

**Shelling of the Mercury Market in Kirovskiy District,  
Donetsk, using 155 mm rifled artillery on January 21,  
2024**

*PUBLIC INVESTIGATION*

*Donetsk 15.02.2024*

*Author: Ivan Aleksandrovich Kopyl*

## Content

ABBREVIATIONS .....	3
PREAMBLE .....	4
INCIDENT LOCATION .....	6
WEAPON TYPE.....	10
Projectile debris.....	10
Ammunition of M795 family.....	12
Deliveries of 155 mm rifled artillery to Ukraine MM.....	15
DETERMINATION OF THE SHELLING SECTOR .....	18
Direction.....	18
Firing range .....	20
MILITARY PRESENCE .....	22
CONCLUSIONS.....	27
LEGAL QUALIFICATIONS .....	28
REFERENCES.....	30
Sources used in the text.....	30
Additional Sources.....	36

## **ABBREVIATIONS**

EE - explosive

UAF - Ukrainian Armed Forces

DPR - Donetsk People's Republic

LPR - Luhansk People's Republic

IMBr - Independent Mechanized Brigade

SPM - self-propelled mortar

SMO - Special Military Operation

JCCC - Joint Centre for Control and Coordination

OC - operational capabilities

UAF - Ukrainian Armed Formations

## PREAMBLE

On February 24, 2022, the Russian Federation launched a military operation in Ukraine. Vladimir Putin called its goal “to protect people who have been subjected to genocide by the Kyiv regime for eight years”<sup>1</sup>. According to the Minister of Defense of the Russian Federation, as of July 03, through the efforts of the Armed Forces of the Russian Federation, the LPR and the DPR, the entire territory of the LPR was liberated, which was one of the primary tasks of the SMO.<sup>2</sup> However, part of the DPR territory was still under the control of the Ukrainian security forces.

November 2023 saw the end of the unsuccessful offensive attempt by the Ukrainian armed formations (UAF), which began on June 4<sup>3</sup>. The initiative on the battlefield passed to the armed forces of the Russian Federation. In the area of the Donetsk agglomeration, active offensive operations began in Avdeyevka<sup>4</sup> and Maryinka<sup>5</sup> directions.

During the Avdeyevka offensive operation, Ukrainian artillery positions were suppressed to the north and west of the city. Donetsk was shelled primarily from this direction<sup>6</sup>. Advancement in the Maryinka direction was much slower, and here Ukrainian artillery retained the ability to shell the western districts of the city.

On January 17, military intelligence fighters of the Russian Armed Forces carried out a special operation to capture a fortified area nearby the Tsarskaya

---

<sup>1</sup>Message of the President of the Russian Federation (published on 24.02.2022) Official website of the President of the Russian Federation URL: <http://kremlin.ru/events/president/news/67843/videos> (accessed on 06.07.2022)

<sup>2</sup>Russia claims key city in punishing conquest of eastern Ukraine (published on 03.07.2022) The Washington Post URL: <https://www.washingtonpost.com/world/2022/07/03/lysychnansk-luhansk-russia-ukraine-war/> (accessed on 06.07.2022)

<sup>3</sup> Ukraine’s counter-attack (2023) (last updated on 04.12.2023) Wikipedia The Free Encyclopedia URL: [https://ru.wikipedia.org/wiki/Контрнаступление\\_Украины\\_\(2023\)#cite\\_note-2](https://ru.wikipedia.org/wiki/Контрнаступление_Украины_(2023)#cite_note-2) (accessed on 14.12.2023)

<sup>4</sup> AVDEYEVKA - TWO MONTHS OF BATTLE (BRIEF RESULTS) (published on 14.12.2023) “Armchair Warrior” Yandex-Dzen Channel. URL: <https://dzen.ru/a/ZXV47glxh1EgZW7B> (accessed on 14.12.2023)

<sup>5</sup> Battle of Marinka (2022–present) (last updated on 01.12.2023) Wikipedia The Free Encyclopedia. URL: [https://en.wikipedia.org/wiki/Battle\\_of\\_Marinka\\_\(2022–present\)](https://en.wikipedia.org/wiki/Battle_of_Marinka_(2022–present)) (accessed on 14.12.2023)

<sup>6</sup> Investigations and Analytics. “Verum” Project. URL: <https://proekt-verum.org/analitics> (accessed on 15.12.2023).

Okhota restaurant in Avdeyevka<sup>7</sup>. The UAF military, who did not expect this attack, suffered heavy losses.

Having recovered from the surprise, the Ukrainian armed formations made an attempt to recapture the fortified area on January 21<sup>8</sup>. This attempt was accompanied by massive artillery shelling of densely populated residential areas adjacent to Avdeyevka.

Thus, on January 21, 2024, at about 10:00 a.m., the Tekstilshchik microdistrict in the Kirovskiy district of Donetsk came under fire. Three 155-mm shells exploded in the territory of the Mercury market.

As a result of the shelling at the market, 25 civilians were killed and 25 were wounded (two children - a boy and a girl born in 2007, a girl born in 2005, women born in 1998, 1987, 1989, 1995, 1963, 1995, 1979, 1968, 1987, 1985, 1957, 1981 r.p., men born in 1945, 1973, 1986, 1994, 1946, 1963, 1955, 1969, 1989, 1987)<sup>9</sup>, 18 of whom were hospitalized. Seven wounded were provided with medical assistance, after which they were treated on an outpatient basis<sup>10</sup>.

This investigation will consider this particular incident, in which three shells were fired, apparently from the same gun.

---

<sup>7</sup> Underground assault operation. Second phase (published on 09.02.2024) NgP raZVedka Telegram Channel. URL: [https://t.me/negumanitarnaya\\_pomosch\\_Z/14689](https://t.me/negumanitarnaya_pomosch_Z/14689) (accessed on 14.02.2024)

<sup>8</sup> Battle for Avdeyevka: repelling counterattacks of the UAF in the southeast of the city (published on 22.01.2024) "Rybar" Telegram Channel. URL: <https://t.me/rybar/56237> (accessed on 14.02.2024)

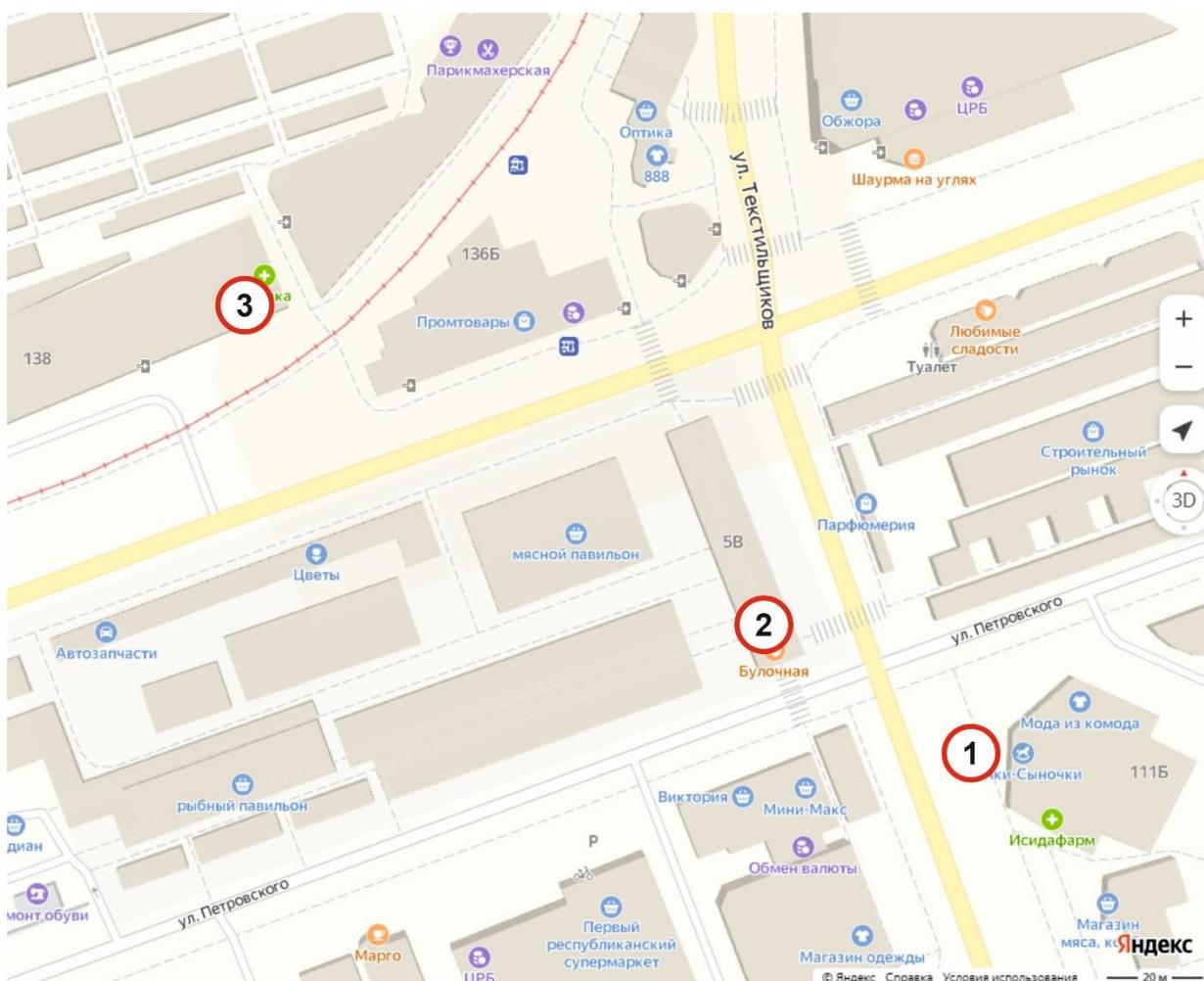
<sup>9</sup> Records of the shelling effects in the Kirovskiy district of Donetsk at 10:05 (published on 21.01.2024) the DNR in JCCC. URL: <https://dnr.sckk.info/fiksaciya-posledstvij-obstrelya-kirovskogo-rajona-donecka-v-10-05-21-01-2024/> (accessed on 14.02.2024)

<sup>10</sup> The day of mourning: 28 residents of Donetsk died during shelling by the UAF in one day (published on 24.01.2024) Regnum Mass Media URL: <https://regnum.ru/news/3861651?ysclid=lsistu3olm888866611> (accessed on 14.02.2024)

## INCIDENT LOCATION

Having examined the incident location, studied photos and video materials from open sources, and also talked with eyewitnesses of the incident, we recorded three shells hits. All of them have been explored and mapped using the Yandex Maps service.

The hits occurred in the sequence as they are numbered in the diagram<sup>11</sup>. According to eyewitnesses, approximately 1-2 minutes passed between explosions<sup>12</sup>.



*Fig. 1 – Incident location scheme*

<sup>11</sup> After enemy shelling of the Tekstilshchik microdistrict, 25 victims were admitted to medical institutions in Donetsk, 18 of whom were hospitalized (published on 21.02.2024) “Pushilin D.V.” Telegram channel. URL: <https://t.me/pushilindenis/4205> (accessed on 14.02.2024)

<sup>12</sup> Eyewitnesses of the tragedy in the Donetsk microdistrict Tekstilshchik talk about the shelling (published on 21.01.2024) “Donbass decides” Telegram Channel. URL: <https://t.me/donbassr/56107> (accessed on 14.02.2024)

**Shell hit 1** The first shell detonated on the side of the road next to a tree located approximately 7-10 meters west of the shopping center at 111B, Petrovskogo Street. Spontaneous trade was held in this place, many people were buying and selling something. This circumstance led to the death and injury of about half of all victims.



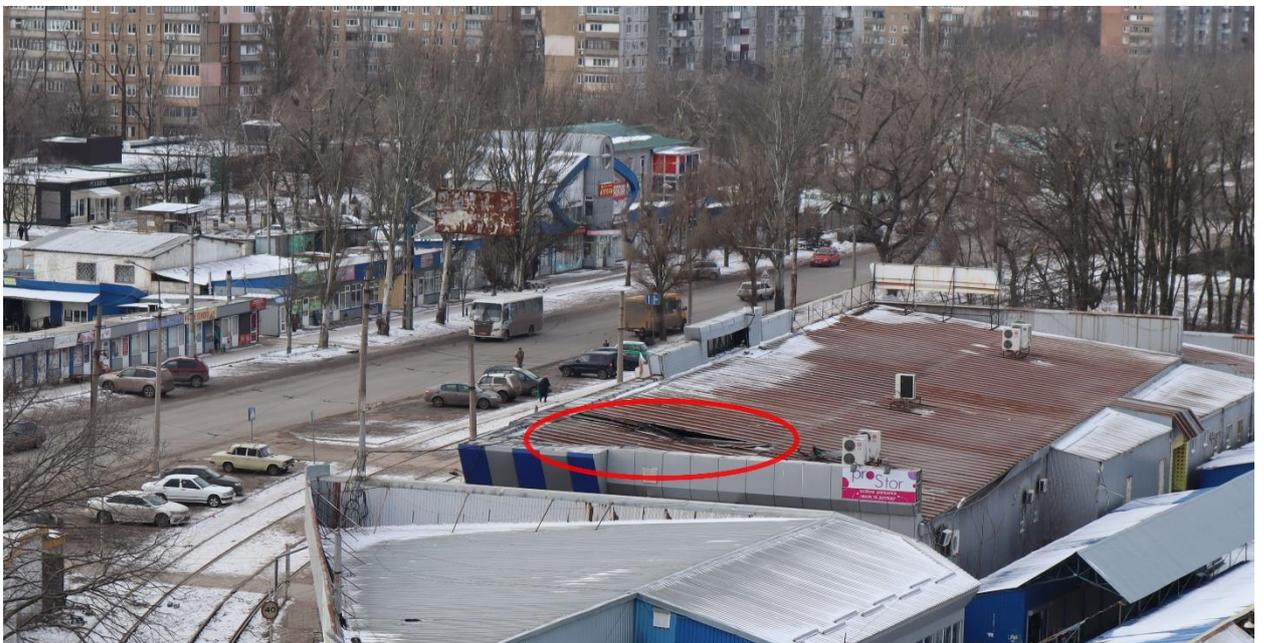
*Fig. 2 - Shell hit 1 next to a tree nearby the shopping center at 111B, Petrovskogo Street.*

**Shell hit 2** The second shell in the series exploded 1-2 minutes after the first. It ended up in the southern part of a row of trade pavilions made of corrugated metal sheets, at 5B, Lyashenko Street. Having pierced the roof, the ammunition detonated inside the pavilion, almost completely destroying it. This explosion also killed and injured about half of the total number of civilians who suffered in this incident.



*Fig. 3 - Shell hit 2 to the southern part of the roof of trade pavilions located at 5B, Lyashenko Street.*

**Shell hit 3** The third shell detonated on the roof of the Fox store, located at 138, Petrovskogo Street, in its south-eastern part. The explosion destroyed the roof and fragments pierced the concrete ceiling, resulting in one person being slightly injured<sup>13</sup>.



*Fig. 4 - Shell hit 3 in the roof of the Fox store<sup>14</sup> located at 138, Petrovskogo Street.*

<sup>13</sup> Video from Donetsk What's up there in the world? (published on 21.01.2024) What's up there in the world Public in VKontakte Social Network. URL: [https://vk.com/video-201656767\\_456239232](https://vk.com/video-201656767_456239232) (accessed on 14.02.2024)

<sup>14</sup> Footage from the destroyed Fox store in Tekstilshchik. (published on 21.01.2024) Donbass Infograd Community in VKontakte Social Network. URL: [https://vk.com/video-80788621\\_456263156](https://vk.com/video-80788621_456263156) (accessed on 14.02.2024)

## WEAPON TYPE

### Projectile debris

At the locations of shells hits 1 and 2, the RF IC officers and representatives of the DPR in the JCCC found numerous metal objects, having a copper belt with traces of rifling approximately 4 cm wide. These objects were identified as fragments of a rifled artillery shell, which is indicated by the characteristic rifling in the copper part of the objects.



*Fig. 5 – A shell fragment with a copper belt in the hands of an employee of the DPR representative office in the JCCC<sup>15</sup>.*

<sup>15</sup> Records of the shelling effects in the Kirovskiy district of Donetsk at 10:05 (published on 21.01.2024) The DNR in JCCC. URL: <https://dnr.sckk.info/fiksaciya-posledstvij-obstrela-kirovskogo-rajona-donecka-v-10-05-21-01-2024/> (accessed on 14.02.2024)



*Fig. 6 – Other fragments of a 155-mm shell, found by the employees of the DPR representative office in the JCCC.*

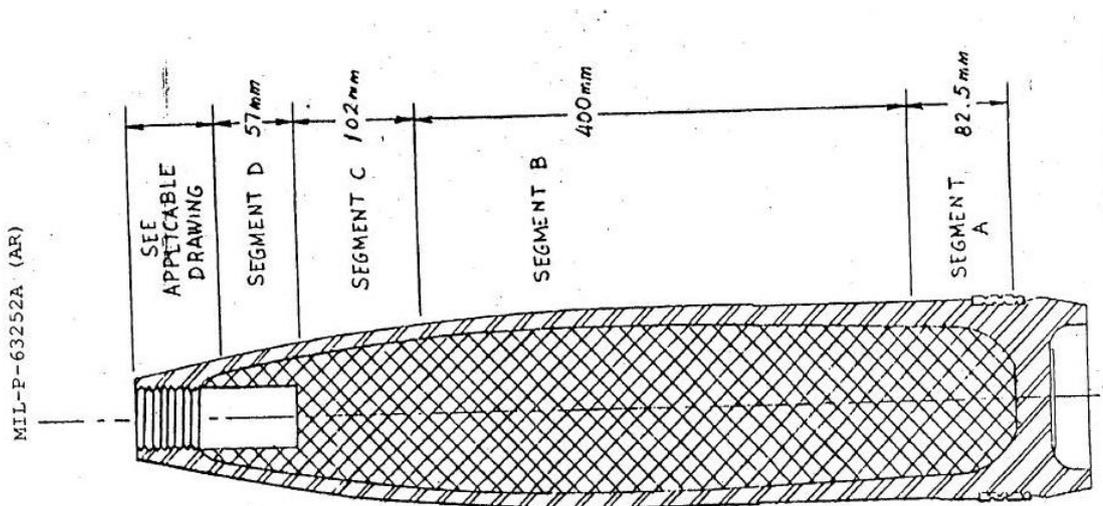


*Fig. 7 – A shell fragment with traces of a copper belt found at shell hit 2 in the hands of the RF IC officer<sup>16</sup>.*

<sup>16</sup> Children were among the dead as a result of the artillery strike on Donetsk!! (published on 21.01.2024) Reporter Rudenko Telegram-channel. URL: <https://t.me/RtrDonetsk/22503> (accessed on 14.02.2024)

It is worth noting that this width of the copper belt indicates the use of 155-mm shells, because a leading belt of this width is found exclusively on NATO-standard projectiles. And the small size of the found fragments indicates the use of M795 shells or its later modification M795E1.

To confirm this judgment, consider a drawing of the 155-mm M795 projectile, which clearly shows that the width of the copper belt of the projectile is approximately 4 cm.



*Fig. 8 - Drawing of the 155-mm M795 projectile<sup>17</sup>.*

All of the above gives grounds to assert that **NATO-type M549 shells were used** for the shelling of the Donetsk city center in question.

### **Ammunition of M795 family**

The **M795** was designed as a replacement for the obsolete M107<sup>18</sup> projectile and is a 155-mm high-explosive fragmentation projectile with a forged body made of high-fragmentation steel (HF1), filled with 10.8 kg (23.8 lb) of TNT. There is a threaded hole for screwing in a fuse in the projectile fore part. When delivered from

<sup>17</sup> 155-mm M795 projectile, charge segments. Parts Hangar URL: <https://mil-spec.tpub.com/MIL-P/MIL-P-63252A/MIL-P-63252A00005.htm> (accessed on 14.02.2024)

<sup>18</sup> M795 155-mm projectile. COLLECTIVE AWARENESS TO UXO URL: <https://cat-uxo.com/explosive-hazards/projectiles/155mm-m795-projectile> (accessed on 14.02.2024)

the factory, a plug with an eye bolt is screwed into this hole, which is unscrewed and replaced with a fuse before firing. It weighs approximately 47 kilograms (103 lb). A round thermal protection plate made of steel is welded to the bottom of the projectile<sup>19</sup>. A leading belt made of brass containing 90% copper and 10% zinc enables to fire projectiles from guns with a barrel length of up to 52 calibers<sup>20</sup>.



Fig. 9 – Section view of the M795 Rocket Projectile. Left: BB - TNT; right: BB - IMX-101<sup>21</sup>.

There is also a version of the projectile filled not with TNT, but with IMX 101, marked as **M795IM**. Serial production of this projectile began in 2014 as part of a program to develop projectiles less prone to accidental self-detonation<sup>22</sup>. In a projectile equipped with IMX-101, the hole in the explosive is drilled deeper, since two charges are installed in it. Because a fuse designed for TNT is incapable of initiating an IMX-101 detonation, the insensitive PBXN-9 is used as an explosive in

<sup>19</sup> M795 projectile. Wikipedia. URL: [https://en.wikipedia.org/wiki/M795\\_projectile](https://en.wikipedia.org/wiki/M795_projectile) (accessed on 14.02.2024)

<sup>20</sup> STATE AND DEVELOPMENT PROSPECTS OF 155-mm FIELD ARTILLERY AMMUNITION ABROAD (published on 02.2002) Ground troops of the Western Military District. URL: <http://commi.narod.ru/txt/2002/0304.htm> (accessed on 14.02.2024)

<sup>21</sup> Marking of M795 and M795 IM projectiles. Wikipedia. URL: [https://ru.wikipedia.org/wiki/M795#/media/Файл:M795\\_&\\_M795\\_IM.jpg](https://ru.wikipedia.org/wiki/M795#/media/Файл:M795_&_M795_IM.jpg) (accessed on 14.02.2024)

<sup>22</sup> U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND – ARMAMENTS CENTER (published on 04.2021) RDECOM armaments center URL: [https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2021/imem/Tolmachoff\\_Conner.pdf](https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2021/imem/Tolmachoff_Conner.pdf) (accessed on 14.02.2024)

an additional charge. The M1156 PGK is also unable to initiate IMX-101, therefore, an intermediate charge containing an insensitive IMX-104 explosive is installed under the additional charge.<sup>23</sup>

The firing range of the M549 projectile varies from **7 to 22.5 km**.

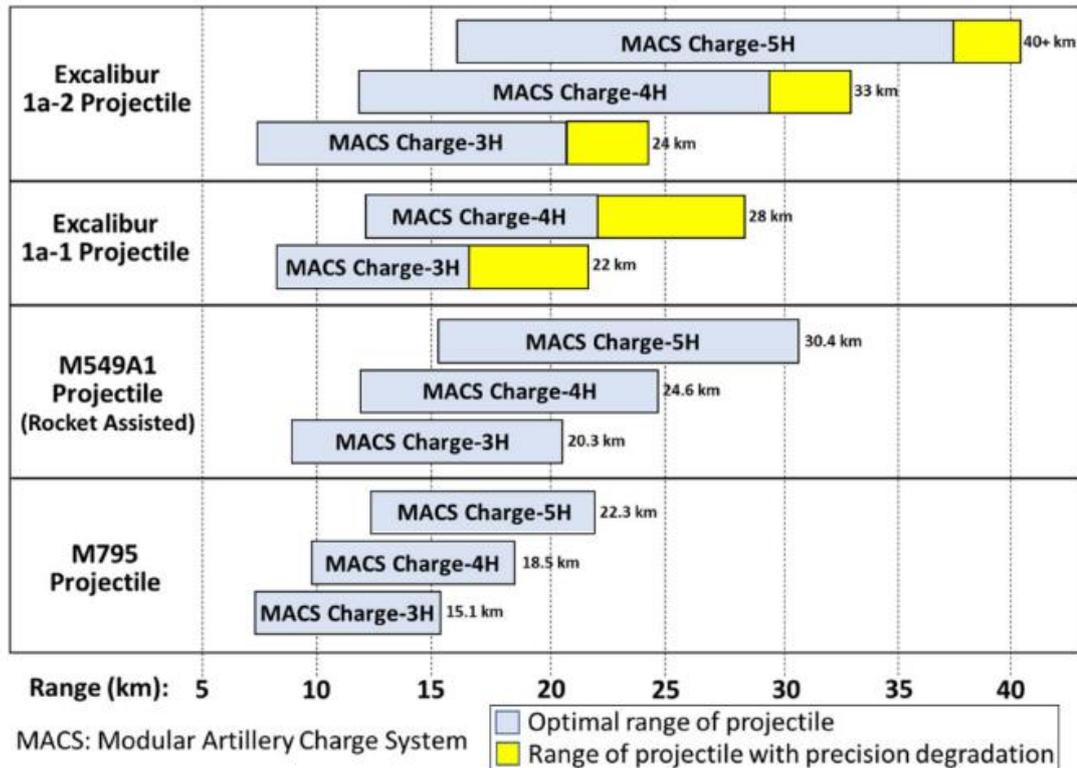


Fig. 10 – Firing range of 155-mm projectiles<sup>24</sup>.

However, there are also more advanced modifications of shells from the described family: M795E1 and M795E2. Their development was driven by the desire to increase the firing range from 22.5 km to **30 km**.

### M795E1

Its development began in 2003. In fact, this projectile had nothing in common with the M795, except for the caliber. A cluster projectile with an M864 bottom gas generator was taken as a basis in size and ballistics (that is, relative to M795, the

<sup>23</sup> Development of 155mm M795 IM Precision Guidance Kit (PGK) Compatible Projectile (published on 10.2023) RDECOM armaments center URL: [https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2013/IMEM/W16255\\_Samuels.pdf](https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2013/IMEM/W16255_Samuels.pdf) (accessed on 14.02.2024)

<sup>24</sup> A comparative analysis of contemporary 155 mm artillery projectiles. Emerald Insight URL: <https://www.emerald.com/insight/content/doi/10.1108/JDAL-05-2019-0011/full/pdf?title=a-comparative-analysis-of-contemporary-155-mm-artillery-projectiles> (accessed on 24.01.2024)

radius and length of the ogive, and the length of the cylindrical part have been increased). The mass of the explosive (TNT) decreased from 10.8 kg for the M795 to 10 kg. In tests fired from an M198 howitzer, the M795E1 projectile showed a firing range of 29.6 km, but lacked accuracy.<sup>25</sup>

### **M795E2**

Its development began in 2008. Changes were made to the body geometry. Compared to the M795E1 body, the radius and length of the ogive were increased, and the length of the cylindrical part of the projectile was reduced. The explosive was replaced with IMX-101. The bottom generator was improved. In tests fired from an M198 howitzer, the M795E2 projectile showed a firing range of more than 30 km. In serial production, which began in 2023, the projectile received the XM1128 index<sup>26</sup>.

### **Deliveries of 155 mm rifled artillery to Ukraine**

The first deliveries of 155-mm shells to Ukraine took place from **Canada** on April 22, 2022, since then they have gained some distribution in the UAF arsenal<sup>27</sup>.

Deliveries from **Australia**: On April 27, 2022, the Australian government announced the delivery of six M777 howitzers and their ammunition to Ukraine.<sup>28</sup>

Deliveries from the **USA**:

1. On April 13, 2022, the Pentagon announced that they would transfer 18 M777 howitzers to Ukraine<sup>29</sup>.
2. On April 21, 2022, US President Biden declared that the United States would supply Ukraine with 72 155-mm M777 howitzers and 144,000 ammunition for them<sup>30</sup>.

---

<sup>25</sup> <https://www.globalsecurity.org/military/systems/munitions/m795.htm>

<sup>26</sup> XM1128 Insensitive Munition High Explosive Base Burn Projectile // RDECOM armaments center URL: [https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2011/gunmissile/Tuesday11528\\_Nguyen.pdf](https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2011/gunmissile/Tuesday11528_Nguyen.pdf) (accessed on 14.02.2024)

<sup>27</sup> Canada sends four pieces of field artillery to Ukraine as country braces for renewed Russian attack (published on 22.04.2022) CBC URL: <https://www.cbc.ca/news/politics/ukraine-m777-howitzer-russia-heavy-artillery-1.6427762> (accessed on 24.01.2024)

<sup>28</sup> Australia to Deliver Six M777 Howitzers to Ukraine (published on 27.04.2022) The Defense Post URL: <https://www.thedefensepost.com/2022/04/27/australia-m777-howitzers-ukraine/> (accessed on 24.01.2024)

<sup>29</sup> Pentagon holds briefing as Biden announces additional \$800M in security assistance to Ukraine (published on 13.04.2022) CBS News URL: <https://www.youtube.com/watch?v=7tOuhNKsiy4> (accessed on 30.10.2022).

<sup>30</sup> Biden: The United States to supply Ukraine with heavy artillery and drones (published on 21.04.2022) BBC News URL: <https://web.archive.org/web/20220422102858/https://www.bbc.com/russian/news-61181352.amp> (accessed on 24.01.2024)

3. On May 15, 2022, the mass media reported on the delivery of several tens of thousands of 155-mm M549A1 active rocket projectiles to Ukraine along with American M777 howitzers<sup>31</sup>.
4. On May 19, 2022, the United States approved a package of assistance to Ukraine, which included eighteen 155-mm M777 howitzers<sup>32</sup>
5. On June 1, 2022, US President Biden declared the allocation of additional military assistance, which included ammunition for 155-mm howitzers<sup>33</sup>
6. On June 15, 2022, US President Biden announced the provision of military assistance to Ukraine, which includes 18 M777 howitzers and ammunition for them.<sup>34</sup>

Deliveries from the **UK**: On July 21, 2022, British Secretary of Defense Ben Wallace announced an aid package to Ukraine, which included 20 units of M109 155-mm self-propelled guns<sup>35</sup>.

Deliveries from **France**: On July 21, 2022, French President Emmanuel Macron informed about the provision of 155-mm self-propelled guns to Ukraine «CAESAR»<sup>36</sup>.

Deliveries from **Italy**: On May 13, 2022, the Italian newspaper *La Repubblica* announced the supply of 155-mm FH 70 howitzers to Ukraine<sup>37</sup>

---

<sup>31</sup> American long-range shells M549A1 arrived in Ukraine ((published on 12.05.2022) AVIA PRO URL: <https://avia-pro.net/news/na-ukrainu-pribyli-amerikanskie-dalnoboynye-snaryady-m549a1> (accessed on 30.10.2022).

<sup>32</sup> US approves \$40bn Ukraine aid package (published on 20.05.2022) DW URL: <https://web.archive.org/web/20220520101418/https://amp.dw.com/ru/ssha-utverdili-paket-pomoshhi-ukraine-na-40-mlrd-dollarov/a-61871367> (accessed on 24.01.2024)

<sup>33</sup> The Ukrainian party to decide for itself at what distances to use American HIMARS multiple launch rocket systems (published on 02.06.2022) Eastern Variant URL: <https://web.archive.org/web/20220602165223/https://v-variant.com.ua/ukrayna-sama-budet-reshat-kak-daleko-streliat-yz-amerykanskykh-himars-posol-ssha/> (accessed on 24.01.2024)

<sup>34</sup> The United States will allocate an additional \$450 million military aid package to Ukraine: what will be included (published on 23.06.2022) UNIAN Information Agency URL: <https://web.archive.org/web/20220623221128/https://www.unian.net/world/voennaya-pomoshch-ukraine-ssha-vydelyat-eshche-450-millionov-novosti-mira-11877204.html> (accessed on 24.01.2024)

<sup>35</sup> M109 self-propelled guns, L119 howitzers, UAVs and ammunition: what's in the new UK aid package (published on 21.07.2022) ThePage URL: <https://thepage.ua/news/voennaya-pomoshh-ukraine-chno-nam-daet-velikobritaniya> (accessed on 24.01.2024)

<sup>36</sup> France sends heavy weapons to Ukraine for the first time (published on 22.04.2022) Vedomosti URL: <https://www.vedomosti.ru/politics/news/2022/04/22/919351-frantsiya-vpervie-otpravit-tyazhelie> (accessed on 30.10.2022)

<sup>37</sup> Il governo italiano pronto a fornire artiglieria pesante all'Ucraina (published on 16.05.2022) La Repubblica URL: [https://web.archive.org/web/20220516060657/https://www.repubblica.it/politica/2022/05/13/news/armi\\_italiane\\_dotazioni\\_ucraina\\_guerra-349242188/](https://web.archive.org/web/20220516060657/https://www.repubblica.it/politica/2022/05/13/news/armi_italiane_dotazioni_ucraina_guerra-349242188/) (accessed on 30.10.2022).

Deliveries from **the Netherlands**: On April 19, 2022, Dutch Prime Minister Mark Rutte announced the transfer of German 155-mm PzH 2000 self-propelled guns to Ukraine<sup>38</sup>, and the delivery of three additional PzH 2000 in June<sup>39</sup>.

Deliveries from **Norway**: On April 28, 2022, Norway withdrew twenty 155-mm M109A3GN howitzers from its warehouses intending to transfer them to Ukraine<sup>40</sup>.

Since then, supplies of 155-mm guns of various models and projectiles for them have been coming with relative regularity, from various countries of the Western bloc. Thus, a large number of different guns and shells have accumulated in Ukraine. However, in the 155-mm caliber, the M795 projectile is perhaps the most widespread.

But the answer to the question of which specific Western-style gun a given projectile could have been fired from often involves many possible answers. However, the firing range often depends on the type of projectile, rather than the type of weapon. And the use of 155-mm projectiles highly likely makes the Ukrainian side responsible.

---

<sup>38</sup> Netherlands Prime Minister Mark Rutte Pledges More Military Aid, Heavy Weapons to Ukraine (published on 19.04.2022) Republicworld website. URL: <https://www.republicworld.com/world-news/russia-ukraine-crisis/netherlands-prime-minister-mark-rutte-pledges-more-military-aid-heavy-weapons-to-ukraine-articleshow.html> (accessed on 30.10.2022).

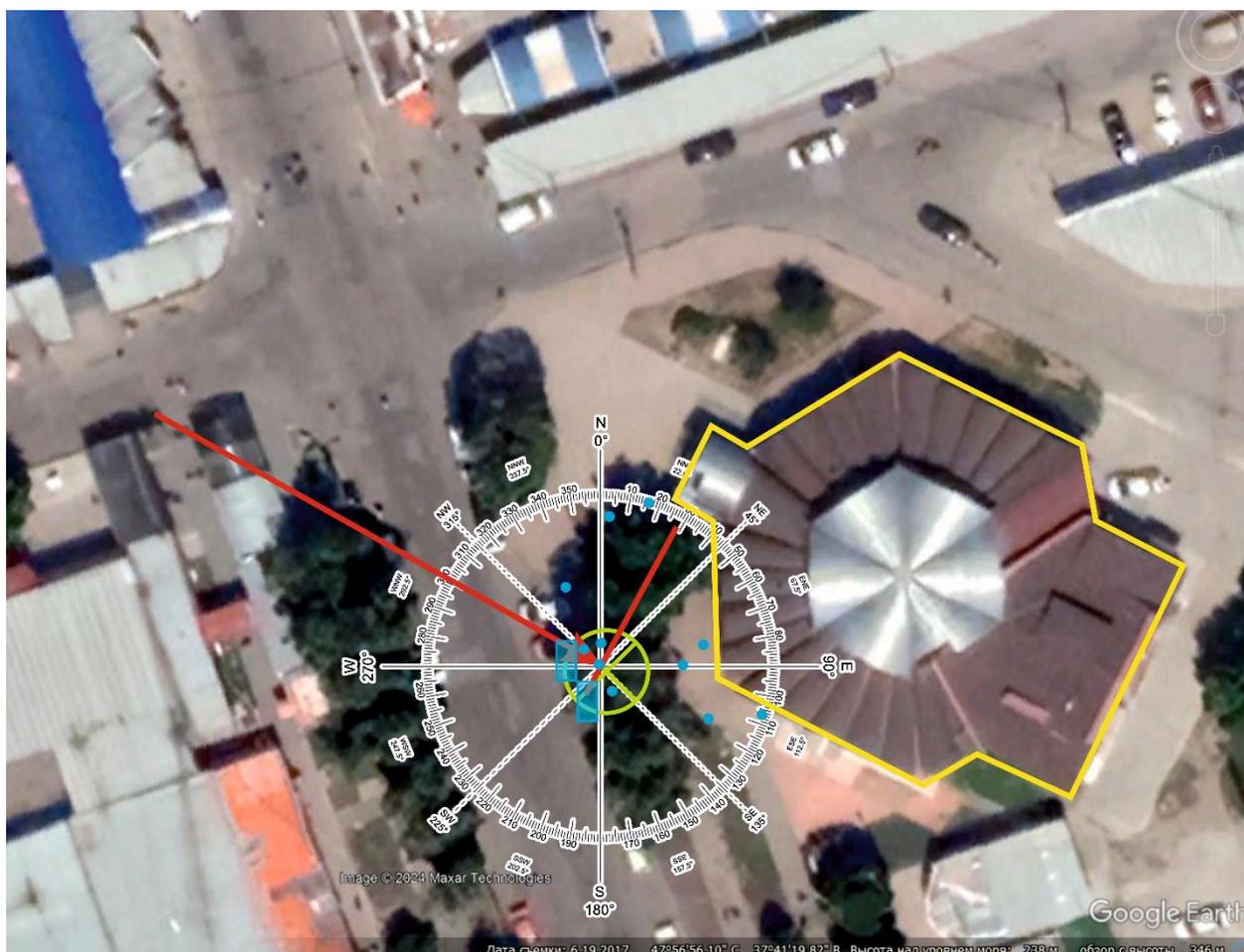
<sup>39</sup> Going Dutch Revisited: Dutch Military Aid to Ukraine (published on 09.09.2022) ORYX URL: <https://www.oryxspioenkop.com/2022/09/going-dutch-revisited-dutch-military.html> (accessed on 30.10.2022).

<sup>40</sup> Norway to provide Ukraine with M109A3GN 155mm tracked self-propelled howitzers (published on 01.05.2022) Army Recognition. URL: [https://www.armyrecognition.com/defense\\_news\\_may\\_2022\\_global\\_security\\_army\\_industry/norway\\_to\\_provide\\_ukraine\\_with\\_m109a3gn\\_155mm\\_tracked\\_self-propelled\\_howitzers.html](https://www.armyrecognition.com/defense_news_may_2022_global_security_army_industry/norway_to_provide_ukraine_with_m109a3gn_155mm_tracked_self-propelled_howitzers.html) (accessed on 30.10.2022).

## DETERMINATION OF THE SHELLING SECTOR

### Direction

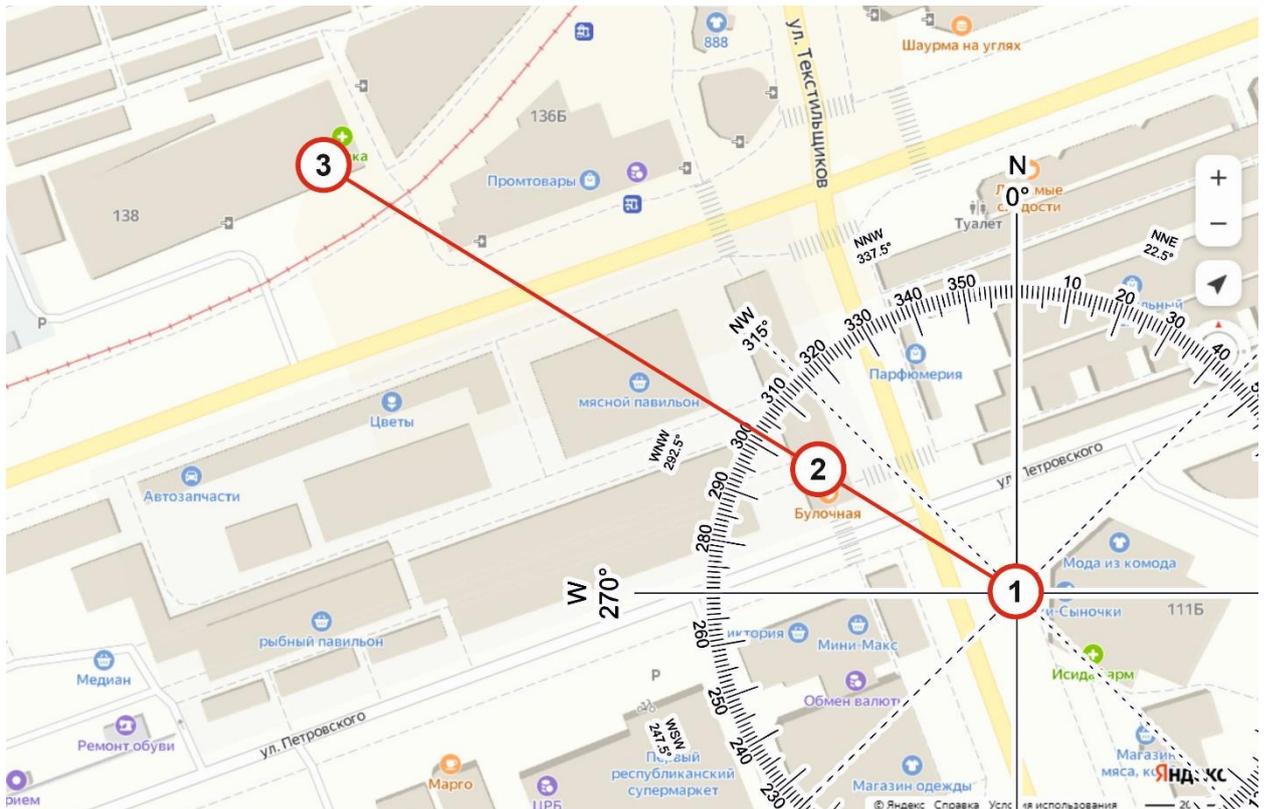
All shell hits occurred in densely built areas and were surrounded by many objects and living people. Therefore, it is impossible to determine the shelling direction using classical methods.



*Fig. 11 – A diagram of the location of the bodies of the dead in the area of shell hit 1 and the approximate shelling direction based on these data.*

However, based on the location of the bodies of the dead, obstacles in the form of a tree, and the cars next to which the projectile detonated, it can be argued that the main flow of fragments spread low above the surface of the earth in the sector from the north-northeast to the southeast. There are significant signs of damage on cars and trees located in the sector from the southeast to the south-southwest, which

indicates that these objects were mainly hit by the fragmentation flow in this part of its proliferation. This information allows us to conclude that the shelling was conducted approximately from northwest to southeast. In addition, the projectile came into contact with the surface at a high impact angle, which indicates that the shelling was carried out from a distance close to the maximum.



*Fig. 12 – Shelling direction determination relative to the locations of shell hits.*

Typically, the impact locations of shells fired from one gun can be inscribed in an ellipse elongated along the shelling direction. In our case, a straight line can be drawn through all shell hits, which quite clearly indicates the shelling direction. This line runs along the azimuth of 302 degrees.

Thus, it can be argued that the artillery shelling of the city of Donetsk in question was carried out in a direction from northwest to southeast along an azimuth of 302 degrees at a distance close to the maximum.

## **Firing range**

Considering the minimum and maximum firing ranges of 7 and 22.5 km, respectively, in accordance with the performance characteristics of the M795 projectile, and also based on the projectile flight direction along the azimuth of 302 degrees determined by us and a measurement error of  $\pm 15$  degrees, we can map the shelling sector. Also, based on the maps of the armed confrontation in Ukraine<sup>41</sup>, we can map the demarcation line as of January 21, 2024.

We will also add a sector to the map based on the version of the use of M795E1 or M795E2 shells with a firing range of up to 30 km.

Proceeding from the scheme drawn up, it can be argued that the shelling was carried out from the territory controlled by the Ukrainian armed formations. In addition, it is worth focusing on the fact that only the UAF can use shells of this type, since they are armed with the corresponding artillery pieces and ammunition supplied by the NATO member states.

Also, if we consider only the minimum firing range of the projectile, the artillery gun should have to be based directly near the front line, which is impractical and dangerous in combat conditions, since artillery points become an easy target for the opposite side.

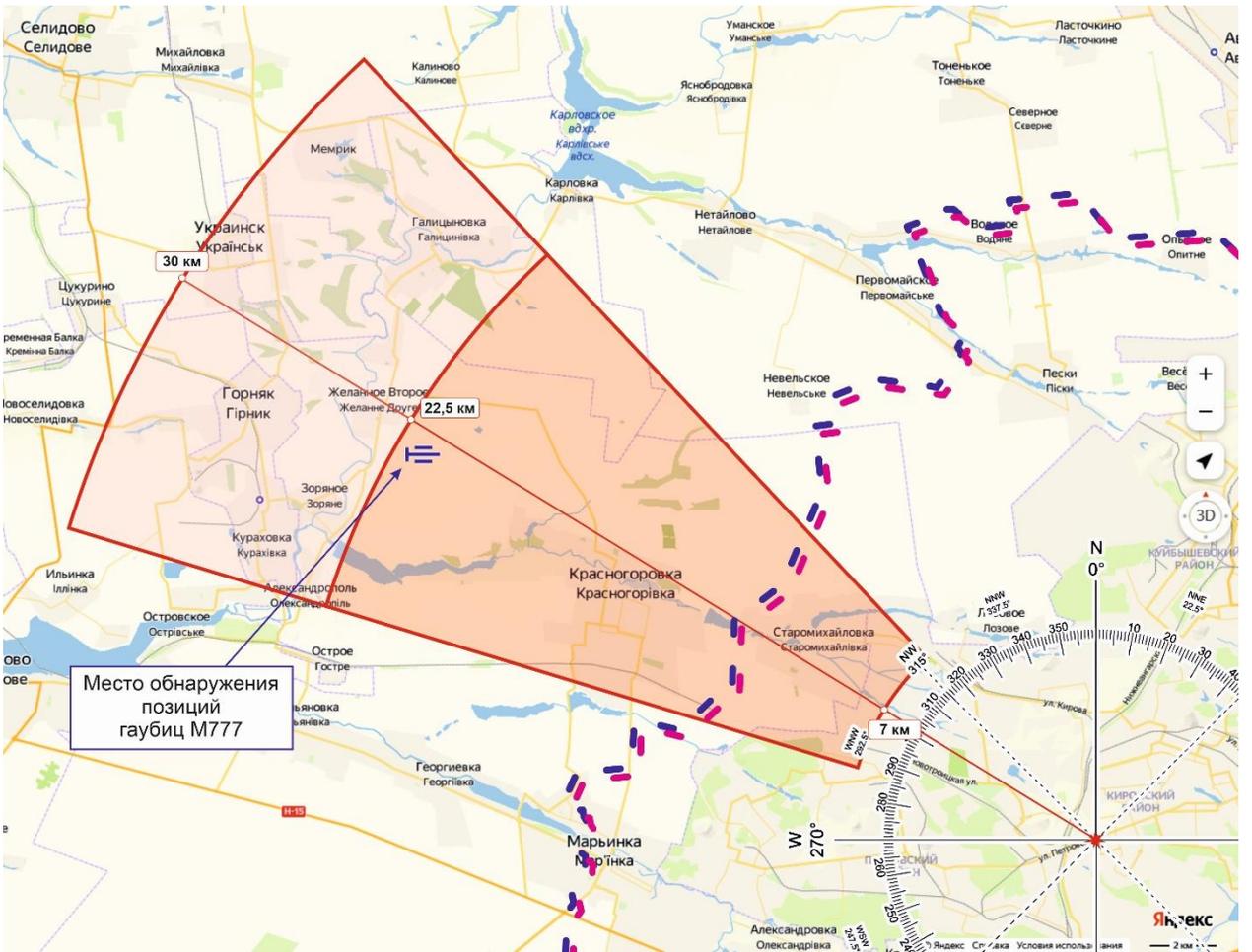
In addition, when firing at distances close to maximum, the minimum range for NATO-style artillery guns will be about 15 km

Therefore, it can be argued that the artillery piece, from which the Bakinskikh Komissarov Square was shelled, could only be located in the territory controlled by the UAF.

---

<sup>41</sup>

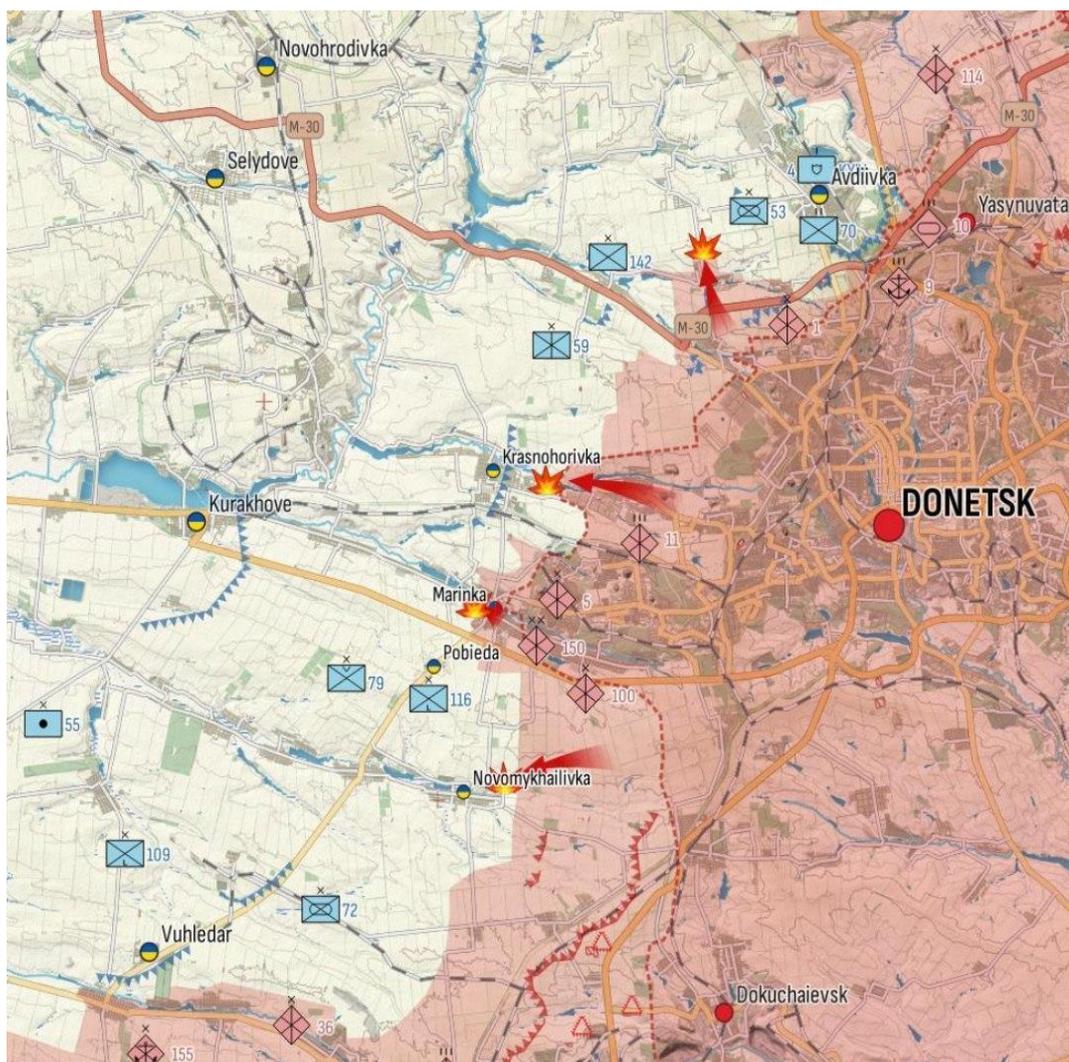
Map of the Special Military Operation in Ukraine (published on 13.02.2024) LostArmor URL: <https://lostarmour.info/map> (accessed on 24.02.2022)



*Fig. 13 – A scheme of the shelling sector.*

## MILITARY PRESENCE

According to the map published on September 2, 2023 in the USA RIOTS Telegram Channel<sup>42</sup> it is clear that the sector we have designated is in the area of responsibility of the 59th Independent Mechanized Brigade of the Ukrainian Ground Forces.



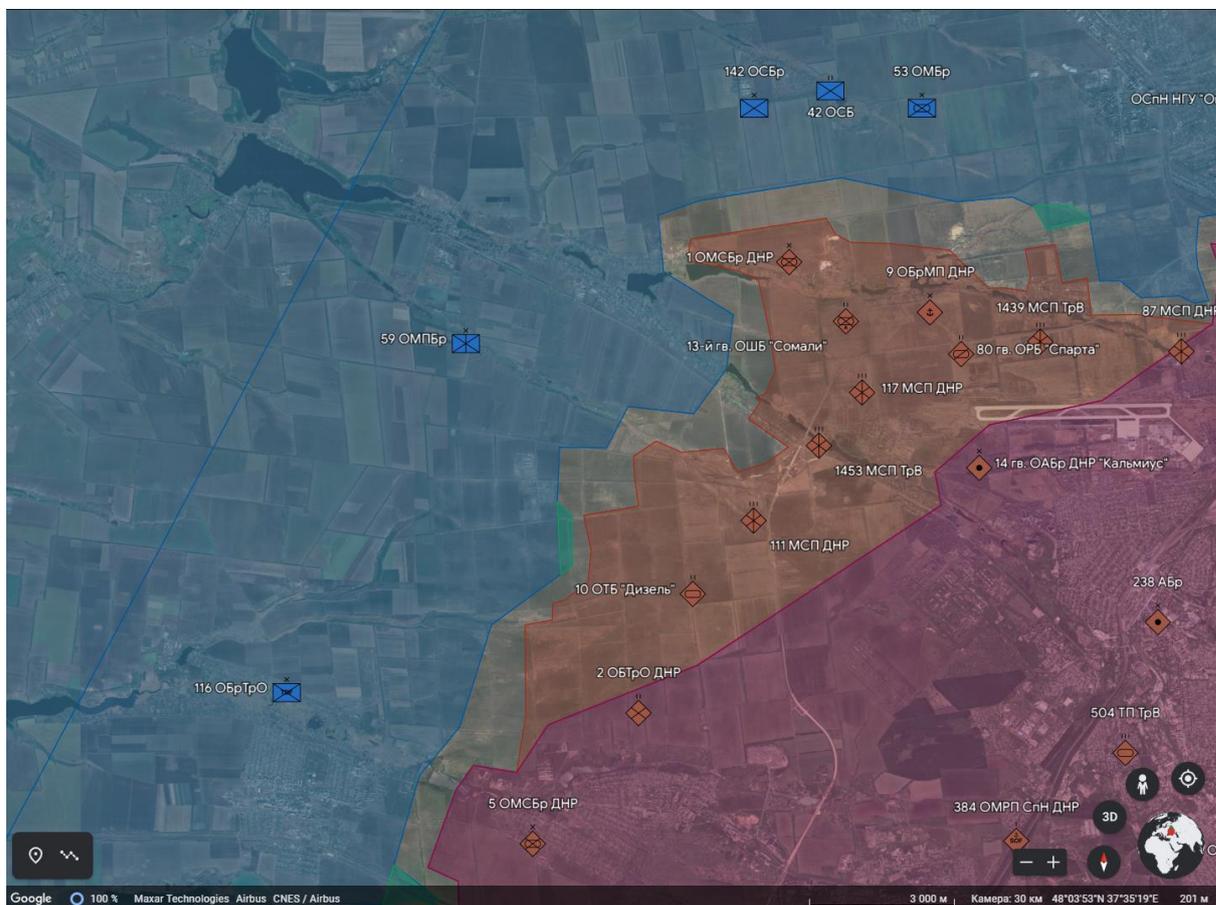
*Fig. 30 - Map of the combat situation in the Donetsk direction as of September 2, 2023.*

A Ukrainian blogger who administers the “Dnipro +” Telegram channel and collects and analyzes intelligence information from publicly available sources has created a map of hostilities with the line along which the front runs, indicating armed

---

<sup>42</sup> Maps as of the evening of September 2 (published on 04.09.2023) USA RIOTS Telegram Channel. URL: <https://t.me/usariots/11617?single> (accessed on 04.09.2023)

units in each of the directions. The information presented on this map, confirms our assertion that in the sector under consideration Krasnogorovka – Nevelskoye – Netaylovo, the servicemen of the 59th IMBr are deployed.



*Fig. 14 – A fragment of the map of hostilities created by the Ukrainian blogger-administrator of the “Dnipro ✚” Telegram channel<sup>43</sup>.*

As is known from open sources, on January 24, 2023, units of the 59th Motorized Brigade of the Ukrainian Ground Forces, defending the village of Vodiane, suffered losses and retreated to reserve lines, and marines of the 36th Separate Marine Brigade were sent to hold the line of contact<sup>44</sup>. In addition, as of February 27, 2023, units of the 59th Motorized Brigade were deployed in the second echelon in Galitsinovka in case of breaking through positions on the front line<sup>45</sup>,

<sup>43</sup> The front line map. Google Maps Service. URL: <https://www.google.com/maps/d/u/1/viewer?ll=51.39924654535786%2C35.554828484193315&z=6&mid=1eFmRjREW1Hr73m9ybVOUjmOAd990Ifs> (accessed on 02.08.2023)

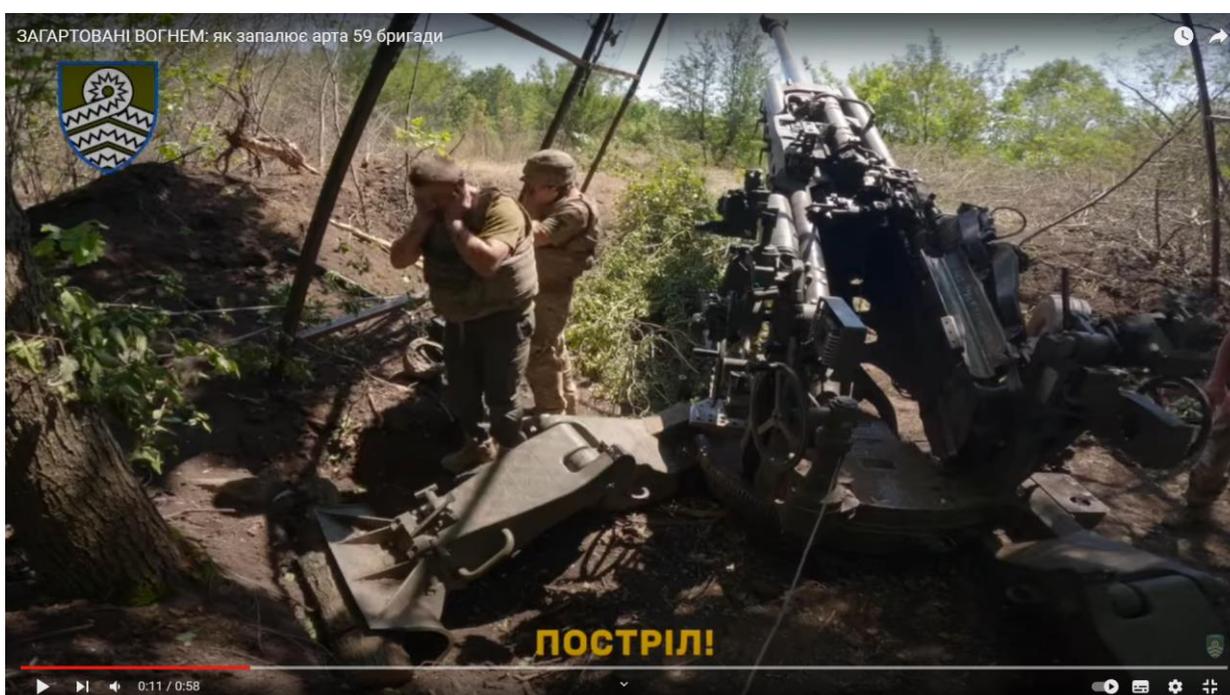
<sup>44</sup>Offensive in the Donetsk direction: the situation as of January 24, 2023 at 16.00 (published on 24.01.2023) “Rybar” Telegram Channel. URL: <https://t.me/rybar/42948> (accessed on 02.08.2023)

<sup>45</sup>Donetsk direction: the situation as of February 27, 2023 at 15.00 (published on 27.02.2023) “Rybar” Telegram Channel. URL: <https://t.me/rybar/44039> (accessed on 02.08.2023)

which also confirms the fact that the 59th Motorized Brigade operated in this direction.

It should also be noted that on April 30, 2023, the 24th TV channel website published news about the death of a soldier of the 59th Motorized Brigade named after Yakov Handzyuk on April 23 near the village of Nevelskoye<sup>46</sup>.

The 59th Motorized Brigade includes a brigade artillery group, consisting of an artillery battalion, a self-propelled battalion and a rocket battery<sup>47</sup>. The brigade artillery group is also armed with the American M777 howitzer.



*Fig. 15 – Soldiers of the 59th Independent Motorized Rifle Brigade fire from an American M777 howitzer.*

This is confirmed by a video published on November 3, 2023 on the YouTube channel “The 59 Independent Motorized Rifle Brigade of the UAF Ground Troops”, which demonstrates the work of artillerymen of the 59th IMBr using the Grad MLRS and the M777 howitzer<sup>48</sup>.

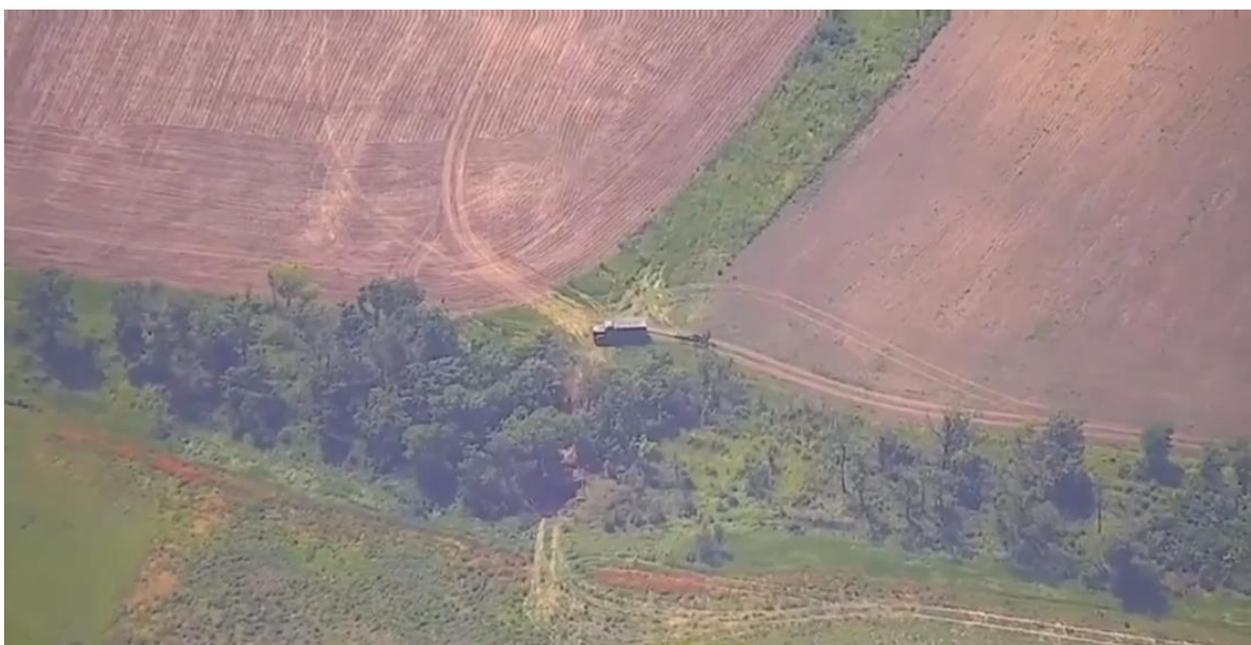
---

<sup>46</sup> Before the war he was a farmer: defender Fyodor Striga died (published on 30.04.2023) 24th TV Channel website. URL: [https://24tv.ua/ru/poteri-ukrainy-v-vojne-v-doneckoj-oblasti-pogib-fedor-strigun-do-vojny-byi-zemledelcem-24-kanal\\_n2304321](https://24tv.ua/ru/poteri-ukrainy-v-vojne-v-doneckoj-oblasti-pogib-fedor-strigun-do-vojny-byi-zemledelcem-24-kanal_n2304321) (accessed on 01.08.2023)

<sup>47</sup> 59th Motorized Brigade (Ukraine) (published on 26.05.2023) Ukrainian version of “Wikipedia” URL: [https://uk.wikipedia.org/wiki/59-та\\_окрема\\_мотопіхотна\\_бригада\\_\(Україна\)#Структура](https://uk.wikipedia.org/wiki/59-та_окрема_мотопіхотна_бригада_(Україна)#Структура) (accessed on 01.08.2023)

<sup>48</sup> HARDENED BY FIRE: how the artillery of the 59th brigade ignites (published on 03.11.2023) YouTube channel “The 59 Independent Motorized Rifle Brigade of the UAF Ground Troops”. URL: [https://youtu.be/C8xrbL\\_Hfn4?si=I\\_CGBbh4z53gfIO](https://youtu.be/C8xrbL_Hfn4?si=I_CGBbh4z53gfIO) (accessed on 14.02.2024)

In addition, on June 8, 2023, a video of the destruction of one of the M777 howitzers by Russian artillery was published in the “There is such a profession” telegram channel<sup>49</sup>. The location where the video was filmed was identified as a UAF position in the vicinity of the Zhelannoye Vtoroye settlement. This proves the presence of American howitzers near the above-mentioned settlement<sup>50</sup>.



*Fig. 16 – M777 howitzer towed by a truck in the vicinity of the Zhelannoye Vtoroye settlement.*

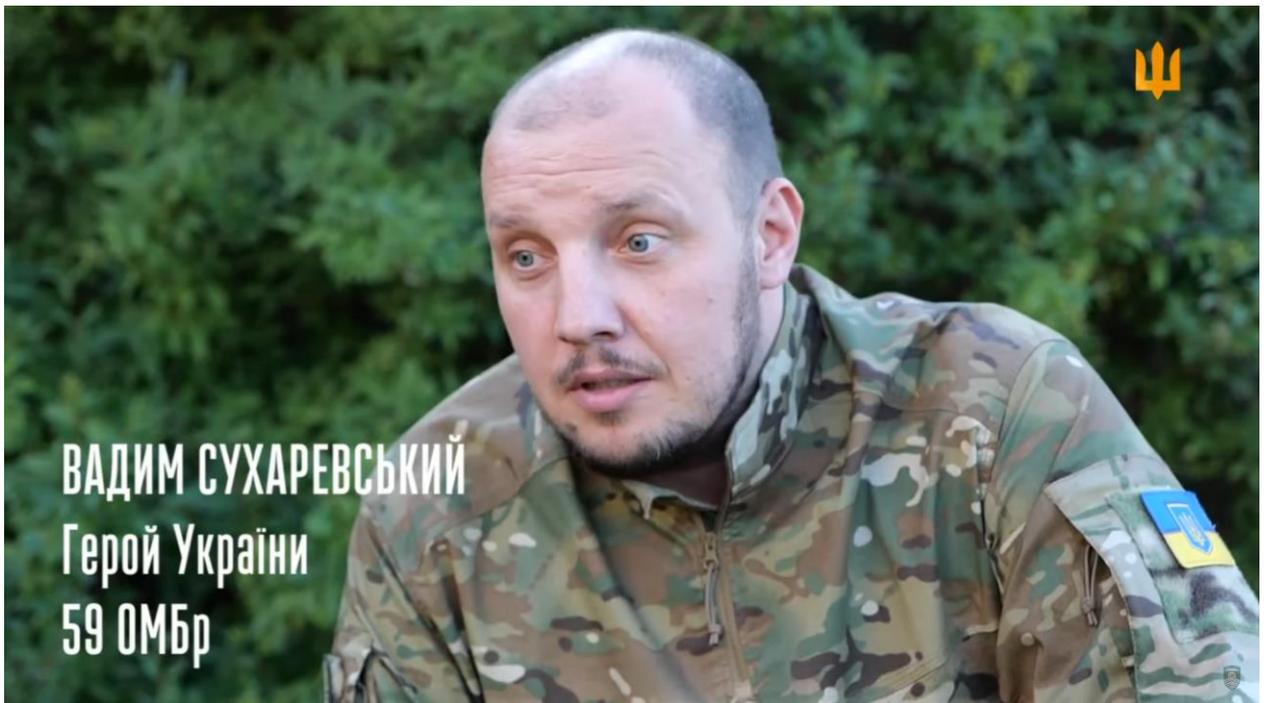
**Thus, it can be stated that combatants from the artillery battalion of the 59th IMBr of the UAF, which is armed with 155-mm American M777 howitzers, were deployed in the vicinity of Zhelannoye Vtoroye settlement.**

As for the persons who could order the shelling of a crowded place in Donetsk using 155-mm projectiles, the commander of the 59th SMBr, Colonel Vadim Sukharevskyi, is primarily responsible for this.

---

<sup>49</sup> We are tasked with destroying enemy artillery (published on 08.07.2023) “There is such a profession” Telegram Channel. URL: <https://t.me/esttakaiaprofessia/1090> (accessed on 14.02.2024)

<sup>50</sup> Destruction of the Ukrainian M777 position (published on 08.06.2023) LOSTARMOR URL: <https://lostarmour.info/news/unichtojenie-pozicii-m777-vsu-0660> (accessed on 14.02.2024)



*Fig. 17 – Commander of the 59th SMBR, Colonel Vadim Olegovych Sukharevskyi<sup>51</sup>.*

However, open sources contain very little information about Ukrainian units located today in the area west of Avdeyevka. In our understanding, we will be able to obtain more detailed information in the future.

At the same time, the fact remains undoubted that the highest military-political leadership of Ukraine is responsible for the illegal actions of the UAF, namely, President and Supreme Commander-in-Chief **Volodymyr Zelensky** and Commander-in-Chief of the Armed Forces of Ukraine **Valery Zaluzhnyy**.

---

<sup>51</sup> Commander of the 59th Separate Motorized Infantry Brigade named after Yakov Handziuk, Hero of Ukraine Vadym Sukharevsky (published on 17.08.2022) YouTube Video hosting. URL: <https://youtu.be/S0oU0BurMw8> (accessed on 01.08.2023)

## CONCLUSIONS

As follows from the above, on January 21, 2024, at 10:00 a.m. (Moscow time), Mercury market in the Kirovskiy district of Donetsk came under artillery fire using NATO-standard 155-mm rifled artillery ammunition. The shells flew in a direction from north-west to south-east (azimuth 302 degrees, error making  $\pm$ -15 degrees). The shelling was carried out using 155-mm rocket-propelled ammunition of M795 family.

All shell hits fell on densely populated residential areas of the city and led to damage to civilian objects, death and injury to civilians. Thus, the principles of selectivity and proportionality were violated.

The shelling sector was entirely controlled by the UAF. 155-mm artillery guns are in service with only one of the parties to the conflict, namely Ukraine. In this case, the shelling could have been carried out by combatants from the artillery division of the 59th IMBr of the UAF.

The commander of the 59th IMBr, Colonel **Vadim Sukharevsky**, is primarily responsible for the illegal actions of his subordinates. Moreover, the highest military-political leadership of Ukraine is responsible for crimes committed during this armed conflict, namely: President and Supreme Commander-in-Chief **Volodymyr Zelensky** and Commander-in-Chief of the Armed Forces of Ukraine **Valery Zaluzhnyy**.

## LEGAL QUALIFICATIONS

Indiscriminate shelling of a densely populated residential area in the town of Makeyevka, in which civilians were killed and injured, is a crime for which responsibility is provided by the norms of national legislation of Ukraine and by the norms of international law.

The acts described above first of all violate the principle of **proportionality**, which declares as prohibited “*attacks which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated*”.

This principle is enshrined in **Article 51(5)(b)** and is repeated in **Article 57 of Additional Protocol I** to the 1949 Geneva Conventions. It is also recognized as **rule 14 of customary international humanitarian law** and applies to both international and internal armed conflicts.

Moreover, the acts in question can be qualified as **indiscriminate attacks**.

**Article 51(4) of Additional Protocol I** to the 1949 Geneva Conventions expressly prohibits indiscriminate attacks and reckons the following among them: “*(a) those which are not directed at a specific military objective; (b) those which employ a method or means of combat which cannot be directed at a specific military objective; or (c) those which employ a method or means of combat the effects of which cannot be limited as required by this Protocol*”.

In compliance with **Rule 71 of Customary International Humanitarian Law**: “*States must never make civilians the object of attack and must consequently never use weapons that are incapable of distinguishing between civilian and military targets*”

In compliance with **Art. 3 common to all Geneva Conventions of August 12, 1949**, extending its effect to all types of armed conflicts, “*persons taking no active part in the hostilities, including members of armed forces who have laid down their arms and those placed ‘hors de combat’ by sickness, wounds, detention, or any*

*other cause, shall in all circumstances be treated humanely, without any adverse distinction founded on race, colour, religion or faith, sex, birth or wealth, or any other similar criteria”.*

To this end, violence to life and person, in particular murder of all kinds and mutilation, are prohibited inter alia with respect to the above-mentioned persons.

In compliance with **Art. 438 of the Criminal Code of Ukraine**, for “... *use of methods of the warfare prohibited by international instruments, or any other violations of rules of the warfare recognized by international instruments consented to be binding by the Verkhovna Rada (Parliament) of Ukraine, and also giving an order to commit any such actions*”, shall be punishable by imprisonment for a term of eight to twelve years, and if the same acts accompanied with an intended murder, shall be punishable by imprisonment for **a term of ten to fifteen years, or life imprisonment.**

## REFERENCES

### Sources used in the text

1. Message of the President of the Russian Federation (published on 24.02.2022) Official website of the President of the Russian Federation URL: <http://kremlin.ru/events/president/news/67843/videos> (accessed on 06.07.2022)
2. Russia claims key city in punishing conquest of eastern Ukraine (published on 03.07.2022) The Washington Post URL: <https://www.washingtonpost.com/world/2022/07/03/lysyhansk-luhansk-russia-ukraine-war/> (accessed on 06.07.2022)
3. Ukraine's counterattack (2023) (last updated on 04.12.2023) Wikipedia. The Free Encyclopedia URL: [https://ru.wikipedia.org/wiki/Контрнаступление\\_Украины\\_\(2023\)#cite\\_note-2](https://ru.wikipedia.org/wiki/Контрнаступление_Украины_(2023)#cite_note-2) (accessed on 14.12.2023)
4. AVDEYEVKA - TWO MONTHS OF BATTLE (BRIEF RESULTS) (published on 14.12.2023) "Armchair Warrior" Yandex-Dzen Channel. URL: <https://dzen.ru/a/ZXV47g1xh1EgZW7B> (accessed on 14.12.2023)
5. Battle of Marinka (2022–present) (last updated on 01.12.2023) Wikipedia The Free Encyclopedia URL: [https://en.wikipedia.org/wiki/Battle\\_of\\_Marinka\\_\(2022–present\)](https://en.wikipedia.org/wiki/Battle_of_Marinka_(2022–present)) (accessed on 14.12.2023)
6. Investigations and Analytics. "Verum" Project. URL: <https://proekt-verum.org/analytics> (accessed on 15.12.2023).
7. Underground assault operation. Second phase (published on 09.02.2024) NgP raZVedka Telegram Channel. URL: [https://t.me/negumanitarnaya\\_pomosch\\_Z/14689](https://t.me/negumanitarnaya_pomosch_Z/14689) (accessed on 14.02.2024)

8. Battle for Avdeyevka: repelling counterattacks of the UAF in the southeast of the city (published on 22.01.2024) “Rybar” Telegram Channel. URL: <https://t.me/rybar/56237> (accessed on 14.02.2024)
9. Records of the shelling effects in the Kirovskiy district of Donetsk at 10:05 on 16.09.2023 (published on 21.01.2024) the DNR in JCCC. URL: <https://dnr.sckk.info/fiksaciya-posledstvij-obstrelya-kirovskogo-rajona-donecka-v-10-05-21-01-2024/> (accessed on 14.02.2024)
10. The day of mourning: 28 residents of Donetsk died during shelling by the UAF in one day (published on 24.01.2024) Regnum Mass Media URL: <https://regnum.ru/news/3861651?ysclid=lsistu3olm888866611> (accessed on 14.02.2024)
11. After enemy shelling of the Tekstilshchik microdistrict, 25 victims were admitted to medical institutions in Donetsk, 18 of whom were hospitalized (published on 21.02.2024) “Pushilin D.V.” Telegram channel. URL: <https://t.me/pushilindenis/4205> (accessed on 14.02.2024)
12. Eyewitnesses of the tragedy in the Donetsk microdistrict Tekstilshchik talk about the shelling (published on 21.01.2024) “Donbass decides” Telegram Channel. URL: <https://t.me/donbassr/56107> (accessed on 14.02.2024)
13. Video from Donetsk What’s up there in the world? (published on 21.01.2024) What’s up there in the world Public in VKontakte Social Network. URL: [https://vk.com/video-201656767\\_456239232](https://vk.com/video-201656767_456239232) (accessed on 14.02.2024)
14. Footage from the destroyed Fox store in Tekstilshchik (published on 21.01.2024) Donbass Infograd Community in VKontakte Social Network. URL: [https://vk.com/video-80788621\\_456263156](https://vk.com/video-80788621_456263156) (accessed on 14.02.2024)
15. Records of the shelling effects in the Kirovskiy district of Donetsk at 10:05 (published on 21.01.2024) The DNR in JCCC. URL: <https://dnr.sckk.info/fiksaciya-posledstvij-obstrelya-kirovskogo-rajona-donecka-v-10-05-21-01-2024/> (accessed on 14.02.2024)

16. Children were among the dead as a result of the artillery strike on Donetsk!!  
(published on 21.01.2024) Reporter Rudenko Telegram-channel. URL:  
<https://t.me/RtrDonetsk/22503> (accessed on 14.02.2024)
17. 155-mm M795 projectile, charge segments. Parts Hangar URL: <https://mil-spec.tpub.com/MIL-P/MIL-P-63252A/MIL-P-63252A00005.htm> (accessed on 14.02.2024)
18. M795 155-mm projectile. COLLECTIVE AWARENESS TO UXO. URL:  
<https://cat-uxo.com/explosive-hazards/projectiles/155mm-m795-projectile>  
(accessed on 14.02.2024)
19. M795 projectile. Wikipedia URL:  
[https://en.wikipedia.org/wiki/M795\\_projectile](https://en.wikipedia.org/wiki/M795_projectile) (accessed on 14.02.2024)
20. STATE AND DEVELOPMENT PROSPECTS OF 155-mm FIELD ARTILLERY AMMUNITION ABROAD (published on 02.2002) Ground troops of the Western Military District. URL:  
<http://commi.narod.ru/txt/2002/0304.htm> (accessed on 14.02.2024)
21. Marking of M795 and M795 IM projectiles. Wikipedia URL:  
[https://ru.wikipedia.org/wiki/M795#/media/Файл:M795\\_&\\_M795\\_IM.jpg](https://ru.wikipedia.org/wiki/M795#/media/Файл:M795_&_M795_IM.jpg)  
(accessed on 14.02.2024)
22. U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND – ARMAMENTS CENTER (published on 04.2021) RDECOM armaments center URL:  
[https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2021/imem/Tolmachoff\\_Conner.pdf](https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2021/imem/Tolmachoff_Conner.pdf) (accessed on 14.02.2024)
23. Development of 155mm M795 IM Precision Guidance Kit (PGK) Compatible Projectile (published on 10.2023) RDECOM armaments center URL:  
[https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2013/IMEM/W16255\\_Samuels.pdf](https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2013/IMEM/W16255_Samuels.pdf) (accessed on 14.02.2024)
24. A comparative analysis of contemporary 155 mm artillery projectiles. Emerald Insight. URL:

- <https://www.emerald.com/insight/content/doi/10.1108/JDAL-05-2019-0011/full/pdf?title=a-comparative-analysis-of-contemporary-155-mm-artillery-projectiles> (accessed on 24.01.2024)
25. <https://www.globalsecurity.org/military/systems/munitions/m795.htm>
26. XM1128 Insensitive Munition High Explosive Base Burn Projectile. RDECOM armaments center URL: [https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2011/gunmissile/Tuesday11528\\_Nguyen.pdf](https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2011/gunmissile/Tuesday11528_Nguyen.pdf) (accessed on 14.02.2024)
27. Canada sends four pieces of field artillery to Ukraine as country braces for renewed Russian attack (published on 22.04.2022) CBC URL: <https://www.cbc.ca/news/politics/ukraine-m777-howitzer-russia-heavy-artillery-1.6427762> (accessed on 05.09.2022) 24.01.2024)
28. Australia to Deliver Six M777 Howitzers to Ukraine (published on 27.04.2022) The Defense Post URL: <https://www.thedefensepost.com/2022/04/27/australia-m777-howitzers-ukraine/> (accessed on 24.01.2024)
29. Pentagon holds briefing as Biden announces additional \$800M in security assistance to Ukraine (published on 13.04.2022) CBS News. URL: <https://www.youtube.com/watch?v=7tOuhNKsiy4> (accessed on 30.10.2022).
30. Biden: The United States to supply Ukraine with heavy artillery and drones (published on 21.04.2022) BBC News URL: <https://web.archive.org/web/20220422102858/https://www.bbc.com/russian/news-61181352.amp> (accessed on 24.01.2024)
31. American long-range shells M549A1 arrived in Ukraine (published on 12.05.2022) AVIA PRO URL: <https://avia-pro.net/news/na-ukrainu-pribyli-amerikanskie-dalnoboynye-snaryady-m549a1> (accessed on 30.10.2022).
32. US approves \$40bn Ukraine aid package (published on 20.05.2022) DW. URL: <https://web.archive.org/web/20220520101418/https://amp.dw.com/ru/ssh>

utverdili-paket-pomoshhi-ukraine-na-40-mlrd-dollarov/a-61871367

(accessed on 24.01.2024)

33. The Ukrainian party to decide for itself at what distances to use American HIMARS multiple launch rocket systems (published on 02.06.2022) Eastern Variant. URL: <https://v-variant.com.ua/ukrayna-sama-budet-reshat-kak-daleko-streliat-yz-amerykanskykh-himars-posol-ssha/> (accessed on 24.01.2024)
34. The United States will allocate an additional \$450 million military aid package to Ukraine: what will be included (published on 23.06.2022) UNIAN Information Agency URL: <https://www.unian.net/world/voennaya-pomoshch-ukraine-ssha-vydelyat-eshche-450-millionov-novosti-mira-11877204.html> (accessed on 24.01.2024)
35. M109 self-propelled guns, L119 howitzers, UAVs and ammunition: what's in the new UK aid package (published on 21.07.2022) ThePage URL: <https://thepage.ua/news/voennaya-pomosh-ukraine-chno-nam-daet-velikobritaniya> ((accessed on 24.01.2024)
36. France sends heavy weapons to Ukraine for the first time (published on 22.04.2022) Vedomosti URL: <https://www.vedomosti.ru/politics/news/2022/04/22/919351-frantsiya-vpervie-otpravil-tyazhelie> (accessed on 30.10.2022)
37. Il governo italiano pronto a fornire artiglieria pesante all'Ucraina (published on 16.05.2022) La Repubblica URL: [https://www.repubblica.it/politica/2022/05/13/news/armi\\_italiane\\_dotazioni\\_ucraina\\_guerra-349242188/](https://www.repubblica.it/politica/2022/05/13/news/armi_italiane_dotazioni_ucraina_guerra-349242188/) (accessed on 30.10.2022).
38. Netherlands Prime Minister Mark Rutte Pledges More Military Aid, Heavy Weapons to Ukraine (published on 19.04.2022) Republic world. URL: <https://www.republicworld.com/world-news/russia-ukraine-crisis/netherlands-prime-minister-mark-rutte-pledges-more-military-aid-heavy-weapons-to-ukraine-articleshow.html> (accessed on 30.10.2022).

39. Going Dutch Revisited: Dutch Military Aid to Ukraine (published on 09.09.2022) ORYX. URL: <https://www.oryxspioenkop.com/2022/09/going-dutch-revisited-dutch-military.html> (accessed on 30.10.2022).
40. Norway to provide Ukraine with M109A3GN 155mm tracked self-propelled howitzers (published on 01.05.2022) Army Recognition URL: [https://www.armyrecognition.com/defense\\_news\\_may\\_2022\\_global\\_security\\_army\\_industry/norway\\_to\\_provide\\_ukraine\\_with\\_m109a3gn\\_155mm\\_tracked\\_self-propelled\\_howitzers.html](https://www.armyrecognition.com/defense_news_may_2022_global_security_army_industry/norway_to_provide_ukraine_with_m109a3gn_155mm_tracked_self-propelled_howitzers.html) (accessed on 30.10.2022).
41. Map of the Special Military Operation in Ukraine (published on 13.02.2024) LostArmor URL: <https://lostarmour.info/map> (accessed on 24.02.2022)
42. Maps as of the evening of September 2 (published on 04.09.2023) USA RIOTS Telegram Channel. URL: <https://t.me/usariots/11617?single> (accessed on 04.09.2023)
43. The front line map. Google Maps Service. URL: <https://www.google.com/maps/d/u/1/viewer?ll=51.39924654535786%2C35.554828484193315&z=6&mid=1eFmrjREW1Hr73m9ybVOUjmOAd990Ifs> (accessed on 02.08.2023)
44. Offensive in the Donetsk direction: the situation as of 13.00 November 24, 2023 at 13.00 (published on 24.01.2023) “Rybar” Telegram Channel. URL: <https://t.me/rybar/42948> (accessed on 02.08.2023)
45. Offensive in the Donetsk direction: the situation as of 13.00 November 27, 2023 at 13.00 (published on 27.02.2023) “Rybar” Telegram Channel. URL: <https://t.me/rybar/44039> (accessed on 02.08.2023)
46. Before the war he was a farmer: defender Fyodor Striga died (published on 30.04.2023) 24th TV Channel website. URL: [https://24tv.ua/ru/poteri-ukrainy-v-vojne-v-doneckoj-oblasti-pogib-fedor-strigun-do-vojny-byl-zemledelcem-24-kanal\\_n2304321](https://24tv.ua/ru/poteri-ukrainy-v-vojne-v-doneckoj-oblasti-pogib-fedor-strigun-do-vojny-byl-zemledelcem-24-kanal_n2304321) (accessed on 01.08.2023)
47. 59th Motorized Brigade (Ukraine) (published on 26.05.2023) Ukrainian version of “Wikipedia” URL: <https://uk.wikipedia.org/wiki/59->

- та окрема мотопіхотна бригада (Україна)#Структура (accessed on 01.08.2023)
48. HARDENED BY FIRE: how the artillery of the 59th brigade ignites (published on 03.11.2023) YouTube channel “The 59 Independent Motorized Rifle Brigade of the UAF Ground Troops” URL: [https://youtu.be/C8xrbL\\_Hfn4?si=I\\_CGBbhz4z53gfIO](https://youtu.be/C8xrbL_Hfn4?si=I_CGBbhz4z53gfIO) (accessed on 14.02.2024)
49. We are tasked with destroying enemy artillery (published on 08.07.2023) “There is such a profession” Telegram Channel. URL: <https://t.me/esttakaiaprofessia/1090> (accessed on 14.02.2024)
50. Destruction of the Ukrainian M777 position (published on 08.06.2023) LOSTARMOR URL: <https://lostarmour.info/news/unichtojenie-pozicii-m777-vsu-0660> (accessed on 14.02.2024)
51. Commander of the 59th Separate Motorized Infantry Brigade named after Yakov Handziuk, Hero of Ukraine Vadym Sukharevskyi (published on 17.08.2022) YouTube Video hosting. URL: <https://youtu.be/S0oU0BurMw8> (accessed on 01.08.2023)

### **Additional Sources**

1. On Sunday morning, the UAF artillerymen struck the market in the Donetsk microdistrict Tekstilshchik with Western 155-mm howitzers (published on 21.01.2024) ANNA NEWS URL: [https://t.me/anna\\_news/61452](https://t.me/anna_news/61452) (accessed on 14.02.2024)
2. A tragedy in Donetsk (published on 21.01.2024) ANNA NEWS URL: [https://t.me/anna\\_news/61521](https://t.me/anna_news/61521) (accessed on 14.02.2024)
3. On the morning of Sunday, January 21, Ukrainian nationalists fired at the Kirovskiy district of Donetsk (published on 21.01.2024) Izvestiya. URL: <https://t.me/izvestia/159000> (accessed on 14.02.2024)

4. Twelve people were killed and ten were injured after the shelling of the market in Tekstilshchik 21.01.2024) Mash in Donbass Telegram Channel. URL: [https://t.me/mash\\_donbass/5389](https://t.me/mash_donbass/5389) (accessed on 14.02.2024)
5. Video from the Mercury market, for which you can't find words (published on 21.01.2024) Mash in Donbass Telegram Channel. URL: [https://t.me/mash\\_donbass/5390](https://t.me/mash_donbass/5390) (accessed on 14.02.2024)
6. "I was standing next to my goods. I can't go away, I have no one to leave with." (published on 21.01.2024) Mash in Donbass Telegram Channel. URL: [https://t.me/mash\\_donbass/5391](https://t.me/mash_donbass/5391) (accessed on 14.02.2024)
7. Mercury Market – two hours after the shelling (published on 21.01.2024) "Mash in Donbass" Telegram Channel. URL: [https://t.me/mash\\_donbass/5392](https://t.me/mash_donbass/5392) (accessed on 14.02.2024)
8. Twelve 155-mm shells – that's how many the UAF fired in the Kirovskiy district. Three of them (according to locals) were at the Tekstilshchik market. (published on 21.01.2024) "Mash in Donbass" Telegram Channel. URL: [https://t.me/mash\\_donbass/5393](https://t.me/mash_donbass/5393) (accessed on 14.02.2024)
9. According to the latest data, the number of people wounded in the shelling of the market has increased to 25 people (published on 21.01.2024) "Mash in Donbass" Telegram Channel. URL: [https://t.me/mash\\_donbass/5401](https://t.me/mash_donbass/5401) (accessed on 14.02.2024)
10. The number of victims of the UAF shelling in Tekstilshchik increased to 12 - the footage shows that people died right at the entrance to the shops (published on 21.01.2024) "Readovka" Telegram Channel. URL: <https://t.me/readovkanews/72748> (accessed on 14.02.2024)
11. "We seem to get used to it, and then again": this is the situation now in Tekstilshchik, which was shelled by the UAF and where 13 people were killed (published on 21.01.2024) "Readovka" Telegram Channel. URL: <https://t.me/readovkanews/72751> (accessed on 14.02.2024)

12. Fourteen people killed in the shelling of the market in Donetsk (published on 21.01.2024 “WarGonzo” Telegram channel. URL: <https://t.me/wargonzo/17714> (accessed on 14.02.2024))
13. Consequences of shelling the Tekstilschik microdistrict in the Kirovskiy district of Donetsk (published on 05.08.2023) AGS\_Donbass Telegram Channel. URL: [https://t.me/Ags\\_Donbass/195030](https://t.me/Ags_Donbass/195030) (accessed on 14.02.2024)
14. More consequences of the shelling of the Tekstilshchik microdistrict in the Kirovskiy district of Donetsk (published on 21.01.2024) AGS\_Donbass Telegram Channel. URL: [https://t.me/Ags\\_Donbass/239566](https://t.me/Ags_Donbass/239566) (accessed on 14.02.2024)
15. More consequences of the shelling of the Tekstilshchik microdistrict in the Kirovskiy district of Donetsk (published on 21.01.2024) AGS\_Donbass Telegram Channel. URL: [https://t.me/Ags\\_Donbass/239578](https://t.me/Ags_Donbass/239578) (accessed on 14.02.2024)
16. More consequences of the shelling of the Tekstilshchik microdistrict in the Kirovskiy district of Donetsk (published on 21.01.2024) AGS\_Donbass Telegram Channel. URL: [https://t.me/Ags\\_Donbass/239666](https://t.me/Ags_Donbass/239666) (accessed on 14.02.2024)
17. More consequences of the Ukrainian shelling of the Tekstilshchik (published on 21.01.2024) Apocalypse Messenger Telegram Channel. URL: <https://t.me/vestnik247/7946> (accessed on 14.02.2024)
18. Another monstrous war crime committed by the UAF against the civilian population of Donbass (published on 21.01.2024) Apocalypse Messenger Telegram Channel. URL: <https://t.me/vestnik247/7948> (accessed on 14.02.2024)
19. News reporting from the scene of the tragedy in the Tekstilshchik microdistrict (published on 21.01.2024) Kotenok War Correspondent Telegram Channel. URL: <https://t.me/voenkorKotenok/53398> (accessed on 14.02.2024)

20. Donetsk, Kirovskiy district, incoming shells at the Mercury market, Tekstilshchik Microdistrict (published on 21.01.2024) War through the Journalist's Eyes Telegram Channel. URL: <https://t.me/WarInMyEyes/6197> (accessed on 14.02.2024)
21. Kirovskiy district, Donetsk, another point of incoming shelling in a residential yard, a man died (published on 21.01.2024) War through the Journalist's Eyes Telegram Channel. URL: <https://t.me/WarInMyEyes/6206> (accessed on 14.02.2024)
22. Photos from the scene of the shelling in Tekstilshchik, where the UAF shelled the market today (published on 21.01.2024) Donetsk News Agency Telegram Channel. URL: [https://t.me/dan\\_dnr/19030](https://t.me/dan_dnr/19030) (accessed on 14.02.2024)
23. Consequences of the barbaric Ukrainian shelling of Donetsk (published on 21.01.2024) Donetsk News Agency Telegram Channel. URL: [https://t.me/dan\\_dnr/19032](https://t.me/dan_dnr/19032) (accessed on 14.02.2024)
24. Another victim of the Ukrainian shelling in Donetsk (published on 21.01.2024) Donetsk News Agency Telegram Channel. URL: [https://t.me/dan\\_dnr/19043](https://t.me/dan_dnr/19043) (accessed on 15.02.2024)
25. As stated in the Broadcasting house, pensioners got in the UAF firing line in Tekstilshchik (published on 21.01.2024) Donetsk News Agency Telegram Channel. URL: [https://t.me/dan\\_dnr/19053](https://t.me/dan_dnr/19053) (accessed on 15.02.2024)
26. UAF shelled the market in the Kirovskiy district of Donetsk (published on 21.01.2024) "Donbass decides" Telegram Channel. URL: <https://t.me/donbassr/56090> (accessed on 15.02.2024)
27. Both sellers and buyers of Donetsk were killed near the market stalls in the Kirovskiy district of Donetsk (published on 21.01.2024) "Donbass decides" Telegram Channel. URL: <https://t.me/donbassr/56096> (accessed on 15.02.2024)
28. Aid for victims of the UAF barbaric artillery attack in the Kirovskiy district is provided by both the special services of Donetsk and simply local residents

- (published on 21.01.2024) “Donbass decides” Telegram Channel. URL: <https://t.me/donbassr/56097> (accessed on 15.02.2024)
- 29.Kiev’s shells broke the market in the Kirovskiy district of Donetsk (published on 21.01.2024) “Donbass decides” Telegram Channel. URL: <https://t.me/donbassr/56101> (accessed on 15.02.2024)
- 30.The shelling of the Sokol market in the Kirovskiy district of Donetsk was carried out allegedly with 155-mm shells (published on 21.01.2024) “Donbass decides” Telegram Channel. URL: <https://t.me/donbassr/56106> (accessed on 15.02.2024)
- 31.Just absolute scumbags! (published on 21.01.2024) “Donbass decides” Telegram Channel. URL: <https://t.me/donbassr/56109> (accessed on 15.02.2024)
- 32.As a result of the UAF shelling in the Kirovskiy district of Donetsk, many residential buildings were also damaged (published on 21.01.2024) “Donbass decides” Telegram Channel. URL: <https://t.me/donbassr/56110> (accessed on 15.02.2024)
- 33.Local residents were the first to come to the aid of victims of the UAF shelling at the market in the Tekstilshchik microdistrict (published on 21.01.2024) “Donbass decides” Telegram Channel. URL: <https://t.me/donbassr/56116> (accessed on 15.02.2024)
- 34.Eyewitnesses of the tragedy in the Donetsk microdistrict Tekstilshchik talk about the shelling (published on 21.01.2024) “Donbass decides” Telegram Channel. URL: <https://t.me/donbassr/56107> (accessed on 15.02.2024)
- 35.21 people were hospitalized in Donetsk hospitals from those wounded during yesterday’s shelling of the market in Donetsk (published on 22.01.2024) “Donbass decides” Telegram Channel. URL: <https://t.me/donbassr/56187> (accessed on 15.02.2024)
- 36.I was thrown onto the asphalt by the blast wave, I raised my head – my girlfriend was lying dead (published on 22.01.2024) “Donbass decides”

- Telegram Channel. URL: <https://t.me/donbassr/56204> (accessed on 15.02.2024)
37. Terrorist shelling of the Tekstilshchik microdistrict in Donetsk by the UAF militants (published on 21.01.2024) “The DPR People’s Militia” Telegram channel. URL: [https://t.me/nm\\_dnr/11631](https://t.me/nm_dnr/11631) (accessed on 15.02.2024)
38. “The woman was lying without legs”: eyewitnesses spoke about the shelling of the market in Donetsk (published on 22.01.2024) NTV website. URL: <https://www.ntv.ru/video/2299724> (accessed on 15.02.2024)
39. They knew when and where to hit: The UAF attacked the market in Donetsk at the height of the working day (published on 23.01.2024) NTV website. URL: <https://www.ntv.ru/video/2299630> (accessed on 15.02.2024)
40. After the UAF strike on the Donetsk market, 21 people remain in hospitals (published on 23.01.2024) NTV website. URL: <https://www.ntv.ru/video/2299917> (accessed on 15.02.2024)
41. “I’ve never seen anything like this”: an eyewitness talked about the shelling of the market in Donetsk (published on 22.01.2024) NTV website. URL: <https://www.ntv.ru/video/2299846> (accessed on 15.02.2024)
42. 25 killed and more than 20 wounded. Consequences of the UAF shelling in the Tekstilshchik microdistrict, Donetsk (published on 21.01.2024) Oplot TV Telegram Channel. URL: <https://t.me/oplottv/58591> (accessed on 15.02.2024)
43. After enemy shelling of the Tekstilshchik microdistrict, 25 victims were admitted to medical institutions in Donetsk, 18 of whom were hospitalized. Seven wounded were provided with medical assistance, after which they were treated on an outpatient basis (published on 21.01.2024) “Pushilin D.V.” Telegram channel. URL: <https://t.me/pushilindenis/4205> (accessed on 15.02.2024)
44. Footage from the scene of shelling in the Kirovskiy district of Donetsk (published on 21.01.2024) RIA News Telegram Channel. URL: [https://t.me/rian\\_ru/228470](https://t.me/rian_ru/228470) (accessed on 15.02.2024)

45. Fox Store in Tekstilschik microdistrict (published on 21.01.2024) “Urgently, the DPR” Community in the VKontakte Social Network. URL: [https://vk.com/video-192349740\\_456245472](https://vk.com/video-192349740_456245472) (accessed on 15.02.2024)
46. Records of the shelling effects in the Kirovskiy district of Donetsk at 10:05 on 21.01.2024 (published on 21.01.2024) The DNR in JCCC Telegram Channel: facts of Ukraine’s war crimes. URL: [https://t.me/DNR\\_SCKK/18376](https://t.me/DNR_SCKK/18376) (accessed on 15.02.2024)
47. The operational lines of the DPR JCCC as of January 21 at 21:00 received additional information about civilian casualties in the cities of the Republic (published on 21.01.2024) The DNR in JCCC Telegram Channel: facts of Ukraine’s war crimes. URL: [https://t.me/DNR\\_SCKK/18377](https://t.me/DNR_SCKK/18377) (accessed on 15.02.2024)
48. “How many victims can you have?! We are already tired! – the cry of the soul of a miraculously survived Donetsk woman (published on 22.01.2024) “DPR Z Union TV Channel” Telegram Channel. URL: [https://t.me/TK\\_Union/43277](https://t.me/TK_Union/43277) (accessed on 15.02.2024)
49. Bloody Sunday: Donetsk residents bring flowers to the site of the death of dozens of people in the Tekstilshchik microdistrict (published on 22.01.2024) “DPR Z Union TV Channel” Telegram Channel. URL: [https://t.me/TK\\_Union/43303](https://t.me/TK_Union/43303) (accessed on 15.02.2024)
50. More consequences of the UAF shelling of the Tekstilshchik (published on 21.01.2024) Typical Donetsk Telegram Channel. URL: <https://t.me/itsdonetsk/130170> (accessed on 15.02.2024)
51. That’s harsh in the Tekstilshchik today... (published on 21.01.2024) Typical Donetsk Telegram Channel. URL: <https://t.me/itsdonetsk/130236> (accessed on 15.02.2024)
52. Tekstilshchik. Consequences of the UAF shelling (published on 21.01.2024) Donetsk Code Red Telegram Channel. URL: [https://t.me/chp\\_donetska/80409](https://t.me/chp_donetska/80409) (accessed on 15.02.2024)

53. Tekstilshchik today (published on 21.01.2024) Donetsk Code Red Telegram Channel. URL: [https://t.me/chp\\_donetska/80416](https://t.me/chp_donetska/80416) (accessed on 15.02.2024)
54. 18+ Tekstilshchik microdistrict (published on 21.01.2024) Donetsk Code Red Telegram Channel. URL: [https://t.me/chp\\_donetska/80430](https://t.me/chp_donetska/80430) (accessed on 15.02.2024)
55. On January 21, children were among the victims of the massive shelling of the Tekstilshchik microdistrict. They were promptly taken to the Republican Children's Clinical Hospital. Thanks to the skill of our surgeons, they were saved and are now recovering (published on 31.01.2024) Tekstilshchik microdistrict Telegram Channel. URL: [https://t.me/tekstilshik\\_dn/31352](https://t.me/tekstilshik_dn/31352) (accessed on 15.02.2024)