

Russia's War in Ukraine: **The Medals and Treacherous Numbers**A bell¿ngcat Investigation



Summary

The war in eastern Ukraine is known under multiple names; most often formulations similar to Ukrainian civil war or Ukrainian conflict are still used to describe the war. The implied characteristic as solely internal Ukrainian conflict is heavily disputed and an active Russian participation is widely accepted. While there is now plentiful evidence documenting a direct and decisive participation of Russian servicemen and the Russian armed forces in the fighting in eastern Ukraine since summer 2014, it is however not possible to support the various claims about the size of the Russian involvement using public available information.

Given the nature of open source evidence, it is near impossible to provide an exact number of Russian servicemen participating in the fighting in eastern Ukraine only relying on this type of information. The open source research done by @Askai707 and InformNapalm strongly suggest that – at minimum – hundreds of Russian servicemen were involved in the fighting so far. The most direct evidence could be provided by the Russian bureaucracy. However, such an information is also most likely a Russian state secret and not publicly available. Other information, similar to official statistics, would also allow an estimation of the number of involved Russian servicemen. Such information is available in previously published individual cases of Russian servicemen.

Previous published analyses identified Russian servicemen who published imagery of awarded medals. This imagery is valuable because most of the higher Russian medals have a consecutive numbering, explicitly stating the number of medals awarded so far. Therefore, imagery from two medals awarded at different dates allows us to calculate the number of awarded medals between both dates. Awards of four medals are analyzed in this report. It is possible to demonstrate that the number of awarded medals, compared to the years before 2014, suddenly and strongly increased in 2014 and 2015. The large number of awarded medals "For Distinction in Combat", 4300 awards between 07.11.2014 and 18.02.2016, strongly suggests larger combat operations with active Russian military involvement in this period. In sum, the data suggests that *more than ten thousand* medals of all four considered types were awarded in the considered period. Therefore, it can be directly concluded that:

• Thousands of Russian servicemen participated in 2014 and 2015 in combat operations and were awarded with medals for their actions in these operations.

Because of the evidence presented in preceding reports documenting the presence of the Armed Forces of the Russian Federation in eastern Ukraine and its participating in the fighting, and because it is a rather unrealistic assumption that *every* Russian serviceman participating or involved in the fighting in eastern Ukraine has been awarded with one of the discussed medals, it is possible to conclude:

- Most likely far more than ten thousand Russian servicemen participated in combat operations in eastern Ukraine.
- Most likely tens of thousands Russian servicemen participated in *or* contributed to the fighting in eastern Ukraine.

In sum, the findings of this report support the claims that thousands of Russian servicemen were active in eastern Ukraine. With these findings, it is also possible to strongly increase the lower *databased* estimate of Russian servicemen involved in the fighting in eastern Ukraine using only open source information.

Introduction

The war in eastern Ukraine is known under multiple names; most often formulations similar to Ukrainian civil war or Ukrainian conflict are still used to describe the war. However, the implied characteristic as solely internal Ukrainian conflict is heavily disputed and an active Russian participation is widely accepted. Such claims, however, are strongly and repeatedly denied by Russia.¹

Already in summer 2014, Ukrainian officials² and also the U.S. government³ stated that Russian servicemen⁴ were active in the war. Ten Russian servicemen were captured deep inside Ukraine after crossing the Russian-Ukrainian border, allegedly by accident.⁵ Later, there were reports documenting or suggesting the participation of Russian servicemen in the fighting for Debaltseve in early 2015.⁶ Furthermore, sightings of military equipment not used by the Ukrainian Armed Forces, but by the Armed Forces of the Russian Federation, were reported in eastern Ukraine by the OSCE.⁷ A Royal United Services Institute (RUSI) publication even names Russian military formations involved in the fighting in eastern Ukraine.⁸ Moreover, there are various reports, starting with summer 2014, discussing the death of Russian servicemen reportedly killed in Ukraine.⁹

Furthermore, analysis of open source material, including public available satellite imagery and social media content, reveals numerous cases of cross-border artillery attacks originating from Russia on targets inside Ukraine, ¹⁰ vehicle tracks crossing the Russian-Ukrainian border which can be related to the fighting in eastern Ukraine and which are close to military camps inside Russia, ¹¹ Russian military equipment in eastern Ukraine, ¹² and (deaths of) Russian servicemen as well as

1 cf.: http://www.bb15092-0543-11e5-93f4-f24d4af7f97d_story.html, http://www.btc.com/article/uk-ukraine-crisis-russia-military-idUKKCN0WS0FB and http://www.bbc.com/news/world-europe-37045730 (last accessed on: 17.08.21016).

2 cf.: http://www.rnbo.gov.ua/en/news/1796 html (last accessed on: 17.08.2016).

³ cf.: http://www.rferl.org/content/ukraine-russia-lying-invasion-us-samantha-power/26555401 html and http://edition.cnn.com/2014/08/28/world/europe/ukraine-crisis/ (last accessed on: 17.08.2016).

⁴ In this report the formulation "Russian servicemen" is used to explicitly refer to personal serving in the Armed Forces of the Russian Federation.

⁵ cf.: http://www.telegraph.co.uk/news/worldnews/europe/ukraine/11056312/Russian-paratroopers-captured-in-Ukraine-accidentally-crossed-border http://www.telegraph.co.uk/news/worldnews/europe/ukraine/11056312/Russian-paratroopers-captured-in-Ukraine-accidentally-crossed-border http://www.telegraph.co.uk/news/worldnews/europe/ukraine/11056312/Russian-paratroopers-captured-in-Ukraine-accidentally-crossed-border http://www.telegraph.co.uk/news/worldnews/europe/ukraine/11056312/Russian-paratroopers-captured-in-Ukraine-accidentally-crossed-border http://www.telegraph.co.uk/news/worldnews/europe/ukraine/11056312/Russian-paratroopers-captured-in-Ukraine-accidentally-crossed-border http://www.telegraph.co.uk/news/worldnews/europe/ukraine/11056312/Russian-paratroopers-captured-in-Ukraine-accidentally-crossed-border http://www.telegraph.co.uk/news/worldnews/europe/ukraine/11056312/Russian-paratroopers-captured-in-Ukraine-accidentally-crossed-border http://www.telegraph.co.uk/news/worldnews/europe/ukraine/11056312/Russian-paratroopers-captured-in-Ukraine-accidentally-crossed-border http://www.telegraph.co.uk/news/worldnews/europe/ukraine/11056312/Russian-paratroopers-captured-in-Ukraine-accidentally-crossed-border

⁶ cf.: https://www.telegraph.co.uk/news/worldnews/europe/russia/11506774/Separatist-fighter-admits-Russian-tanks-troops-decisive-in-eastern-Ukraine-battles.html,

https://www.theguardian.com/world/2015/mar/25/russia-ukraine-soldier and

https://news.vice.com/video/selfie-soldiers-russia-checks-in-to-ukraine (last accessed on: 17.08.2016).

⁷ cf.: http://www.osce.org/ukraine-smm/186276 (last accessed on: 17.08.2016).

⁸ cf.: https://rusi.org/publication/briefing-papers/russian-forces-ukraine (last accessed on: 17.08.2016).

⁹ e.g. cf.: https://tvrain.ru/news/pskovskaja gubernija soobschila o gibeli roty desantnikov v ukraine-374888/ and https://tvrain.ru/news/pskovskaja gubernija soobschila o gibeli roty desantnikov v ukraine-374888/ and https://tvrain.ru/news/pskovskaja gubernija soobschila o gibeli roty desantnikov v ukraine-374888/ and https://tvrain.ru/news/pskovskaja gubernija soobschila o gibeli roty desantnikov v ukraine-374888/ and https://tvrain.ru/news/pskovskaja gubernija soobschila o gibeli roty desantnikov v ukraine-374888/ (last accessed on: 23.08.2016).

¹⁰ cf.: https://www.bellingcat.com/news/uk-and-europe/2015/02/17/origin-of-artillery-attacks/,

https://www.bellingcat.com/news/2015/12/03/the-burning-road-to-mariupol/ (last accessed on: 17.08.2016).

 $^{11~}e.g.~cf.: \\ \underline{https://www.bellingcat.com/news/uk-and-europe/2015/09/21/bellingcat-investigation-russias-paths-to-war/and}\\ \underline{https://www.bellingcat.com/news/uk-and-europe/2016/06/15/9629/}\\ (last accessed on: 17.08.2016).$

¹² e.g. cf.: https://www.bellingcat.com/news/uk-and-europe/2016/05/03/the-lost digit/, https://www.bellingcat.com/news/uk-and-europe/2015/05/31/avalanche/,

Russian military units/formations in eastern Ukraine. 13

However, while there is now plentiful evidence documenting a direct and decisive participation of Russian servicemen and the Russian armed forces in the fighting in eastern Ukraine since summer 2014, it is so far not possible to support the various claims about the size of the Russian involvement¹⁴ using public available information. The open source research done by @Askai707¹⁵ and InformNapalm¹⁶ strongly suggest that – at minimum – hundreds of Russian servicemen were involved in the fighting so far, but this number is still small compared to the figure claimed by many of thousands of Russian servicemen who were or are in eastern Ukraine.

The intention of this report is to present an additional consideration which allows a rough but improved estimation of the sheer size of the Russian involvement in eastern Ukraine using only public available information. For this purpose, information that has mainly¹⁷ already been published is gathered and analyzed to draw new conclusions. Therefore, the following analysis is primarily a secondary data analysis and mainly utilizes information published by @Askai707¹⁸ and InformNapalm and would have not been possible without the original research performed by them.

The treacherous numbers

Given the nature of open source evidence, it is near impossible to provide an exact number of Russian servicemen participating in the fighting in eastern Ukraine only relying on this type of information. As previously stated, there are reports that thousands of Russian servicemen¹⁹ were/are in eastern Ukraine and also participated actively in combat operations. While the presence of Russian servicemen and military units/formations can be clearly documented using open source, even a rough estimation of the number of involved servicemen is much more difficult relying solely on this type of information.

Not every Russian serviceman participating in the fighting in eastern Ukraine will have made social media posts revealing his participation – or even gave interviews explicitly confessing his involvement. It can be rather expected that only a small percentage of all Russian servicemen sent

 $\frac{https://www.bellingcat.com/resources/case-studies/2015/05/28/russias-pantsir-s1s-geolocated-in-ukraine/,}{https://www.bellingcat.com/resources/case-studies/2015/05/29/confirming-the-location-of-the-same-msta-s-in-russia-and-ukraine/ and}{}$

https://www.bellingcat.com/news/2015/12/03/the-burning-road-to-mariupol/ (last accessed on: 17.08.2016)

- 13 e.g. cf.: https://www.bellingcat.com/news/mena/2014/08/27/revealed-around-40-russian-troops-from-pskov-died-in-the-ukraine-reinforcement-sent-in/,
 - https://www.bellingcat.com/news/uk-and-europe/2015/09/22/russias-6th-tank-brigade/,
 - https://www.bellingcat.com/news/uk-and-europe/2015/11/13/136-brigade-in-donbass/,
 - https://www.bellingcat.com/news/uk-and-europe/2016/01/16/russias-200th-motorized-infantry-brigade-in-the-donbass/ and https://informnapalm.org/en/russianpresence/ (last accessed on: 17.08.2016).
- 14 e.g. cf.: http://www.reuters.com/article/us-ukraine-russia-soldiers-idUSKBN0LZ2FV20150303 and http://uatoday.tv/politics/7-000-russian-regular-troops-are-currently-stationed-in-eastern-ukraine-587095 html (last accessed on: 17.08.2016).
- 15 https://twitter.com/askai707
- 16 https://informnapalm.org/en/
- 17 For this report, additional material not published so far was provided by @Askai707.
- 18 @Askai707 provided some so far not published information for this report.
- 19 See the links provided in footnote 14.

to Ukraine published information documenting their presence in Ukraine on public channels, and that the publication of such information happens at a decreasing level the more such information is utilized. The more than one hundred identified social media accounts by InformNapalm²⁰ is therefore in itself already a quite impressive number. But obviously, solely using the number of identified accounts will strongly underestimate the size of the Russian involvement.

@Askai707 identifies Russian military units/formations which participated in fighting or were present in eastern Ukraine.²¹ Beside the presented individual cases of Russian servicemen showing them inside Ukraine, the documented presence of military units/formations in eastern Ukraine would also allow an indirect estimation of the number of involved Russian servicemen. However, such an estimate requires additional assumption about the exact size of the involved units/formations and could also only cover previously analyzed military units/formations.

The most direct evidence could be provided by the Russian bureaucracy: the number of involved Russian military units/formations and servicemen is — most likely — somewhere recorded. Such information would allow a clearer image of Russia's role in eastern Ukraine. Unfortunately, this information is also most likely a Russian state secret²² and not publicly available. However, other information, similar to official statistics, would also allow an estimation of the number of involved Russian servicemen.

Such information is available in previously published individual cases of Russian servicemen. It was possible for @Askai707 and InformNapalm to identify Russian servicemen who published imagery of awarded medals. This imagery is valuable because most of the higher Russian medals have a consecutive numbering, explicitly stating the number of medals awarded so far. Therefore, imagery from two medals awarded at different dates allows us to calculate the number of awarded medals between both dates.

For the following analysis, imagery depicting awarded medals was searched for among previously reported individual cases of Russian servicemen who participated in or are suspected of participating in the war. Only medals with consecutive numbering are included in this report. An additional criterion is that the available imagery must provide information about the number of the medal and the award date. If information related to a medal is not completely readable, it will be mentioned in a comment. To allow a better assessment of the number of awarded medals, additional information from other sources is added if available. Note that although the original material mainly stems from research related to Russian servicemen or Russian units/formations in Ukraine, for this report, the presence of the presented individual Russian servicemen who were awarded with the medals in eastern Ukraine is neither necessary nor the topic of this investigation. However, a comparison of the number of awards in the years 2014 to 2016 and in the years before 2014 should provide information if Russian servicemen participated in combat operations during the Ukrainian

²⁰ cf.: https://informnapalm.org/en/russianpresence/ (last accessed on: 17.08.2016).

²¹ See the links provided in footnote 13 for some of these reports. Provided are links to the English translations of the original Russian language investigations.

²² While there is no direct evidence for this statement, the repeatedly denied presence of Russian servicemen in eastern Ukraine by Russian officials in spite of the evidence documenting the opposite strongly support such a position.

war.

The clear advantage of a "medal number" approach is that relatively few data points allow a quite detailed picture of the award dates and the number of awarded medals in certain periods. No estimation is necessary because the exact numbers are known. If enough data points are available, it might be even possible that a more detailed analysis of the awards can provide additional information about the background of these awards. Furthermore, it is also not necessary to identify every Russian serviceman who was awarded a medal, because the available information from other servicemen also encompasses information about *all* unidentified servicemen with an award.





Figure 1: Discussion between two supposed Russian servicemen on VK. The depicted medal in the image is "For Military Valour" (2nd Class), the supporting text states the medal type. The discussion in the comment section below the image can be translated as "Thank you, Thank you:):)", "..., the commander of the brigade forbade uploading photos with medals!!!", "..., he didn't say this to me personally so I don't give a shit:):)". Names are censored. Archived version of the conversation available. Provided by @Askai707 for this report.

More precisely, every Russian servicemen or civilians awarded with a medal, even if this award is clearly unrelated to the war in eastern Ukraine, might provide information about the Russian involvement in eastern Ukraine. Therefore, it is not necessary to document the presence of the awarded persons in eastern Ukraine, because the solely considered information is the number of awarded medals.

The obvious limitation of the approach is that not every medal is and will be awarded to Russian servicemen participating in the fighting in eastern Ukraine. Furthermore, the discussed medals are not necessarily limited to combat activities or even active Russian servicemen. Therefore, the number of awarded medals must be considered with caution. Moreover, only the number of awarded medals is known, the number of Russian servicemen participating in the fighting must still be projected based on this data.

However, the fact that medals are awarded to Russian servicemen is considered as sensitive information inside the Russian armed forces can be derived from a discussion between two supposed Russian servicemen, see figure 1. The depicted medal "For Military Valour" (2nd Class)²³ is part of the heraldry of the Russian armed forces and is awarded to Russian servicemen.²⁴ In the discussion of the image showing the medal, it is stated that the commander forbade uploading imagery showing medals. This is insofar surprising because medals are awarded for personal deeds of the servicemen and are a sign of honor which should be proudly presentable by the awarded servicemen. Therefore, it seems that there must be some reason which contradicts the public presentation of awarded medals.

²³ Because there is no consecutive numbering, this type of medal is not included in the following section. Note also, that this medal is not only awarded for combat deeds.

²⁴ cf.: http://heraldy.mil.ru/heraldry/badges/info.htm?id=10389364@morfAwards (last accessed on: 19.08.2016).

Detailed Discussion of Individual Awards

The following subsections will present a brief discussion of four Russian medals. One medal is part of the heraldry of the Armed Forces of the Russian Federation, while the other three medals are Russian state awards. A shared feature of all four medals is a consecutive numbering of the awarded medals.

Medal "For Distinction in Combat"



The Russian Federation's Ministry of Defense medal "For Distinction in Combat" is awarded to servicemen of the Armed Forces of the Russian Federation:

- for distinction, courage, and dedication shown in the performance of tasks in combat and special operations involving a risk to one's life;
- for skillful, proactive, and decisive actions that contributed to the successful fulfillment of combat missions;
- for successfully guiding the actions of subordinates in carrying out combat missions

On the reverse side of the medal is the embossed inscription in the center – "Number ____", circling the top part – "Ministry of Defense", at the bottom – "Russian Federation"

Source: http://heraldy.mil.ru/heraldry/badges/info.htm?id=10372711@morfAwards

The medal "For Distinction in Combat" ("За боевые отличия") is part of the heraldry of the Armed Forces of the Russian Federation. It is only awarded to Russian servicemen and also only awarded for activities under combat conditions or in combat missions. The medal was established on 31.03.2003.²⁵

These characteristics make this medal quite suitable for the purpose of this report. There is the consecutive numbering, the medal was established after the two Chechen wars, and the medal is only awarded to Russian servicemen and also only for activities under combat conditions or in combat missions. This implies that only the post-war battles in the Caucasus region and the Russo-Georgian War of 2008 are the more obvious reasons for likely awards. Moreover, given that Russian forces did not participate officially in any war before September 2015²⁶, no noticeable increase in the number of awarded medals would be expected for 2014 and the first half of 2015.

²⁵ cf.: http://heraldy.mil.ru/heraldry/badges/info.htm?id=10372711@morfAwards (last accessed on: 20.08.2016).

²⁶ Russia started officially its involvement in Syria in September 2015. However, even in this war no Russian grounds troops are officially used for combat operations.

However, it is possible to identify multiple awards showing a sharp increase in the number of awarded medals for the period of 2014 – 2016, see table 1. Most awards happened before 01.09.2015.

Date	Number	Comment
07.11.2014	2464	
14.11.2014	2889	
25.11.2014	2984	
25.11.2014	3077	
25.11.2014	3102	
25.11.2014	3164	
XX.12.2014	3261	Day not readable
10.12.2014	3346	
XX.XX.2014	3380	Date not readable, likely 2014
16.12.2014	3479	
16.12.2014	3804	
12.03.2015	5033	"Medal of Suvorov" 41799
15.04.2015	5387	Date does not fit medal number
26.03.2015	5462	
26.03.2015	5502	
26.03.2015	5507	
06.08.2015	5741	
XX.09.2015	6076	Day not readable
18.02.2016	6802	

Table 1: Medal "For Distinction in Combat", award dates and medal number depicted on available imagery. In the comment column the not clearly readable information or other noticeable problems are stated. The source material for this list stems mainly from investigation published by @Askai707 and InformNapalm.

For example, on 07.11.2014 the medal "For Distinction in Combat" with the number 2464 was awarded. In the following months a strong increase is visible, on 26.03.2015 medal number 5507, on 06.08.2105 medal number 5741 and on 28.02.2016 medal number 6802 were awarded. The imagery showing the award documents for these four medals is presented in figure 2. In total, more than 4300 medals "For Distinction in Combat" were awarded between 07.11.2014 and 18.02.2016, therefrom fall around 3600 in the period November 2014 to September 2015. This clearly contradicts the previously mentioned expectation resulting from the award principles and the official Russian statements.

Note, that medal number 5387 does not fit perfectly in the list. The medal number does not match the award date, because medals with larger numbers were awarded already earlier. Therefore, the

medal is excluded from the analysis. It is not possible to clearly identify the reason of this anomaly. Furthermore, three medals have only incomplete information because the exact date cannot be determined with the available imagery. In case of medal 3261 and 3380, both are excluded from the following analysis because enough information is available in this period. In case of medal 6076, the 15.09.2015 is assumed as award date in the following.



Figure 2: Medal "For Distinction in Combat", examples of award documents, top left: medal number 2464, top right: medal number 5507, bottom left: medal number 5741, bottom right: 6802, source: own research, @Askai707 and InformNapalm.

It was not possible in the research phase for this report to identify a source stating the number of awarded medals "For Distinction in Combat" in the Russo-Georgian war of 2008. However, it was possible to find a source which states the number of awards between 2003 and 2008. Following this article, 492 medals "For Distinction in Combat" were awarded between 25.08.2003 and 01.06.2008, 253 of them shall have been awarded for participation in anti-terror operations in the North Caucasus.²⁷

This would imply that between 25.08.2003 and 01.06.2008 an average of fewer than 0.3 medals per day were awarded, and that between 25.08.2003 and 07.11.2014 an average of around 0.6 medals per day were awarded. The latter figure does include the Russo-Georgian war of 2008 and might

²⁷ cf.: http://history.milportal.ru/arxiv/voenno-istoricheskij-zhurnal-9-2008-g/ (last accessed on: 20.08.2016).

also include some medals from the second half of 2014. However, compared to around 9.3 medals awarded per day between 07.11.2014 and 18.02.2016, even the latter figure is tiny.

Number of awarded medals: For Distinction in Combat

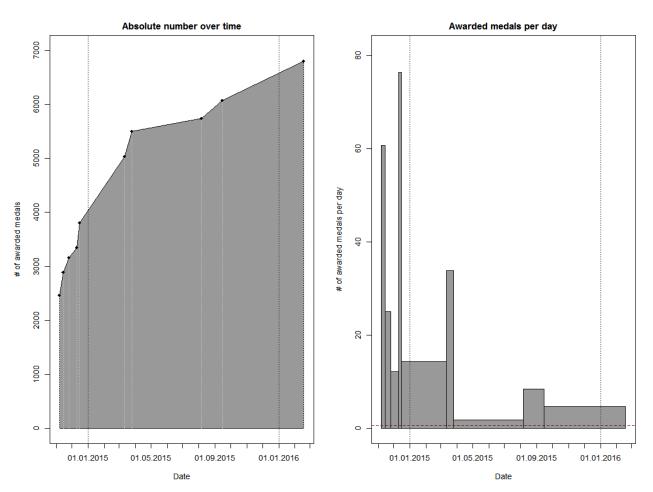


Figure 3: Medal "For Distinction in Combat", awarded medals, left: absolute number, right: awarded medals per day. Data is presented as points in the left figure, for each date only the largest medal number is used, linear interpolation is used to connect two points. For the right figure, the difference in medal numbers between two dates and the number of days is used to calculate the number of awarded medals per day. The vertical gray lines represent the first day of a year, the red line in the right figure the average of awarded medals between 25.08.2003 and 07.11.2014.

A more detailed presentation of the numbers of awarded medals "For Distinction in Combat" is presented in figure 3. For this chart only the highest medal number awarded at one day is used. The left figure shows the development of the absolute medal number, while the right figure shows the number of awarded medals per day calculated using the difference in medal number and number of days between the two dates.

Between the first two dates with known imagery showing medals "For Distinction in Combat" in 2014, an extremely high number of awards per day (>60 awards/day) can be observed. However, the number of awarded medals is high for the entire November and December 2014. Between 10.12.2014 and 16.12.2014, the most extreme number of medals awarded per day (>>70

awards/day) can be observed. The first three months in 2015 again show relative high numbers (>>10 awards/day), with a strong spike in the second half of March 2015. The number of awarded medals per day is relatively low between March 2015 and August 2015, but even in this period the number is still clearly larger than the average for the period between 25.08.2003 and 07.11.2014. In August 2015 and early September 2015 an increase is visible; however, the number of awarded medals per day is still clearly lower than in March 2015. Afterward, from September 2015 to February 2016, the number of awarded medals is around five awards per day.

Therefore, even if the number of known medals is relatively low, the available information already allows a more detailed consideration. It is striking that the observed number of awarded medals per day closely follows the known events in eastern Ukraine. In August and early September 2014, there was the decisive period in the fighting in eastern Ukraine. Afterward, there was the winter offensive by the armed forces opposing the Ukrainian army which led to the capture of the Donetsk Airport and the capture of Debaltseve. This period shows a high number of awarded medals. The relative quiet period in the second quarter of 2015 is also accompanied by a comparable low number of awarded medals, the sharp increase in hostilities in August 2015 is also followed by an increased number of awarded medals per day. Because of the weak data base after September 2015, a detailed assessment of this period is not possible. Furthermore, it is possible that some awards are related to the Russian involvement in the Syrian war.²⁸

²⁸ e.g. cf.: https://citeam.org/russia-s-activities-on-the-ground-in-syria/ and https://citeam.org/putin-admits-russianground-operation-in-syria/ (last accessed on: 20.08.2016).

Medal "For Courage"



The medal "For Courage" is awarded to servicemen and also employees of the Russian Ministry of Internal Affairs, the State Fire Service of the Russian Federation's Ministry of Civil Defense, Emergencies, and Disaster Relief, and other citizens for personal courage and bravery shown:

- in battle in defense of the Fatherland and state interests of the Russian Federation;
- when performing special tasks for the state security of the Russian Federation;
- in protection of the state border of the Russian Federation:
- performance of military, official, or civil duty protecting the constitutional rights of citizens and in other circumstances involving risk to one's life.

On the reverse side - the number of the medal.

Source: http://award.gov.ru/courage_medal.html

The medal "For Courage" ("3a Otbary") is a Russian state award and the highest state award discussed in this report. The award is not limited to Russian servicemen and can also be awarded for non-combat related actions. The medal "For Courage" of the Russian Federation was established in 1994, the current award principles are from 2010.²⁹

Because the award was established in 1994, awards for both Chechen wars and the 2008 Russo-Georgian war are likely. Furthermore, the medal is not restricted to military personnel and activities under combat conditions or in combat missions. Therefore, it will be more difficult to gather information which can be clearly related to the purpose of this report from this medal.

So far, seven medals awarded between 2014 and 2016 could be identified, see table 2. The first known medal awarded in 2014 has the number 64145. Two awards are from December 2014 and have the medal numbers 65059 and 65392. For 2015, one award in June, one in August,³⁰ and two awards from November 2015 are known. The highest known number is 66613. Between 01.09.2014 and 23.11.2015 around 2470 medals were awarded, therefrom around 2260 between 01.09.2014 and 24.08.2015.

Given the already high number of awarded medals before 01.09.2014, it is difficult to assess the relevance of the around 2470 medals awarded between 01.09.2014 and 23.11.2015 without additional information. On average, around 8.6 medals per day were awarded between 1994 and 2014, while around 6.3 medals per day were awarded between 01.09.2014 and 23.11.2015.

²⁹ cf.: http://award.gov.ru/courage_medal_html (last accessed on: 20.08.2016).

³⁰ This medal is most likely awarded to a civilian, cf.: http://kudo.ru/news/1805 (last accessed on: 20.08.2016).

However, a large number of medals was most likely awarded for deeds in one of the two Chechen wars.

Date	Number	Comment
01.09.2014	64145	
12.12.2014	65059	
29.12.2014	65392	
01.06.2015	66295	
24.08.2015	66411	
13.11.2015	66604	
23.11.2015	66613	

Table 2: Medal "For Courage", award dates and medal number depicted on available imagery. In the comment column the not clearly readable information or other noticeable problems are stated. The source material for this list stems mainly from investigation published by @Askai707 and InformNapalm.

For example, it is stated that medal number 30706 was awarded on 21.02.2000.³¹ It is also possible to find imagery depicting medal number 61161, which was awarded on 27.09.2008.³² Therefore, it can be assumed that the number of medals "For Courage" awarded per day in years without war, e.g. between 2009 and 2013, is considerable lower than the average over all years. Using the medals with the numbers 61161 and 64145, an average of around 1.4 medals per day were awarded between September 2008 and August 2014. This number is considerable lower than the 6.3 medals per day for September 2014 to November 2015.

A detailed view of the period 01.09.2014 to 23.11.2015 further reveals that the number of awarded medals is not constant in the considered period. It is clearly visible that on average in the first 12 months, more medals were awarded per day than in the following three months. Moreover, more than fifty percent of the awarded medals between 01.09.2014 and 23.11.2015 were already awarded in the first four months of the around fifteen-month period.

³¹ cf.: http://www.shou-tao ru/instructors/dzharimov/ (last accessed on: 20.08.2016).

³² cf.: http://www.sammler.ru/index.php?showtopic=144975 (last accessed on: 21.08.2016).

"Medal of Suvorov"



The "Medal of Suvorov" is awarded to servicemen for bravery and courage demonstrated while defending the Fatherland and state interests of the Russian Federation:

- in fighting on the ground;
- in combat service and duty;
- while participating in exercises and maneuvers;
- while serving in the protection of the state borders of the Russian Federation;
- for outstanding performance in combat training and field training.

On the reverse side of the medal, in the center - a relief of crossed swords and sabers, and under it - the number of the medal.

Source: http://award.gov.ru/suvorov_medal.html

The "Medal of Suvorov" ("медаль Суворова") is a Russian state award primarily awarded to Russian servicemen. The award can also be awarded for non-combat related actions. It is the second highest Russian state award considered in this report. The award was established in 1994, and the current award principles are from 2010.³³

Because of the year the medal was established and the awarding principles, almost the same limitation described for the medal "For Courage" also apply to this medal. Awards for both Chechen wars and the 2008 Russo-Georgian war are likely. Furthermore, the medal is also not restricted to activities under combat conditions or in combat missions. Therefore, it will again be more difficult to gather information which can be clearly related to the purpose of this report from this medal.

For this report, it was possible to identify 13 awarded "Medals of Suvorov" between 2014 and 2015 (see table 3). The first known medal was awarded on 24.11.2014 and has the number 41099. Six awards are known for 2014; however, four of these "Medals of Suvorov" were awarded on the same day in December 2014. The sixth award, medal 41422, has a medal number which does not match the award date and is therefore excluded from the analysis. Seven awarded medals are known for 2015: one medal in February, two medals in March, again one medal in April and May and two medals in December. The last known award is from 08.12.2015 and has the medal number 43672. Therefore, around 2570 medals were awarded between November 2014 and December 2015. Note, that the Russian servicemen awarded with the "Medal of Suvorov" 41799 was also later awarded

³³ cf.: http://award.gov.ru/suvorov_medal.html (last accessed on: 20.08.2016).

with the medal "For Distinction in Combat" number 5033.

Date	Number	Comment
24.11.2014	41099	
29.12.2014	41422	Date does not fit medal number
25.12.2014	41799	"For Distinction in Combat" 5033
25.12.2014	41826	
25.12.2014	41829	
25.12.2014	41831	
21.02.2015	42661	
19.03.2015	42747	
19.03.2015	42782	
27.04.2015	42968	
01.05.2015	43071	
08.12.2015	43644	
08.12.2015	43672	

Table 3: "Medal of Suvorov", award dates and medal number depicted on available imagery. In the comment column the not clearly readable information or other noticeable problems are stated. The source material for this list stems mainly from investigation published by @Askai707 and InformNapalm.

Similar to the medal "For Courage", a high number of "Medals of Suvorov" were already awarded before 24.11.2014. Therefore, the ability to assess the relevance of the around 2570 awarded medals depends again on additional information about the number of awarded medals in the years before 2014. An average of 5.5 medals per day were awarded between 1994 and November 2014, while an average of around 6.8 medals per day were awarded between 24.11.2014 and 08.12.2015. It is noteworthy that the average of medals awarded per day is higher for the period 24.11.2014 to 08.12.2015. This is a non-trivial finding because it can be again assumed that a large number of the medals were awarded for deeds in one of the two Chechen wars.

It is possible to identify two awards of the "Medal of Suvorov" which provide relevant information. The medal with the number 28378, while being awarded to the (former) serviceman in the year 2012, states the year 2000 as its award date in the award documents.³⁴ However, the late award casts some doubts if the number of the medal is usable for the purpose of this report. Other imagery shows the "Medal of Suvorov" with the number 40454, which was awarded on 10.09.2013.³⁵ With these medals it is possible to calculate an average of around 2.4 medals per day between February 2000 and November 2014, and an average of around 1.5 medals per day between 10.09.2013 and 24.11.2014. Both estimated averages are considerable lower than the average of around 6.8 medals

³⁴ cf.: http://www.ugra-tv.ru/news/society/yugorchaninu-vruchili-medal-suvorova-spustya-12-let/ (last accessed on: 21.08.2016).

³⁵ In the same thread also the "Medal of Suvorov" number 40444, which was awarded on the same day, is shown. cf.: http://www.sammler.ru/index.php?showtopic=135151 (last accessed on: 21.08.2016).

per day after 24.11.2014.

Figure 4 shows a more detailed presentation of the number of awarded "Medals of Suvorov". As before, for this chart only the highest medal number awarded on one day is used. The left figure shows the development of the absolute medal number, while the right figure shows the number of awarded medals per day calculated using the difference in medal number and number of days between two dates. The x-axis is identical to figure 3, the y-axes are adjusted to fit the numbers for this medal. For the extension of both charts to the left medal number 40454 is used.

Number of awarded medals: Medal of Suvorov

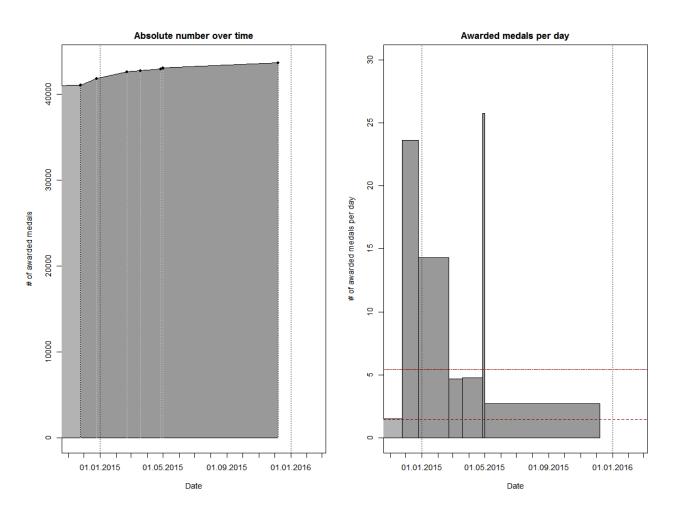


Figure 4: "Medal of Suvorov", awarded medals, left: absolute number, right: awarded medals per day. Data is presented as points in the left figure, for each date only the largest medal number is used, linear interpolation is used to connect two points. For the right figure, the difference in medal numbers between two dates and the number of days is used to calculate the number of awarded medals per day. The vertical gray lines represent the first day of a year, the polygon using the brighter gray represents the development between September 2013 and November 2014. The lower red line in the right figure is the average of awarded medals per day between 10.09.2013 and 24.11.2014, the upper red line the average of awarded medals per day between 1994 and 24.11.2014.

The detailed presentation reveals that at the end of 2014 around 24 "Medals of Suvorov" were awarded per day. This number is multiple times larger than the all-time average of around 5.5 awards per day until 24.11.2014 and the average between 10.09.2014 and 24.11.2014. Moreover,

more medals were awarded between 24.11.2014 and 25.12.2014 than in the entire year before. The number of medals awarded on average is relatively high in the following two months. The average between 21.02.2015 and 27.04.2015 is considerable lower and falls even below the all-time average. However, at the end of April, a relative large number of medals were awarded per day. Afterward, the number of awarded medals is relatively low, but still almost twice as many were awarded per day than between 10.09.2014 and 24.11.2014.

Even if the number of data points compared to the medal "For Distinction in Combat" is lower, it can be assessed that the number of medals awarded per day approximately follows the events in eastern Ukraine. A number of "Medals of Suvorov" was awarded at the end of 2014. Fewer awards per day happened in the following months; however, there is the strong spike at the end of April. The calmer period in eastern Ukraine, after February 2015 is also mirrored by lower number of awarded medals per day after 01.05.2015. Because there is no detailed information about the medals awarded until 08.12.2015, a possible increase related to the fighting in August 2015 cannot be identified with the available data.

"Medal of Zhukov"



The "Medal of Zhukov" is awarded to servicemen for bravery, dedication, and personal courage:

- in fighting in defense of the fatherland and state interests of the Russian federation;
- for outstanding distinctions in combat service, duty, and participation in exercises and maneuvers;
- for outstanding performance in combat training.



On the reverse side of the medal, in the center is an inscription: "For Excellence in Service", and under it - the medal's number. At the bottom of the medal: a relief of laurel and oak branches.³⁶

Source: http://award.gov.ru/zhukov_medal.html

The "Medal of Zhukov" ("Медаль Жукова") is a state award of the Russian Federation. It is the lowest state award discussed in the report and also the last discussed medal. The medal is primarily awarded to Russian servicemen and can be also awarded for non-combat related actions. The medal was established in 1994. However, the statute of the medal was changed in 2010, including the design of the reverse side of the medal. With this change, the numbering of the medals restarted.³⁷

The "Medal of Zhukov" shares some limitations with the medal "For Courage" and the "Medal of Suvorov", mainly that the medal is also not restricted to activities under combat conditions or in combat missions. However, the restarting of the numbering with the 2010 amendment greatly eases analysis of the medal numbers. The current medal numbers are not affected by the two Chechen wars and the Russo-Georgian war of 2008.

However, only four³⁸ medals are known (see table 4). The first known medal with the number 277 was awarded on 12.12.2014, the second medal with the number 361 was awarded shortly afterward on 25.12.2014, followed by medal 541 on 22.01.2015. The fourth medal with number 1349 was

³⁶ Note, that the depicted flip site of the medal does not correspond to the description. For a more exact presentation of the current "Medal of Zhukov", as well as earlier versions of the medal, see: http://www.gosnagrada.ru/medalzukraznov htm (last accessed on: 21.08.2016).

³⁷ cf.: http://www.gosnagrada.ru/medalzukraznov.htm (last accessed on: 21.08.2016).

³⁸ A fifth medal is known, however, the necessary information are not readable and the medal therefore is not included in this report.

awarded on 08.12.2015. This means that more than 1000 medals were awarded between 12.12.2014 and 08.12.2015, while at maximum no more than 277 medals were awarded since the amendment of the medal statute in the year 2010.

Date	Number	Comment
12.12.2014	277	
25.12.2014	361	
22.01.2015	541	
08.12.2015	1349	

Table 4: "Medal of Zhukov", award dates and medal number depicted on available imagery. In the comment column the not clearly readable information or other noticeable problems are stated. The source material for this list stems mainly from investigation published by @Askai707 and InformNapalm.

A strong limitation in the interpretation of the "Medal of Zhukov" is the low number of known medals. However, a strong increase, at minimum almost a doubling of the number of awarded medals, can be observed between 12.12.2014 and 22.01.2015. Therefore, it seems rather plausible that the medal awarded on 08.12.2015 can be considered as reliable. This implies that between 12.12.2014 and 08.12.2015 almost four times as many medals were awarded than between 2010 and 12.12.2014.

Discussion

In the previous section, four Russian medals were discussed, the medals "For Distinction in Combat", "For Courage", "Medal of Suvorov" and "Medal of Zhukov". One medal, "For Distinction in Combat", can be – given the awarding rules stated the statute of the medal – only awarded for activities under combat conditions or in combat missions. The other three medals can also be awarded for non-combat related activities. Except for the medal "For Courage", the medals are primarily awarded to Russian servicemen. The focus of the discussion lies on the number of awarded medals in the years 2014 to 2016, and the comparison of these numbers with the number of awards in the years before 2014.

It is possible to demonstrate with the available data that the number of awarded medals, compared to the years before 2014, suddenly and strongly increased in 2014 and 2015. The most direct proof for an active participation of Russian servicemen in combat operations is provided by the large number of awarded medals "For Distinction in Combat". 4300 awards of this type were awarded between 07.11.2014 and 18.02.2016, strongly suggesting larger combat operations with active Russian military involvement in this period. Additionally, the relatively large number of awards for the other three medals does not correspond with a nation at peace. In sum, the presented data suggests that more than ten thousand medals of all four types were awarded in the considered period. Therefore, it can be directly concluded that:

• Thousands of Russian servicemen participated in 2014 and 2015 in combat operations and were awarded with medals for their actions in these operations.

This finding strongly contradicts the Russian positions that no Russian servicemen *on duty*³⁹ were involved in larger combat operations in 2014 and in the first two thirds of 2015 and is important on its own because this finding raises the fundamental question in which undeclared war the Armed Forces of the Russian Federation were involved in this period.

However, exactly in this period falls the most active phase of the war in eastern Ukraine and there is plentiful evidence documenting Russian involvement in this war. This evidence⁴⁰ encompasses cross-border attacks, the presence of Russian military equipment and even of active Russian servicemen and military units/formations in eastern Ukraine. These findings alone strongly challenge the official Russian position that no Russian servicemen *on duty* participated in the fighting in eastern Ukraine. However, this war is therefore also the most likely candidate for the undeclared war in which the Armed Forces of the Russian Federation were and are involved in. Together with the evidence presented in preceding reports, it is therefore possible to conclude:

• Thousands of Russian servicemen participated in combat operations in eastern Ukraine and were awarded with medals for their actions in this war.

³⁹ Note, Russia repeatedly denied the presence of Russian servicemen in eastern Ukraine, however, it was stated that Russian servicemen might have participated in the fighting in their holidays without order.

cf.: <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-soldiers-on-leave-fighting-Ukrainian-troops-alongside-rebels-pro-Russian-separatist-leader-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-soldiers-on-leave-fighting-Ukrainian-troops-alongside-rebels-pro-Russian-separatist-leader-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-soldiers-on-leave-fighting-Ukrainian-troops-alongside-rebels-pro-Russian-separatist-leader-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-soldiers-on-leave-fighting-Ukrainian-troops-alongside-rebels-pro-Russian-separatist-leader-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-separatist-leader-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-separatist-leader-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-separatist-leader-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-separatist-leader-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-separatist-leader-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-separatist-leader-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-separatist-says <a href="http://www.telegraph.co.uk/news/worldnews/europe/germany/angela-merkel/11060559/Serving-Russian-separatist-says http://www.telegraph.co.uk/news/merkel/

⁴⁰ See the footnotes 10 to 13 for some links to open source based investigations of this topics.

Furthermore, because of the large number of known awards in this period and because it is a rather unrealistic assumption that every Russian servicemen participating or involved in the fighting in eastern Ukraine has been awarded with one of the discussed medals, 41 it can be additionally concluded:

- Most likely far more than ten thousand Russian servicemen participated in combat operations in eastern Ukraine.
- Most likely tens of thousands Russian servicemen participated in or contributed to the fighting in eastern Ukraine.

Moreover, given that the medal awards don't cease after the main battles were fought in summer 2014 and winter 2014/15, but remained at a lower pace, but still – compared to the time of peace – increased level, it can be concluded:⁴²

It is very likely that Russian servicemen participated in the fighting in eastern Ukraine also in the calmer periods of the war after Minsk II was signed in February 2015.

In sum, the findings of this report support the claims that thousands of Russian servicemen were active in eastern Ukraine. With these findings, it is also possible to strongly increase the lower databased estimate of Russian servicemen involved in the fighting in eastern Ukraine using only open source information.

Further research in this topic could encompass analyzing in detail the pre-2014 awards of the discussed medals, identifying more medals of the considered types to strengthen and expand the argument presented in this report, analyzing the awards in individual Russian military units/formations or analyzing other Russian awards not discussed in this report.

⁴¹ If every Russian serviceman participating in the fighting would have been awarded with one of the discussed medals, the medals must be considered together as a kind of "operation participation award". However, such an interpretation is contradicted by the fact that not one but four medals are considered in this report and by the statutes of the individual medals. Furthermore, there are examples of lower medals also awarded to Russian servicemen in this period. See Figure 1 for an example of an awarded medal ("For Military Valour") not discussed

⁴² The last finding also supports the Ukrainian claim and investigator reports that Russian servicemen fought in eastern Ukraine after Minsk II, cf.: https://www.theguardian.com/world/2015/may/18/russian-soldiers-ukraine-trialterrorism-charges and https://www.bellingcat.com/news/uk-and-europe/2015/05/22/three-graves/ (last accessed on: 26.08.2016).

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