed.), *The Fiscal-Military State in Eighteenth-Century Europe* (Farnham: Ashgate, 2009), 125-46

- Hellie, R., "The Petrine Army: Continuity, Change and Impact", *Canadian-American Slavic Studies* 8, 2 (1974), 237-53
- , *Enserfment and Military Change in Muscovy* (University of Chicago Press, 1971)
- Hughes, L., *Russia in the Age of Peter the Great* (New Heaven and London: Yale University Press, 1998)
- Inalcik, H., "Military and Fiscal Transformation in the Ottoman Empire, 1600-1700", *Archivum Ottomanicum* 6 (Mouton, 1980), 283-339
- Jackson, P. and L. Lockhart (eds), *The Cambridge History of Iran, vol.6 – The Timurid and Safavid Periods* (Cambridge, 1986)
- Kafadar, C., *Between Two Worlds. The Construction of the Ottoman State* (Los Angeles: University of California Press, 1996).
- Keep, J.L., *Soldiers of the Tsar: Army and Society in Russia, 1462–1874* (Oxford: Clarendon Press, 1985)
- Kennedy, P., *The Rise and Fall of the Great Powers* (New York: Vintage Books, 1989)
- Khodarkovsky, M., *Where Two Worlds Met: The Russian State and the Kalmyk Nomads, 1600-1771* (Cornell University Press, 2006)
- , *Russia's Steppe Frontier: The Making of a Colonial Empire, 1500-1800* (Indianapolis: Indiana University Press, 2002)
- Konstam, A., *Peter the Great's Army, vol. 1-2* (London: Osprey Publishing, 1993)
- Lang, D.M., "Georgia and the Fall of the Şafavi Dynasty", *Bulletin of the School of Oriental and African Studies* 14, 3 (1952), 523-39
- LeDonne, J.P., *The Grand Strategy of the Russian Empire, 1650–1831* (Oxford, 2004)
- Lockhart, L., "The Persian Army in the Şafavī Period", *Der Islam: Journal of the History and Culture of the Middle East* 34, 1 (1959), 89-98
- , *The Fall of the Şafavī Dynasty and the Afghan Occupation of Persia* (Cambridge: Cambridge University Press, 1958)
- Lorge, P.A., *The Asian Military Revolution: From Gunpowder to the Bomb* (Cambridge: Cambridge University Press, 2008)
- Lynn, J.A., "Recalculating the French Army Growth during the Grand Siécle, 1610-1715", in C. J. Rogers (ed.), *The Military Revolution Debate* (Oxford: Westview Press, 1995), 117-49;
- , "The *trace italienne* and the Growth of Armies: The French Case", in C. J. Rogers (ed.), *The Military Revolution Debate* (Oxford: Westview Press, 1995), 169-201
- Massie, R.K., *Peter the Great, His Life and World* (London, 1981)
- Matthee, R., "The Decline of Safavid Iran in Comparative Perspective", *Journal of Persianate Studies* 8, 2 (2015), 276-308
- , *Persia in Crisis: Safavid Decline and the Fall of Isfahan* (New York: I.B. Tauris, 2012)
- , "Unwalled Cities and Restless Nomads: Firearms and Artillery in Safavid Iran" in C. Melville (ed.), *Safavid Persia: The History and Politics of an Islamic Society* (London and New York: I.B. Tauris, 1996), 389-417
- Murphey, R., *Ottoman Warfare, 1500-1700* (London: University College London Press, 1999)

- Nicolle, D., *The Janissaries, Osprey 'Elite' 58* (London: Osprey, 1995)
- Ostapchuk, V., "Crimean Tatar Long-Range Campaigns: The View from Remmal Khoja's History of Sahib Gerey Khan", in B. Davies (ed.), *Warfare in Eastern Europe, 1500-1800* (Leiden and London: Brill, 2012), 147-72
- Payaslian, S., *The History of Armenia: From the Origins to the Present* (New York: Palgrave Macmillan, 2007)
- Parker, G., *The Military Revolution: Military Innovation and the Rise of the West, 1500–1800* (Cambridge: Cambridge University Press, 1996)
- , "The Military Revolution, 1550-1660 – A Myth?", in C. J. Rogers (ed.), *The Military Revolution Debate*, (Oxford: Westview Press, 1995), 37-55
- Parrott, D.A., *The Business of War: Military Enterprise and Military Revolution in Early Modern Europe* (Cambridge: Cambridge University Press, 2012)
- , "Strategy and Tactics in the Thirty Years' War: The 'Military Revolution' ", in C. J. Rogers (ed.), *The Military Revolution Debate* (Oxford: Westview Press, 1995), 227-53
- Paul, M.C., "The Military Revolution in Russia, 1550-1682", *The Journal of Military History* 68, 1 (2004), 9-45
- Poe, M., "The Military Revolution, Administrative Development and Cultural Change in Early Modern Russia", *Journal of Early Modern History* 2, 3 (1998), 247-73
- , "Muscovite Personnel Records, 1475-1550: New Light on the Early Evolution of Russian Bureaucracy", *Jahrbücher für Geschichte Osteuropas* 45, 3 (1997), 361-77
- , "The Consequences of the Military Revolution in Muscovy: A Comparative Perspective", *Comparative Studies in Society and History* 38, 4 (1996), 603-18
- Ramazani, R.K., *The Foreign Policy of Iran: A Developing Nation in World Affairs, 1500–1941* (The University Press of Virginia, 1966)
- Roberts, M., "The Military Revolution, 1560-1660", in C. J. Rogers (ed.), *The Military Revolution Debate* (Oxford: Westview Press, 1995), 13-37
- Rogers, C. J. (ed.), *The Military Revolution Debate* (Oxford: Westview Press, 1995)
- , "The Military Revolution in History and Historiography", in C. J. Rogers (ed.), *The Military Revolution Debate* (Oxford: Westview Press, 1995), 1-13
- , "The Military Revolution of the Hundred Years War", in C. J. Rogers (ed.), *The Military Revolution Debate* (Oxford: Westview Press, 1995), 55-95
- Rywkin, M. (ed.), *Russian Colonial Expansion to 1917* (London and New York, 1988)
- Savory, R., *Iran Under the Safavids* (Cambridge: Cambridge University Press, 1989)
- Setton, K.M., *Venice, Austria, and the Turks in the Seventeenth Century* (Philadelphia: The American Philosophical Society, 1991)
- Sicker, M., *The Islamic World in Decline: From the Treaty of Karlowitz to the Desintegration of the Ottoman Empire* (London, 2001)
- Smith, D.L., "Muscovite Logistics, 1462-1598", *The Slavonic and East European Review* 71, 1 (1993), 35-65
- Stevens, C.B., *Soldiers on the Steppe: Army Reform and Social Change in Early Modern Russia* (Northern Illinois University Press, 1995)

Storrs, C. (ed.), *The Fiscal-Military State in Eighteenth-Century Europe* (Farnham: Ashgate, 2009)

Sumner, B.H., *Peter the Great and the Ottoman Empire* (Oxford, 1949)

Suny, R.G., *The Making of the Georgian Nation* (Bloomington and Indianapolis: Indiana University Press, 1994)

Uyar, M. and E.J. Erickson, *A Military History of the Ottomans: From Osman to Atatürk* (Santa Barbara: ABC Clio, 2009)

Williams, B.G., *The Sultan's Raiders: The Military Role of the Crimean Tatars in the Ottoman Empire* (Washington, D.C.: The Jamestown Foundation, 2013)

Wittram, R., *Peter I. Czar und Kaiser. Zur Geschichte Peters des Großen in seiner Zeit* (Gottingen: Vandenhoeck & Ruprecht, 1964)

Witzenrath, C., *Cossacks and the Russian Empire, 1598-1725: Manipulation, Rebellion and Expansion into Siberia* (London: Routledge, 2007)

Internet Sources:

Runivers – Electronic library and encyclopedia - <http://www.runivers.ru/>