# **Incident Assessment**

Incident ID	CIVoo83
Location	23-ho Serpnya Lane, Kharkiv, Kharkiv Oblast
Coordinates	50.0328, 36.2368 <sup>1</sup>
Date	28/02/2022
Time	Before 13:06 EET, likely at 12:46 EET

## **Description of the Events**

In the early afternoon of 28/02/2022, what appears to have been a cluster munition attack took place on 23-ho Serpnya Lane in Kharkiv. The earliest identified footage of this incident was uploaded at 13:06 EET, with one source (Source 4) indicating it may have taken place at 12:46 EET. Following the incident, four bodies can be seen throughout the sources: two by the water dispenser next to a shoe repair shop on the corner of 23-ho Serpnya Lane and Ozernyi Lane, one across the road on Ozernyi Lane in front of a shed, and one further down the Serpnya Lane. This seems to align with <a href="media reports">media reports</a>² that four individuals were killed - two appear dead in the sources, for the other two it is unclear. It is unclear what was the target of the attack, but it seems to have affected a largely civilian area, where <a href="MADO3">MADO3</a>, a chemical company, held a building.

## **Key Findings**

- On 28/02/2022 what appears to have been a cluster munition strike occurred on 23-ho Serpnya Lane (Провулок 23-го Серпня) in Kharkiv, at 50.0328, 36.2368.4
- The earliest video showing the aftermath of the attack (Source 2), was posted at 13:24 EET, meaning the attack must have taken place before this time.
- Dashcam footage visible in Source 4 seems to show the attack as it happens, with a timestamp showing 12:45-12:47 on 28/02/2022. This footage, however, was not posted until 01/03/2022 at 08:11 EET.
- Munition remnants were depicted by one of the sources. Although the image was not geolocatable as such, it was verified that the image's metadata was intact.
- Assessments of other incidents that occurred on 28/02/2022 may give an indication of the direction of origin for this incident.
- There are four bodies visible throughout the sources, two appearing to be immobile and covered in blood next to a water dispenser, one being attended to, and one falling down

<sup>&</sup>lt;sup>1</sup> https://maps.app.goo.gl/QNEGtug1x6L8UC8PA

<sup>&</sup>lt;sup>2</sup> https://www.city.kharkov.ua/uk/news/igor-terekhov-kharkivyani-vi---spravzhni-geroi-49922.html

<sup>&</sup>lt;sup>3</sup> https://en.wikipedia.org/wiki/XADO

<sup>4</sup> https://maps.app.goo.gl/QNEGtug1x6L8UC8PA

- as the strike occurs this seems to correspond with <u>local media reports</u><sup>5</sup> of four people dying while trying to get water.
- It is possible that this incident is connected to CIV0090, CIV0091, CIV1907, CIV0082 and CIV0463.

# **Description of Searches**

The Civilian Harm sheet listed two relevant sources for this incident. Source 16 is a Telegram post showing a video of the incident (S1V1). Source 27 is a Telegram post showing two additional videos of the incident (S2V1 and S2V2). Searches to find other relevant material were conducted in English, Ukrainian, and Russian with both non-restricted and restricted date ranges; search terms included the general location as well as the specific address. Source 38 is a YouTube video (S3V1), showing two smoking, burnt cars up the road from where Sources 1 and 2 take place. Source 49, is a Telegram video (S4V1) depicting dashcam footage that appears to be linked to this same incident. Sources 5-9 were discovered as part of CIVoo86, which was later identified as the same incident.

## **Background Summary of Significant Descriptive Content**

### **Media Reports**

- Al Jazeera<sup>10</sup> general report on attacks in Kharkiv on 28/02/2022.
- Washington Post<sup>11</sup> general report on attacks in Kharkiv on 28/02/2022.
- <u>Unian</u><sup>12</sup> makes reference to the incident, and shares the same videos as in Source 2. Says that the people who died had left their shelter to get water.
- <u>HB</u><sup>13</sup> report on the incident, showing additional photos of water bottles on the ground near blood and the same video as in Source 1.
- <u>Vesti UA</u><sup>14</sup> Report on attacks on Kharkiv on 28/02/2022, includes the same video as in Source 1.
- Kharkiv Today<sup>15</sup> General report on attacks in Kharkiv on 28/02/2022, mentions this incident.

<sup>&</sup>lt;sup>5</sup> https://www.city.kharkov.ua/uk/news/igor-terekhov-kharkivyani-vi---sprayzhni-geroi-49922.html

<sup>&</sup>lt;sup>6</sup> https://t.me/truexanewsua/25978

<sup>&</sup>lt;sup>7</sup> https://t.me/truexanewsua/26073

<sup>8</sup> https://www.youtube.com/watch?v=ZxbtmjmBW-A

<sup>9</sup> https://t.me/vekha/30412

¹ºhttps://www.aljazeera.com/news/2022/2/28/ukraine-reports-dozens-killed-in-kharkiv-rocket-strikes# :~:text=At%20least%2011%20people%20have,Kharkiv%2C%20according%20to%20Ukrainian%20officia ls

<sup>&</sup>lt;sup>11</sup> https://www.washingtonpost.com/world/2022/02/28/kharkiv-rockets-shelling-russia-ukraine-war/ <sup>12</sup>https://www.unian.ua/war/zakrivavleni-lyudi-posered-dorogi-motoroshni-naslidki-obstrilu-v-harkovivideo-novini-vtorgnennya-rosiji-v-ukrajinu-11722162.html

<sup>&</sup>lt;sup>13</sup> https://nv.ua/kharkiv/v-harkove-obstrelyali-zhilye-kvartaly-novosti-harkova-50220905.html

<sup>&</sup>lt;sup>14</sup> https://vesti.ua/harkov/rossijskie-vojska-obstrelivayut-zhilye-kvartaly-harkova-iz-gradov-video

<sup>15</sup> https://2day.kh.ua/ru/kharkow/gde-v-kharkove-popali-pod-obstrel-doma

- <u>BBC</u><sup>16</sup> Report on this incident.
- <u>Telegraf</u><sup>17</sup> Mentions this incident, says that four people came out of the bomb shelter to get water and died.
- <u>Unian</u><sup>18</sup> Speech of the mayor of Kharkiv, mentioning this incident.

### **NGO Reports**

- HRW<sup>19</sup> Report mentions 23-ho Serpnya Lane.
- <u>Amnesty International</u><sup>20</sup> General report on strikes in Kharkiv.

#### Other

• <u>City of Kharkiv</u><sup>21</sup> - Mentions this incident.

# **Analysis of Examinable Content**

<u>Source 1<sup>22</sup></u> [Graphic]: A Telegram post containing Video 1 (S1V1) posted on 28/02/2022 at 13:24 EET, filmed at <u>50.0329</u>, <u>36.2367</u><sup>23</sup>, showing smoke further up the street and at least two people that appear to be immobile and one person who is being attended to.



<sup>16</sup> https://www.bbc.com/news/60591017

<sup>&</sup>lt;sup>17</sup>https://telegraf.com.ua/ukr/harkov/2022-02-28/5697917-semya-sgorela-zazhivo-shokiruyushchie-pote ri-kharkova-posle-obstrelov-rossii

<sup>&</sup>lt;sup>18</sup>https://www.unian.ua/war/ce-ne-viyskova-operaciya-ce-vbivstvo-mer-harkova-pro-obstril-mista-okupa ntami-rf-novini-harkova-11722873.html

<sup>&</sup>lt;sup>19</sup> https://www.hrw.org/news/2022/03/04/ukraine-cluster-munitions-launched-kharkiv-neighborhoods

<sup>&</sup>lt;sup>20</sup> https://www.amnesty.org/en/latest/research/2022/06/anyone-can-die-at-any-time-kharkiv/

<sup>&</sup>lt;sup>21</sup> https://www.city.kharkov.ua/uk/news/igor-terekhov-kharkivyani-vi---spravzhni-geroi-49922.html

<sup>&</sup>lt;sup>22</sup> https://t.me/truexanewsua/25978

<sup>&</sup>lt;sup>23</sup> https://maps.app.goo.gl/TqEDyucsdRumqwfq9

Source 2<sup>24</sup> [Graphic]: Two videos posted on Telegram on 28/02/2022 at 14:43 EET, filmed at 50.0329, 36.2367<sup>25</sup>. The post depicts two videos, Video 1 (S2V1) shows two immobile bodies near water bottles, and a third body possibly being tended to. Source 2 Video 2 (S2V2) shows smoke visible further up the street, ambulances, and the three bodies from a farther view.



Source 3<sup>26</sup>: A YouTube video (S<sub>3</sub>V<sub>1</sub>), which, according to Amnesty International's YouTube Dataviewer, was posted on 28/02/2022 at 15:48 EET. It was filmed from 50.0324, 36.2380<sup>27</sup>. It shows two cars that have been burnt and are smoking, next to a firetruck. The caption says "Χαρьκοβ, Οφυς ΧΑДΟ на 23 αββγραπα. 28 φεβραπα 2022 ε" translating to "Kharkiv, Khado Office on August 23. February 28, 2022".



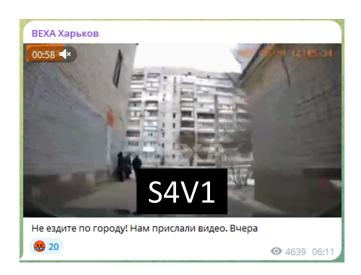
<sup>&</sup>lt;sup>24</sup> https://t.me/truexanewsua/26073

<sup>&</sup>lt;sup>25</sup> https://maps.app.goo.gl/p9MH84TRKUzTdY8Q8

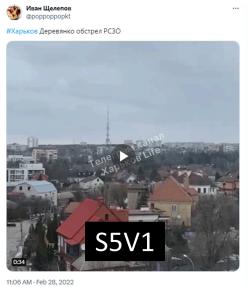
<sup>&</sup>lt;sup>26</sup> https://www.youtube.com/watch?v=ZxbtmjmBW-A

<sup>&</sup>lt;sup>27</sup> https://maps.app.goo.gl/7MJShJKa1wkV4JxY8

Source 4 [Graphic]<sup>28</sup>: A Telegram video (S4V1) posted on 01/03/2022 at 08:11 EET. Filming begins at 50.03586, 36.23692<sup>29</sup>, 4 Henrikha Altuniana Street. Video depicts dashcam footage of a car driving towards Serpnya Lane, when a series of explosions occurs. It shows a person fall to the ground and become immobile. The video has a time stamp that states the footage was taken 28/02/2022 around 12:46 EET.



Source 5<sup>30</sup>: A video (S<sub>5</sub>V<sub>1</sub>) posted on Twitter on 28/02/2022 at 13:06 EET, containing footage of a series of explosions near Derevianko Street in the city of Kharkiv. Filmed from 50.0213, 36.2273<sup>31</sup>.



<sup>&</sup>lt;sup>28</sup> https://t.me/vekha/30412

<sup>&</sup>lt;sup>29</sup> https://maps.app.goo.gl/LxJU9UkQR7Z4wa5S8

<sup>&</sup>lt;sup>30</sup> https://twitter.com/poppoppopkt/status/1498253254907789313?s=20

<sup>&</sup>lt;sup>31</sup> https://maps.app.goo.gl/Y4SryvKt4UAdFNJv9

Source 6<sup>32</sup>: A Telegram video (S6V1) posted on 28/02/2022 at 14:13 EET, showing a series of explosions in Kharkiv. Filmed from 50.0249, 36.2191<sup>33</sup>.



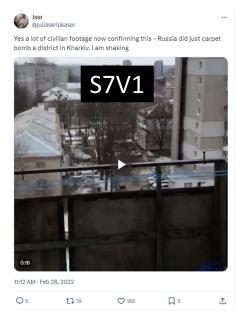
Source  $7^{34}$ : A Twitter post made on 28/02/2022 at 13:12 EET containing a video (S7V1) of smoke rising in the vicinity of the neighborhood where this attack took place. Filmed from 50.0353, 36.2371<sup>35</sup>.

<sup>32</sup> https://t.me/uniannet/33371

<sup>&</sup>lt;sup>33</sup> https://maps.app.goo.gl/d7fjMENe6AaJaLLB6

<sup>&</sup>lt;sup>34</sup> https://twitter.com/juliaskripkaser/status/1498254899792027653

<sup>35</sup> https://maps.app.goo.gl/rJ8Gc18r2X6i53Yb7



Source  $8^{36}$ : A Telegram post made on 28/02/2022 at 16:57 EET showing objects on fire, fragmentation damage and small craters. Filming starts at  $50.0324, 36.2347^{37}$ .



Source 9<sup>38</sup>: A Twitter post made on 28/02/2022 at 13:02 EET depicting what appears to be a 9N235 submunition with a manufacturing date of 2019. Although this image is not possible to geolocate by itself, it was verified by Bellingcat at confirmed that Bellingcat [N.B - not the Justice & Accountability Team] was sent this image with intact metadata.

<sup>&</sup>lt;sup>36</sup> https://t.me/truexanewsua/26155

<sup>&</sup>lt;sup>37</sup> https://maps.app.goo.gl/R9UeVemtNLzXSJhz5

<sup>38</sup> https://twitter.com/DoctorOfRadost/status/1498433559509434369



11:02 PM · Feb 28, 2022

## **Questions to Investigate**

#### Where Was the Incident?

Local and social media identify the incident to have occurred on Προβγλοκ 23-го Серпня, which can be translated to 23-ho Serpnya Lane or Lane of 23rd of August. This is aligned with the coordinates provided by the Global Authentication Project (50.0328, 36.2368<sup>39</sup>).

Sources 1, 2, and 3 show two bodies on the ground in front of a small square structure with "PEMOHT OBYBU" written on one side – translating to "shoe repair" and "KЛЮЧИ" on the other – translating to "keys". The Google Street view imagery of this area is from 2015 and shows a similar structure, in one angle the name is not blurred and the signs read "PEMOHT OBYBU" and "КЛЮЧИ". Other additional factors, such as the two structures across from the street on Ozernyi Lane, the specific coloring of buildings, and the T intersection confirm this geolocation.

Note: some reports mention attacks on 23-ho Serpnya Street - this is a nearby but a separate location (a street located between <u>50.0288</u>, <u>36.2062</u><sup>40</sup> and <u>50.0308</u>, <u>36.2354</u><sup>41</sup>) and should not be mixed with 23-ho Serpnya Lane.

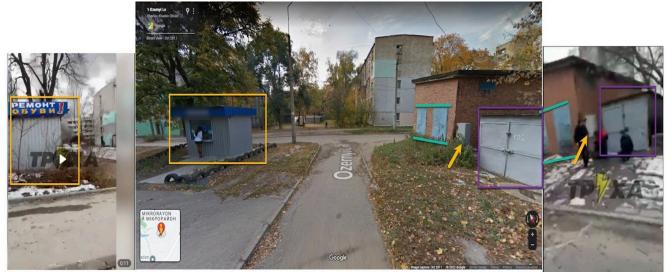
<sup>39</sup> https://maps.app.goo.gl/QNEGtug1x6L8UC8PA

<sup>40</sup> https://maps.app.goo.gl/tbjCVfqhTuqQexR56

<sup>41</sup> https://maps.app.goo.gl/AY4DLp1yDejn8iu49



Right: Screenshot from S1V1 showing "shoe repair sign". Middle: Screenshot of Google Earth <u>Street View</u><sup>42</sup> of 23-ho Serpnya Lane and Ozernyi Lane showing a view of the "shoe repair" and "keys" signs. Left: Screenshot from S2V2, showing "keys" sign.



Left: screenshot from S1V1 at 00:11 showing shoe repair building (yellow box). Middle: Screenshot of Google Earth <u>Street View</u><sup>43</sup> of Ozernyi Lane intersection with 23-ho Serpnya Lane, showing shoe repair building (yellow box), double blue doors (turquoise lines), small grey box (yellow arrow), and gray shed doors (purple box). Right: Screenshot from S1V1 at 00:17.

 $\underline{\$3V1}^{44}$  shows burnt cars with smoke visible, which is likely the same smoke visible in  $\underline{\$2V2}^{45}$ .  $\underline{\$3V1}$  can be geolocated to 23 Serpyna Lane #3-4,  $\underline{\$0.0321}$ ,  $\underline{\$6.2376}^{46}$ .

<sup>42</sup> https://maps.app.goo.gl/oiMsE8WPqUcdGn2D6

<sup>43</sup> https://maps.app.goo.gl/F8STW3bGAT6mayrbA

<sup>44</sup> https://www.youtube.com/watch?v=ZxbtmjmBW-A

<sup>45</sup> https://t.me/truexanewsua/26073

<sup>46</sup> https://maps.app.goo.gl/rdB14sk1WDCTCRUR6



Top: Screenshot from S<sub>3</sub>V<sub>1</sub>, showing distinctive entrance gate and gold carvings (yellow box) and large windows (turquoise box). Bottom: Screenshot of Google Earth <u>Street View</u><sup>47</sup> at 23 Serpnya Lane 3-4, showing the same distinctive entrance gate (yellow box) and large windows (turquoise box).

<u>Source 4</u><sup>48</sup> was posted one day later than the first three sources. However, it appears to also depict the same event at the same location. The video depicts dashcam footage of a car traveling from <u>50.0359</u>, <u>36.2369</u><sup>49</sup> (4 Henrikha Altuniana Street) to <u>50.0331</u>, <u>36.2361</u><sup>50</sup> (7 23-ho Serpyna Lane).

<sup>47</sup> https://maps.app.goo.gl/4yiC28b5ErGdbUfC7

<sup>48</sup> https://t.me/vekha/30412

<sup>49</sup> https://maps.app.goo.gl/LxJU9UkQR7Z4wa5S8

<sup>&</sup>lt;sup>50</sup> https://maps.app.goo.gl/8tJyEqymrgo6gyAU6



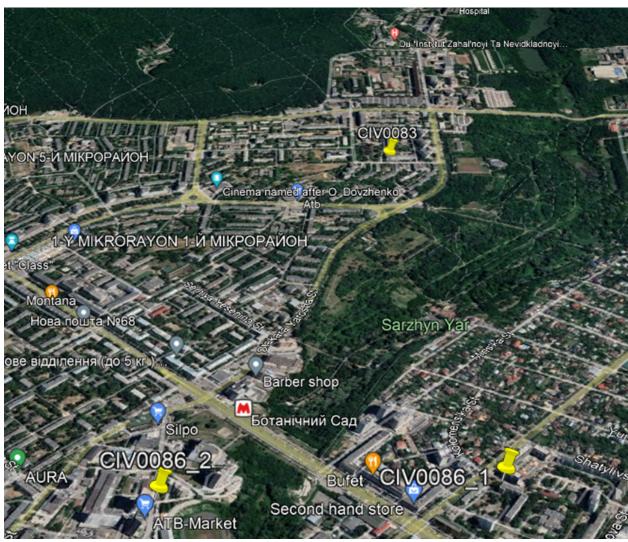


Top: Screenshot from S4V1, row of sheds (turquoise line) ending with a red and white building (purple arrow), light post (yellow box) and row of garages with blue doors (red box). Bottom: Google Earth Screenshot from 7 23-ho Serpnya Lane showing all these features (Credit: Google).

Incident CIVoo86 in Bellingcat's Civilian Harm database was assessed as being connected to this incident due to it occurring at the same place, on the same date and around the same time. CIVoo86 contains links to two videos (Sources 5 and 6) taken by the eye witnesses from two different perspectives roughly from 1500 m away. As such it was included in this report as

### part of CIVoo83.

- $\underline{S5V1}^{51}$  (CIVoo86\_1) appears to have been filmed from  $\underline{50.0213, 36.2273}^{52}$ .
- S6V1<sup>53</sup> (CIVoo86\_2) appears to have been filmed from 50.0249, 36.2191<sup>54</sup>.



Screenshot from Google Earth Pro with yellow pins indicating location of CIV0083, as well as CIV0086\_1 as a location of the camera for S5V1 (50.0213, 36.2273<sup>55</sup>) and CIV0086\_2 as the location of the camera for S6V1 (50.0249, 36.2191<sup>56</sup>) (Credit: Google/Maxar Technologies).

<sup>&</sup>lt;sup>51</sup> https://twitter.com/poppoppopkt/status/1498253254907789313?s=20

<sup>52</sup> https://maps.app.goo.gl/fLtH6cgEPVXyDCfZA

<sup>53</sup> https://t.me/uniannet/33371

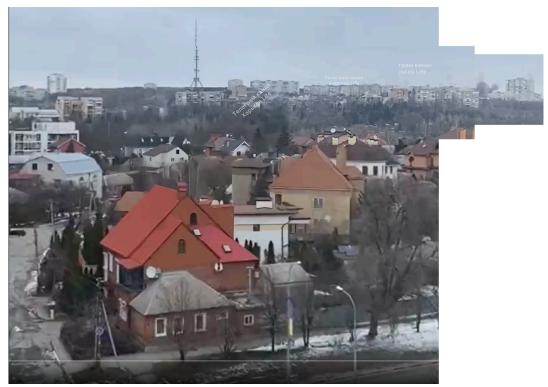
<sup>54</sup> https://maps.app.goo.gl/eExaLiJrUgSbFYuw9

<sup>55</sup> https://maps.app.goo.gl/fLtH6cgEPVXyDCfZA

<sup>&</sup>lt;sup>56</sup> https://maps.app.goo.gl/eExaLiJrUgSbFYuw9



Screenshot of Google Earth Pro indicating an area visible on the footage of explosions recorded on S5V1 (Credit: Google/Maxar Technologies).



Panorama stitched from stills of S5V1 depicting all visible buildings in a combined image.



Collage of cropped and zoomed-in comparison of three panoramas). Top - panorama stitched from stills of the  $S_5V_1$  video. Middle - panorama of the same area of Kharkiv on <u>Google Maps</u><sup>57</sup> as seen in  $S_5V_1$ , but from a slightly different perspective. Bottom - an alternative panorama of the same area of Kharkiv also on <u>Google Maps</u>58.

https://maps.app.goo.gl/Pqw1yguwjnrYyiRA7
https://maps.app.goo.gl/4ySmC1g4MPysJhup7



Screenshot of Google Earth Pro indicating an area visible on the footage of explosions from S6V1 (Credit: Google/Maxar Technologies).



Panorama stitched from stills of S6V1 depicting all visible buildings in a combined image.

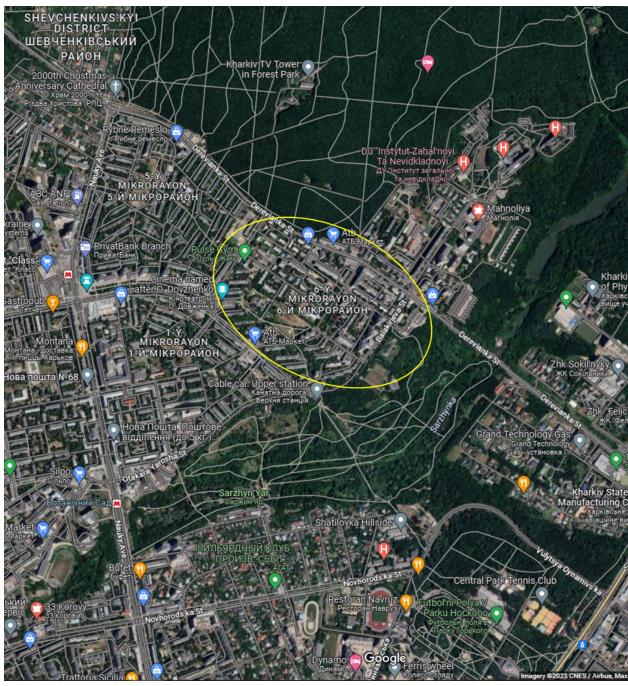


Panorama stitched from screenshots of Google Earth Pro indicating sequence of buildings as seen on panorama made from stills of S6V1 above (Credit: Google/Maxar Technologies).



Left: A screenshot made from Google Earth Pro showing building 10 from the panorama stitched from stills of S6V1 from the perspective of a satellite view. Right - screenshot made from Google Maps <u>Street View</u>59 showing the same building marked with 10 from the perspective of the ground view.

<sup>59</sup> https://maps.app.goo.gl/k2rDYiEEtJsCKT9k9



Screenshot of Google Maps showing the area of explosions visible on S5V1 and S6V1 marked with a yellow oval (Credit: Google/Maxar Technologies).

The distance from furthest left to furthest right sides of the area of explosions (marked with yellow oval on the image above) shown on  $S_5V_1$  and  $S_6V_1$  appears to be around  $7_5O$  m. The approximate area of impact could be up to 409,355 m<sup>2</sup>.

CIVoo90 was also assessed to show the same location on the same date as CIVoo83 and hence was also included in this assessment. This incident only included a single source -  $\underline{\$7V1}^{60}$ , which shows smoke rising from the area impacted by the submunitions and was taken from  $\underline{50.0353}$ ,  $\underline{36.2371}^{61}$  depicting the view to the south.



Top left: A composite panorama of stills from S7V1. Note the distinctive building highlighted in yellow. Top right: distinctive building as seen on Google Maps <u>Street View</u><sup>62</sup> in June 2015. Bottom: Point of view of S7V1 as seen on satellite imagery (Credit: Google/Maxar Technologies).

60 https://twitter.com/juliaskripkaser/status/1498254899792027653

<sup>61</sup> https://maps.app.goo.gl/eemuMm9tDAaQNDZF9

<sup>62</sup> https://maps.app.goo.gl/tmVHdBzeobmeMxAw5

S8V163 can be identified as having been filmed at 50.0324, 36.234764.



Top: A composite panorama of stills from S8V1. Bottom: Satellite image showing the point of view (Credit: Google/Maxar Technologies).

https://t.me/truexanewsua/26155
https://maps.app.goo.gl/heReQ9V8NBZHkNL28



Top: A composite panorama of stills from S8V1. Bottom: Satellite image showing the point of view. (Credit: Google/Maxar Technologies).

#### When Was the Incident?

All sources, with the exception of Source 4, were posted on 28/02/2022 and either directly claim, or imply, that the incident happened that day. Source 4 was posted a day later, on 01/03/2022; however, it contains a timestamp which indicates the date as 28/02/2022. Additionally, all descriptive sources note this event took place on 28/02/2022. During research, no historic incidents were identified which could be confused with this event. Hence, the date of this incident is almost certainly 28/02/2022.

Source 4 is a dashcam video which includes a timestamp indicating it was filmed at 12:46. The weather seen in the identified sources does not allow for the use of shadows for chronolocation. However, most sources were posted within three hours of 12:46 EET, with the first (Source 9) being posted at 13:02 EET. This pattern of posting by multiple different sources is consistent with the event having begun shortly before 13:00 EET. As such the time seen in Source 4 of 12:46 is likely accurate, and is likely in EET.

#### What Kind of Munition Was Used?

Sources 1-3 and 7 do not depict any munition and were filmed after the attack, focusing on the victims and damage. Sources 4-6, however, show the actual attack and are indicative of cluster munitions due to the large number of smaller detonations over a very short period of time.

S8V1<sup>65</sup> depicts two small craters which are consistent with those caused by submunitions.



Craters seen in S8V1.

<u>S9I1</u><sup>66</sup>, which was reportedly taken at the scene of this attack, clearly depicts a submunition. Amnesty International <u>identified</u><sup>67</sup> this as a 9N235 submunition manufactured in 2019. This is consistent with the Investigator's assessment of this munition and conclusion that it is either a 9N210 or 9N235 submunition (which are externally identical), manufactured in 2019 due to the year of manufacture seen on the casing.

This year of manufacture is significant, as these submunitions are manufactured by Russia and have not been supplied to Ukraine since Russia's 2014 invasion. As such this submunition is identifiably of Russian origin.

<sup>65</sup> https://t.me/truexanewsua/26155

<sup>66</sup> https://twitter.com/DoctorOfRadost/status/1498433559509434369

<sup>&</sup>lt;sup>67</sup> https://twitter.com/amnesty/status/1499357519327731716?s=20



Left: Submunition seen in S9I1. Right: 9N235 submunition as seen on CAT-UXO<sup>68</sup>.

## Is There Any Indication of What This Location Was Used for?

The area affected appears to be a street in the middle of a residential area. However, that located on this street is also a company called XADO, depicted in \$\frac{\sum\_3V1}{69}\$. According to the \$\frac{\textrm{BBC}}{\textrm{BBC}}\$, "XADO is a chemical company that is also understood to have made rifles." According to Google Maps, the building where XADO is at 4 23-ho Serpnya Lane, is a "\$\frac{\textrm{Sports and Hunting Shooting Club}}{\textrm{Club}}\$. However, some import \$\frac{\textrm{websites}}{\textrm{2}}\$^2 also refer to XADO Tech in Kharkiv with a similar address - 4 23-ho Serpnya Lane but with differing postal codes, one of these postal codes aligns with 23-ho Serpnya Street - which was also attacked on 28 February. The distance between these two locations is 2 km.

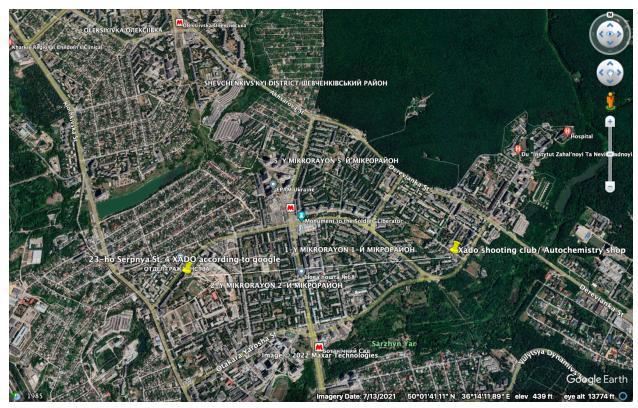
<sup>68</sup> https://cat-uxo.com/explosive-hazards/submunitions/9n235-submunition

<sup>69</sup> https://www.youtube.com/watch?v=ZxbtmjmBW-A

<sup>70</sup> https://www.bbc.com/news/60591017

<sup>71</sup> https://maps.app.goo.gl/nyx8B4PE9YmiwVk66

<sup>&</sup>lt;sup>72</sup> See for example: https://www.importgenius.com/suppliers/xado-technology-ltd; https://www.importyeti.com/supplier/xado-technology.



Two locations believed to be housing XADO (Credit: Google/Maxar Technologies).

It is unclear what XADO's purpose was at the time of the attack as there are differing accounts online. The Month of the attack as there are differing accounts online. The Month of Washington on the size and location within a residential area it is unlikely it was used to produce large amounts of weapons, if any. It should be noted that a Ukrainian flag on a flagpole is alongside another flag in front of XADO - it is unknown whether there is an official national partnership or not.

### Were There Military Structures, Installations or Other Assets in the Area?

470 m away from 23-ho Serpnya Lane at 50.0368, 36.2420,<sup>74</sup> Google Earth Pro imagery from 14 July 2021 shows a compound that holds what appear to be military vehicles. It is unclear whether this was still in use in February 2022.

<sup>&</sup>lt;sup>73</sup> See for example, Vgorode KH which lists this address and some of XADO's services as ""Services: shooting range, weapons workshop, weapons shop" - https://kh.vgorode.ua/reference/tyry/76561-khado <sup>74</sup> https://maps.app.goo.gl/Dwt3pbRngMuWqWTv5



Top: Google Earth Pro Imagery taken on 14 July 2021. Area showing what appear to be military vehicles highlighted in green and a yellow pin marking a distance to the place of incident. Bottom: The same location, zoomed in for visualisation purposes (Credit: Google/Maxar Technologies).

1.74 km to the south east from where the attack took place is an airfield as well as the Kharkiv State Aircraft Manufacturing Company – it is, however, unclear if these were military structures at the time of the incident.



Google Earth Pro Imagery from 13 July 2021 showing distance between CIV0083 and Kharkiv State Aircraft Manufacturing Company (Credit: Google/Maxar Technologies).

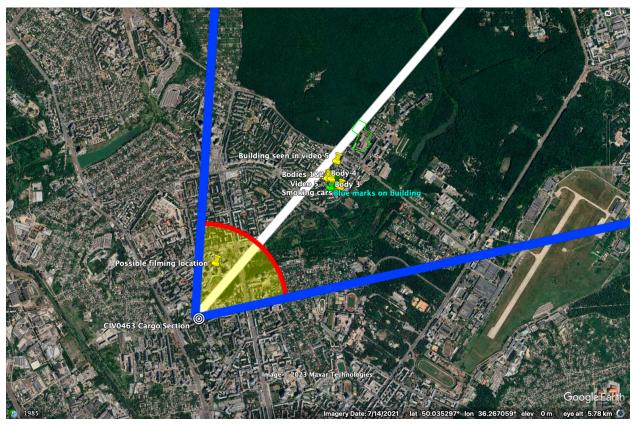
## **Any Identifiable Crimes?**

According to local media reports, four people were killed as a result of this attack. In imagery from Sources 1-3, two people are seen laying on the ground, next to a water dispenser, immobile and bloodied - appearing to be dead. Across from them another person is visible who appears to be injured, propped up against a garage with people attending to them. In Source 4, a person who is upright appears to fall down once the attack begins - it is unclear whether or not they survived the attack or were among the four dead as reported by local media. All of these people appear in plain clothes.

There also appears to be some property damage to cars and roads on 23-ho Serpnya Lane.

## Is There Any Evidence of the Direction the Munition Came from?

A possible indicator of origin was identified when examining other incidents that occurred in this area on this date. The cargo warhead identified in incident CIVo463 impacted approximately 2 km to the south west of the location of CIVoo83 on the same date. The assessed direction of origin for this cargo section, which was conducted independently to CIVoo83, passed directly over the impact area of submunitions identified in CIVoo83.



Screenshot from Google Earth showing the assessed direction of origin of the cargo section seen in CIV0463, as well as the pins indicating the location affected by the submunitions seen in CIV0083 (Credit: Google/Maxar Technologies).



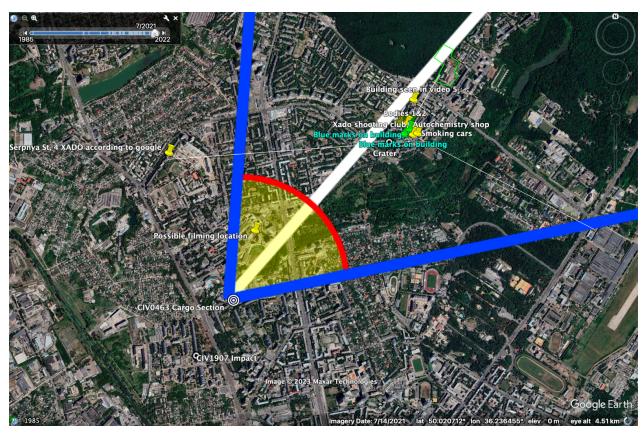
Likely area of origin of munition from incident CIV0463 outlined in red (Credit: Google/Landsat/Copernicus).

A further indication may be provided by an incident depicted in CIV1907 that occurred further to the south-west, at <u>50.0163</u>, <u>36.2128</u><sup>75</sup>, where what was likely a 9M55K rocket motor impacted a roof.

A <u>dashcam video</u> seen in CIV1907<sup>76</sup> indicates that this incident occurred at 13:48 EET; however, this dashcam is certainly incorrect due to social media posts showing the damage after the same incident posted at 13:28 EET. However, if the owner had not adjusted the dashcam for daylight savings time, this would mean that video was filmed two minutes after the impact of the submunitions seen in CIV0083, and the debris spray indicates the motor was moving roughly from east to west at the time of impact. This incident also aligns closely with CIV0463.

<sup>75</sup> https://maps.app.goo.gl/LhD3w9ntmQzRqhVM7

<sup>&</sup>lt;sup>76</sup> https://web.archive.org/web/20220613231815/https://t.me/hueviykharkov/47046



Impacts seen in CIV0083, direction of origin of CIV0463 and impact point of the rocket motor seen in CIV1907.

## **Any Other Relevant Information?**

Fighting between Ukrainian and Russian forces took place on 27/02/2022 within the city limits of Kharkiv. According to the regional governor in a <u>Facebook post</u><sup>77</sup>, Ukrainian forces had expelled Russian forces from the city by 12:00 EET on 27/02/2022. According to social media posts, Kharkiv was shelled during the early hours of the following morning, 28/02/2022, at <u>04:00 EET</u><sup>78</sup>. Many other incidents happened on this day in Kharkiv, including: CIV0082, CIV0084, CIV0086, CIV0088, CIV0090, CIV0091, CIV0093, CIV0095, CIV0097, and others.

<sup>77</sup> 

https://www.facebook.com/synegubov.oleg/posts/pfbidoNwGd5Bxe4UkM7cKja8jdd1F8TPKcwovhAMF9Hsmx5byJLPaynrZuniEVqTWjW84Gl

<sup>&</sup>lt;sup>78</sup> https://t.me/truexanewsua/25541

### **Timeline of the Incident**

27/02/2022: Fighting occurred inside the city limits of Kharkiv, but according to the Regional Governor, Oleh Sinegubov, Russian forces had been expelled by 12:00 EET:

- <u>Facebook post of Oleh Sinegubov</u><sup>79</sup>;
- Al Jazeera<sup>80</sup>;
- <u>BB</u>C<sup>81</sup>:
- <u>Telegram</u><sup>82</sup>.

28/02/2022: According to sources on Telegram, shellings occurred in the early hours of the morning in Kharkiv:

- 01:18 EET first post about shellings on <u>Telegram</u><sup>83</sup>;
- 04:00 EET post on <u>Telegram</u><sup>84</sup> talking about shelling in Kyiv and Kharkiv;
- 04:13 EET post on Telegram<sup>85</sup> reportedly showing the "night shelling";
- 10:23 EET <u>Telegram</u><sup>86</sup> post warning of an air alarm, urging people in Kharkiv to take shelter;
- 11:10 EET post on <u>Telegram</u><sup>87</sup> showing the earliest found video of a "barrage" hitting Kharkiv (see Incident CIVoo86);
- 12:46 EET on the timestamp from <u>Telegram</u>. 88 This video is posted the next day, 29/02/2022 at 08:15 EET
- 13:06 EET is reported by the <u>BBC</u><sup>89</sup> to be the time the first video of the event was posted;
- 13:15 EET post on <u>Telegram</u>90 showing a car on fire with caption "Переулок 23 Августа. Харьков";
- 13:24 EET Source 191 is posted.

<sup>79</sup> 

https://www.facebook.com/synegubov.oleg/posts/pfbidoNwGd5Bxe4UkM7cKja8jdd1F8TPKcwovhAMF9Hsmx5byJLPaynrZuniEVqTWjW84Gl

<sup>&</sup>lt;sup>80</sup>https://www.aljazeera.com/news/2022/2/27/street-battles-in-kharkiv-as-russians-enter-ukraines-2nd-city

<sup>81</sup> https://www.bbc.com/news/world-europe-60543087

<sup>82</sup> https://t.me/uniannet/32867

<sup>83</sup> https://t.me/truexanewsua/25530

<sup>84</sup> https://t.me/truexanewsua/25577

<sup>85</sup> https://t.me/uniannet/33203

<sup>86</sup> https://t.me/hueviykharkov/46954

<sup>87</sup> https://t.me/truexanewsua/25857

<sup>88</sup> https://t.me/vekha/30412

<sup>89</sup> https://www.bbc.com/news/60591017

<sup>90</sup> https://t.me/truexanewsua/25968

<sup>91</sup> https://t.me/truexanewsua/25978

### Statements from Parties of the Conflict

#### Ukraine

- 1) President Volodymyr Zelenskyy in his daily war-time address, <u>mentions attacks</u><sup>92</sup> on Kharkiv but not specifically this incident.
- 2) Zelensky speech on 01/03/2022, <u>calls a strike</u><sup>93</sup> on central square in Kharkiv a war crime.
- 3) Kharkiv Mayor mentions<sup>94</sup> this incident in his address.

#### Russia

- 1) Kremlin's spokesperson Dmitry Peskov <u>denies</u>95 cluster munitions use in Ukraine.
- 2) Ria Novosti <u>article</u><sup>96</sup>, saying that the Russian Ministry of Defence is only using "high precision" weapons on military assets.

#### Conclusion

A cluster munition attack took place on 23-ho Serpyna Lane sometime before 13:24 EET, likely at 12:46 EET. There are four visible casualties throughout the sources, two of whom appear immobile. Based on information from open sources, it appears that the attack was a cluster munition attack. The attack may have been targeting XADO, however, it appears that only two cars in the front of the building were impacted, while at least four people in plain clothes were hit.

### **Further Action**

CIV0091 occurred on the same day close by. The timing should be analyzed as CIV0091 was a cargo warhead landing in a home. Further analysis is merited on the relationship between the attack on 23-ho Serpyna Street and 23-ho Serpyna Lane as they likely occurred at similar times. Investigator requests to take on the investigation of what is believed to be related incidents: CIV0090 and CIV1907, CIV0082 and CIV0463.

<sup>92</sup> 

https://www.president.gov.ua/news/zlo-ozbroyene-raketami-bombami-j-artileriyeyu-treba-zupiniti-7325

https://www.president.gov.ua/news/raketa-po-centralnij-ploshi-harkova-ce-terorizm-i-rosiya-may-7326

 $<sup>^{94}\</sup> https://www.city.kharkov.ua/uk/news/igor-terekhov-kharkivyani-vi---spravzhni-geroi-49922.html$ 

<sup>95</sup> https://www.gazeta.ru/politics/2022/03/01/14589073.shtml

<sup>96</sup> https://ria.ru/20220228/kharkov-1775487722.html