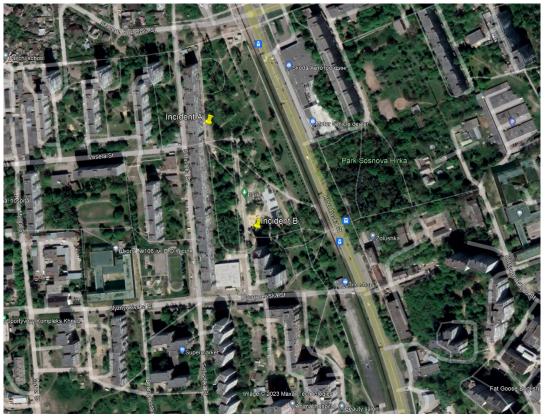
| Incident ID | CIV0082 |
|-------------|--|
| Location | 197 Klochkivska Street, Kharkiv, 61000 |
| Coordinates | <u>50.0179, 36.2126</u> ¹ Incident A <u>50.0165, 36.2136</u> ² Incident B |
| Date | 28/02/2022 |
| Time | Both Incidents took place between 06:20 - 13:25 EET |

Incident Assessment

Description of the Events

In the early afternoon of 28/02/2022, what appears to have been a cluster munition attack took place 197 Klochkivska Street district in Kharkiv. The earliest identified upload of images of the Incident A was posted on 28/02/2022 at 13:25 EET. The post contains an image of a rocket remnant embedded in the ground in front of what appears to be a pet store located on the first floor of a residential building. At least one person was reported dead in this Incident.

A second rocket motor impacted (Incident B) at almost the same location, at around the same time. As such this has been included as part of CIV0082.



Vicinity of showing impact locations of Incident A and B.

¹ https://maps.app.goo.gl/2UVUoWwgtFam6cvM6

² https://maps.app.goo.gl/u1GqGDTC4547WS5e9

Key Findings

- On 28/02/2022, several videos and images of rocket remnants embedded in the ground in front of what appears to be a pet store located on the first floor of a residential building were posted (further "**the Incident A**").
- Also on 28/02/2022, at approximately the same time, another rocket remnant was embedded in the ground next to what appears to be a playground within a 150 meter distance from Incident A (further "**the Incident B**").
- Incident A was geolocated to <u>50.0179</u>, <u>36.2126</u>³, which corresponds to the address: 197 Klochkivska Street in the city of Kharkiv, Ukraine, 61000.
- Incident B was geolocated to <u>50.0165, 36.2136</u>⁴.
- The rocket fragments of the incidents A and B appear to be from a 9M55K rocket motor.
- No military objects were identified in the likely area of impact, however the Ivan Kozhedub National Air Force University is located just over 1 km away from the impacts.
- The possible area of impact of the submunitions was not identified.
- The exact location of the launches was not identified, however it is possible to identify the general direction of origin.
- It is possible that this incident is connected to CIV0463.

Description of Searches

The CIVHARM sheet lists at least four sources for this Incident A. <u>Source 1⁵</u>, mentioned above, contains an image of a rocket remnant embedded in the ground in front of what appears to be a pet store located on the first floor of a residential building. At least one person was reported dead in this Incident.

There is a video (<u>Source 2</u>⁶) of the aftermath of the Incident A depicting a woman lying on the floor with her legs amputated as a result of a strike. The video also shows the surroundings near the pet store depicting munition remnants embedded in the ground, blood stains and pieces of flesh of possible other victims of the Incident A.

Another video listed (<u>Source 3</u>⁷) on the CIVHARM sheet provides footage of a munition remnant embedded in the ground and shows the area right next to it. A voice behind the camera mentions that there are parts of a human brain remaining on the ground. Blood stains and part of what could be pieces of flesh are visible on the ground.

The CIVHARM sheet also contains a link to a post on Twitter (Source 4^8), which provides four images of various munition remnants embedded in the ground in different areas of Kharkiv on 28/02/2022, including one image from the Incident A on Klochkivska Street.

³ https://goo.gl/maps/Vuw10mYdQ8GU6BJE7

⁴ https://maps.app.goo.gl/u1GqGDTC4547WS5e9

⁵ http://t.me/hueviykharkov/46999

⁶ https://t.me/voynareal/10903

⁷ https://t.me/truexanewsua/26053

⁸ https://x.com/StudMedia/status/1498259214770257920

Searches for more information on the Incident A, including more pictures, videos, etc., of the possible strike were conducted for the day of 28/02/2022 in the area near Klochkivska Street in the city of Kharkiv in three languages: English, Ukrainian and Russian. These searches led to dozens of media reports from all over the world, as well as footage of this Incident on Youtube recorded by eyewitnesses of the Incident at the moment of strike (Source 5⁹ and Source 6¹⁰). Source 6 appears to contain at least some indications of another strike happening a few seconds before the Incident A within the distance of 150 meters (Incident B).

The aftermath of Incident B can be seen on the videos (<u>Source 7</u>¹¹ and <u>Source 8</u>¹²) showing munition remnants embedded in the ground next to a playground.

Background Summary of Significant Descriptive Content

Media Reports

- <u>Washington Post</u>¹³ a report on attacks in Kharkiv on 28/02/2022, as well as a video detailing rocket remnants embedded in the ground on Klochkivska Street and a playground in a park nearby;
- <u>Al Jazeera¹⁴</u> a report on attacks in Kharkiv on 28/02/2022;
- <u>The Guardian¹⁵</u> a report on attacks in Kharkiv on 28/02/2022, as well as an image of the rocket remnant embedded in the ground on Klochkivska Street;
- <u>Kharkiv Today</u>¹⁶ a report on attacks in Kharkiv on 28/02/2022, mentions this Incident;
- <u>Hromadske</u>¹⁷ mentions aftermath of the attack on Kharkiv on 28/02/2022;
- <u>Newsroom</u>¹⁸ a local news report about this Incident.

NGO Reports

- <u>HRW</u>¹⁹ report mentions the incident on Klochkivska Street;
- <u>Atlantic Council</u>²⁰ mapped attack on 28/02/2022 in Kharkiv including the Incident on Klochkivska Street.

⁹ https://yandex.com/video/preview/16824370174592866290

¹⁰ https://www.youtube.com/watch?v=xGkcNQ1TzIs

¹¹ https://t.me/kharkov_now/10305

¹² https://www.washingtonpost.com/world/2022/02/28/kharkiv-rockets-shelling-russia-ukraine-war/

¹³ https://www.washingtonpost.com/world/2022/02/28/kharkiv-rockets-shelling-russia-ukraine-war/

https://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%20official s

¹⁵

https://www.theguardian.com/world/2022/feb/28/ukraine-several-killed-by-russian-rocket-strikes-in-civilian-areas-of-kharkiv

¹⁶ https://2day.kh.ua/ru/kharkow/gde-v-kharkove-popali-pod-obstrel-doma

¹⁷ https://hromadske.ua/posts/unaslidok-obstriliv-u-harkovi-zaginulo-9-lyudej-she-desyatki-poraneni

https://www.newsroom.kh.ua/news/v-harkove-na-klochkovskoy-upali-reaktivnye-snaryady-est-ranenye ¹⁹ https://www.hrw.org/news/2022/03/04/ukraine-cluster-munitions-launched-kharkiv-neighborhoods ²⁰

https://www.atlanticcouncil.org/blogs/new-atlanticist/mapped-russias-shelling-of-civilians-in-kharkiv/

Other

• <u>Wikipedia page</u>²¹ - overview of Kharkiv being shelled with cluster munition on 28/02/2022.

Analysis of Examinable Content

• <u>Source 1²²</u>: An image posted on Telegram on 28/02/2022 at 13:25 EET, showing rocket remnants embedded in the ground in front of what appears to be a pet store.



Image contained in the Source 1 (S1I1).

• <u>Source 2</u>²³: [Graphic] A video posted on Telegram on 28/02/2022 at 13:28 EET. The post depicts a woman lying on the floor with her legs amputated as a result of the strike, as well as showing the surroundings near the pet store depicting munition remnants embedded in the ground, with blood stains and parts of flesh of possible other victims of the hit.

²¹

https://uk.wikipedia.org/wiki/%D0%9E%D0%B1%D1%81%D1%82%D1%80%D1%96%D0%BB_%D0%A 5%D0%B0%D1%80%D0%BA%D0%BE%D0%B2%D0%B0_%D0%BA%D0%B0%D1%81%D0%B5%D1%8 2%D0%BD%D0%B8%D0%BC%D0%B8_%D0%B1%D0%BE%D1%94%D0%BF%D1%80%D0%B8%D0% BF%D0%B0%D1%81%D0%B0%D0%BC%D0%B8_(28_%D0%BB%D1%8E%D1%82%D0%BE%D0%B3% D0%BE_2022)

²² http://t.me/hueviykharkov/46999

²³ https://t.me/voynareal/10903



A still from a video depicted in Source 2 (S2V1).

• <u>Source 3²⁴</u>: A Telegram video posted on 28/02/2022 at 14:15 EET. The video depicts a munition remnant embedded in the ground and shows the area right next to it. A voice behind the camera mentions that there are parts of what appears to be a human brain on the ground. Blood stains and parts of what could be human flesh are visible on the ground.



A still from a video depicted in Source 3 (S3V1).

²⁴ https://t.me/truexanewsua/26053

• <u>Source 4</u>²⁵: Images posted on Twitter images on 28/02/2022 at 13:44 EET. The post depicts 4 images of various munition remnants embedded in the ground in different areas of Kharkiv on 28/02/2022, including one image (image 4) from the Incident on Klochkivska Street. This image is the same as as S1I1.



Image 4 from Source 4 (S4I4) depicting munition remnants.

• <u>Source 5</u>²⁶: A Youtube video posted on 28/02/2022 at 14:16 EET. The video shows extensive queues of tens of civilians. Some people were reportedly waiting outside for a grocery shop to open, others in line to a pet store and others for bread distribution. The victim whose legs were later amputated (S2V1) is visible among tens of people in the queue. The video depicts the area and people at the moment of the strike. From 03:04 it is possible to see what appears to be the cone from a rocket motor bouncing away from the point of impact.

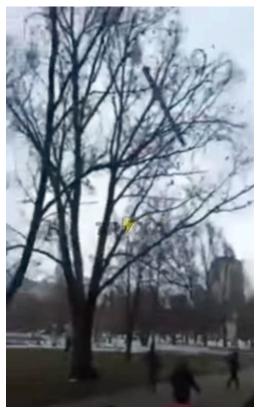


A still from a video depicted in Source 5 (S5V1).

²⁵ https://x.com/StudMedia/status/1498259214770257920

²⁶ https://www.youtube.com/watch?v=xGkcNQ1TzIs&t=125s

• <u>Source 6</u>²⁷: A Youtube video posted on 28/02/2022 at 17:21 EET. The video depicts the moment of the strike on Klochkivska Street. The munition remnants landing and striking the ground is visible. The civilian crowd is seen running in panic and screaming.



A still from a video depicted in Source 6 (S6V1).

• <u>Source 7²⁸</u>: A video posted on Telegram on 28/02/2022 at 19:44 EET. Video shows the aftermath of a strike with munition remnants embedded in the ground next to a playground.

²⁷ https://www.youtube.com/watch?v=X4Dw_8eDOxk

²⁸ https://t.me/kharkov_now/10305



A still from a video depicted in Source 7 (S7V1).

• <u>Source 8</u>²⁹: A WashingtonPost video posted on 28/02/2022. The video was taken by the Kharkiv local resident and shows the aftermath of cluster munition attack on Klochkivska Street.



A still from a video depicted in Source 8 (S8V1).

All sources depict around the same location, at various points on 197 Klochkivska Street.

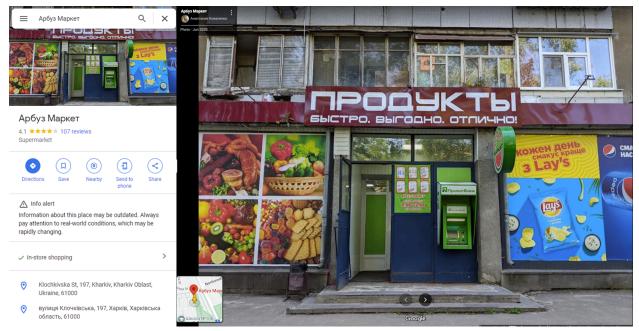
²⁹ https://www.washingtonpost.com/world/2022/02/28/kharkiv-rockets-shelling-russia-ukraine-war/

Questions to Investigate

Where Was the Incident A?

<u>Source 3</u>³⁰ identifies the Incident to have occurred on Klochkivska Street. Specifically, a description of the Telegram post says: "Китайская стена на Клочковской", which translates into English as "Chinese wall on Klochkivska", meaning there could be a long building like Great Wall in China, which is located on Klochkivska Street. This is aligned with the coordinates provided by the Global Authentication Project: 50.0178, 36.2126³¹.

Google Maps does not provide for a street view of this location. However, Google Maps has images of commercial locations at the address 197 Klochkivska Street. Namely, Google Maps provides 8 images of supermarket "Arbuz", as well as 3 images of the pharmacy store "Medi F". Images of both the supermarket and pharmacy store match images and videos of the Incident provided by Sources 1-7. Below is a series of images and collages depicting matching details of the location of the Incident and footages of the Incident provided by Sources 1-7.

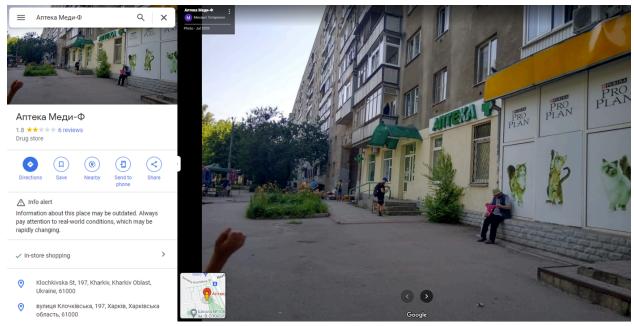


A <u>screenshot</u>³² from Google Maps showing the address, as well as an exterior image of the supermarket "Arbuz".

³⁰ https://t.me/truexanewsua/26053

³¹ https://maps.app.goo.gl/aDWXskNYWKKgd1qJ8

³² https://maps.app.goo.gl/WUqnxoQUavGUv3mQA



A <u>screenshot</u>³³ from Google Maps showing the address, as well as an exterior image of the pharmacy "Medi-M" also depicting the facade of the neighboring pet store.

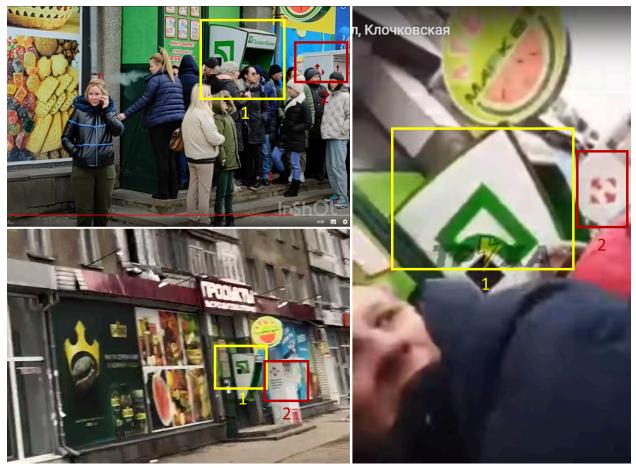


Left: S4I4 showing the facade of the pet store (marked in blue). Middle: Screenshot from S5V1 at 02:02 showing the facade of the pet store (marked in blue), as well as the facade and sign of the supermarket "Arbuz" supermarket (marked in red). Right: Screenshot from S6V1 at 00:13 showing the sign of the supermarket "Arbuz" (marked in red).

³³ https://maps.app.goo.gl/y6yAVwWMZLLxVJGh6



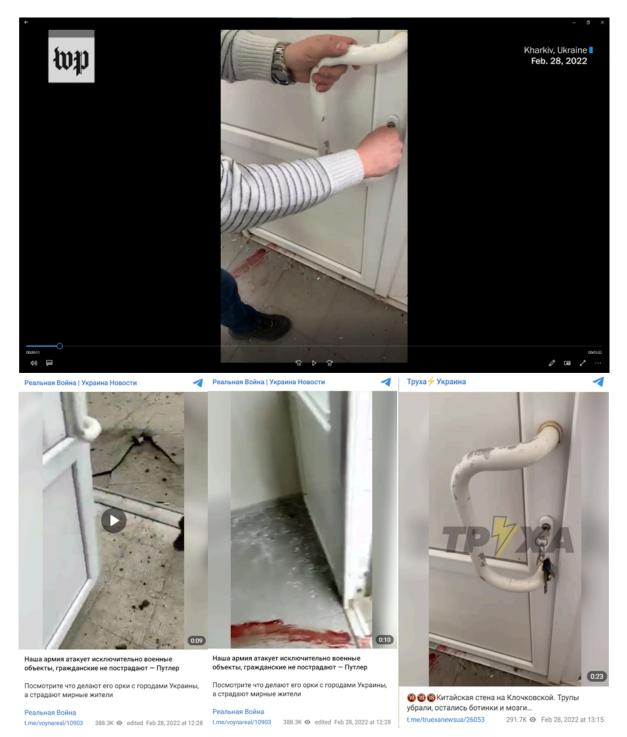
A composite panorama of S8V1 (stills taken between 00:17-00:22), showing the facade of the building on 197 Klochkivska Str., as stated by the man taken a video; as well as sequence of stores: the pharmacy, pet store (marked in blue) and supermarket "Arbuz" (marked in red).



Top left: A screenshot from S5V1 depicting an ATM with a green logo (marked in yellow). Bottom left: The same ATM and a white box (marked in yellow and red) visible in S5I1. Right: A screenshot from S6V1 Source 6, depicting the same ATM and white box.

S2V1, S3V1 and S7V1 start from what appears to be the same spot inside the building at the entrance of the pet store. All three videos start with a person walking through what appears to be the same corridor with blood spots towards a white door. The door opens to what appears to

be the same set of stairs, followed by identical cracks in the asphalt where the munition remnants embedded.



A collage of sources depicting what appears to be the same hall and white door. Top: A screenshot from S7V1 taken at 01:32. Bottom left: A screenshot from S2V1 taken at 00:09. Bottom center: a screenshot from S2V1 taken at 00:10. Bottom right: A screenshot from S3V1 taken at 00:23.



Реальная Война | Украина Новости

Труха 🗲 Украина



Наша армия атакует исключительно военные объекты, гражданские не пострадают – Путлер

Посмотрите что делают его орки с городами Украины, а страдают мирные жители

388.3K 👁 edited Feb 28, 2022 at 12:28

Реальная Война t.me/voynareal/10903



🔞 🔞 Китайская стена на Клочковской. Трупы убрали, остались ботинки и мозги... 291.7K • Feb 28, 2022 at 13:15 t.me/truexanewsua/26053

A collage of sources showing what appear to be the same munition fragment. Top - A screenshot from S7V1 taken at 00:11. Bottom left: A screenshot from S2V1 taken at 00:08. Bottom right: A screenshot from S3V1 taken at 00:15.

When Was the Incident A?

Sources 1-4 were posted on 28/02/2022 in the afternoon, with the Source 1 being the earliest at 13:25 EET. Sources 5 and 6 were posted on Youtube on 28/02/2022 at 14:16 EET and 17:21 EET accordingly. Source 8 - an article about Kharkiv shelling, was published on 28/02/2022 at 15:25 EET.

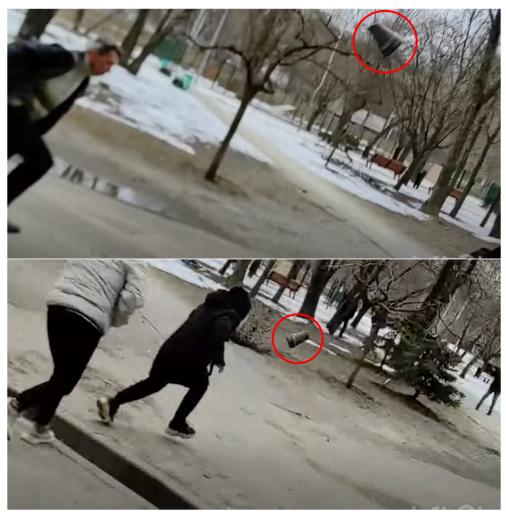
According to the <u>SunCalc³⁴</u>, in this location the sun rose at 06:20 and set at 17:15 EET - a range in which the Incident A clearly falls within. Other techniques to determine the exact time, such as shadow analysis, were not possible due to the cloudy conditions.

As such, it appears that Incident A took place on 28 February at an undetermined time after the dawn at 06:20 and before the first imagery was posted at 13:25 EET.

What Kind of Munition Was Used?

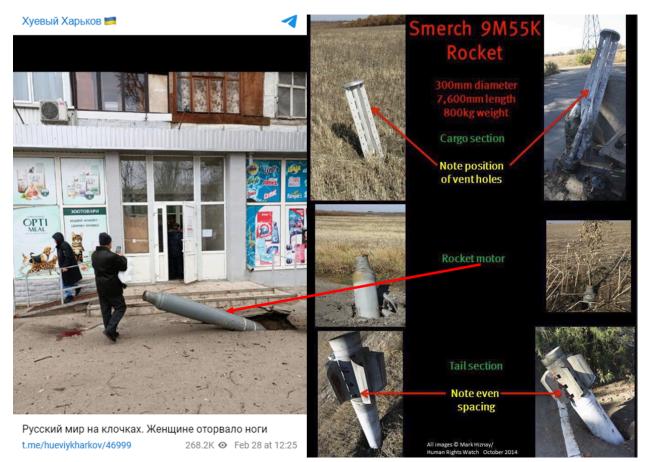
S5V1 and S6V1 do not clearly depict any munition as they were filmed at the moment of the impact, focusing on the crowd present. However, S5V1 does depict what appears to be a cone of a rocket motor being thrown from the impact at 03:04.

³⁴ https://www.suncalc.org/



Stills from S5V1 depicting what appears to be a cone from the base of a rocket motor.

Sources 1-4, show the munition remnant embedded on the ground. The conical end of the rocket motor, as well as the general size matches reference photos of a 9M55K rocket.



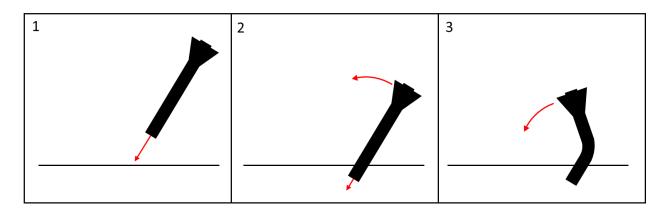
Left: S1I1 depicting a rocket motor embedde in the ground. Right: A <u>reference image</u>³⁵ from the official Twitter page of the Human Rights Watch Associate Arms Director.

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

It is assessed that the rocket motor was bent from the impact. A chunk of asphalt is missing from the northern side, indicating a hard impact from that direction.

Signs of lateral stress are visible on the rocket motor present at this location, further indicating that it was bent on impact. This can happen when a rocket motor impacts the ground while still having forward momentum. The front section becomes buried, while the rear section continues forward, buckling away from the direction of origin.

³⁵ https://twitter.com/MarkHiznay/status/1496719886009126912?s=20&t=YjisQbzlIfzMFdp_0zO0Kw



This buckling is most evident in Source 7.



Still from S8V1 clearly shows how the rocket motor has buckled.

It is also worth noting that S6V1 provides footage of the exact moment of the rocket strike. It appears that the rocket goes over the place where the man with the cane is located (near the entrance of the supermarket "Arbuz"), and hits the ground further on along the building (in front of the pet store which appears to be further south).

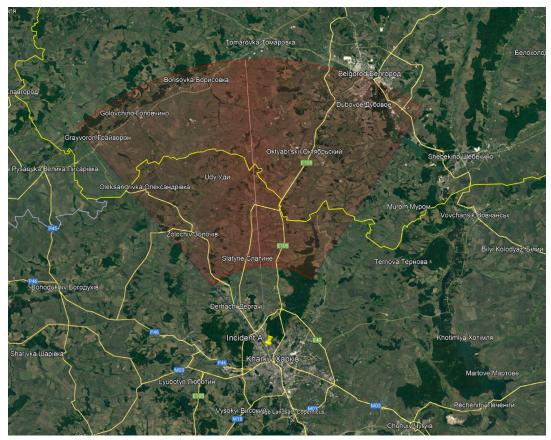


Stills from S6V1 depicting the moment of strike.

The angle at which the rocket motor impacted the ground, as well as the video showing the moment of impact, allowed the investigator to establish a rough direction of origin, assessed as being on a bearing of 358 degrees from the point of impact. According to the <u>Army Recognition</u>,³⁶ a 9M55k rocket has a range of 20 to 70 km. When combined with the arc of direction of origin, this gives us an area of origin within which this 9M55K was likely fired.

³⁶

 $https://www.armyrecognition.com/russia_russian_army_vehicles_system_artillery_uk/bm-30_smerch__9k58_300mm_multiple_rocket_launcher_system_technical_data_sheet_information_description.html$



A satellite imagery from Google Earth Pro showing the area, from which the attack related to Incident A was likely to have originated from, overlaid with a 70 km arc (Credit: Google Earth Pro).

Where Was the Incident B?

Source 8 identifies the Incident B to have occurred on Klochkivska Street. Specifically, a man taking a video says at 00:59: "The same building on Klochkovska 197, Kharkiv, Ukraine".

Google Maps does not provide for a street view of this location. However, both Google Maps and Google Earth Pro provide satellite imagery of the playground, as well as 68 pictures of "Skate Park" neighboring the playground.

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| ▲ Info alert Information about this place may be outdated. Always pay attention to real-world conditions, which may be rapidly changing. | | | |
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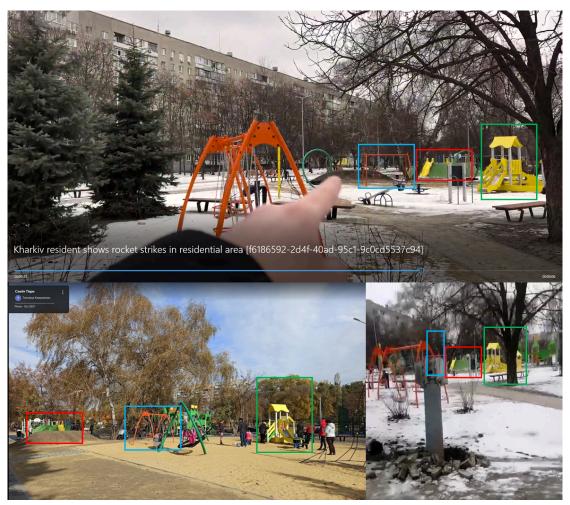
Screenshot of <u>Google Maps</u>³⁷ indicating the information, and a number of pictures of "Skate park" and playground where the munition remnant embedded next to (Credit: Google Maps).



Left - cropped screenshot of S8V1 taken at 00:58 depicting: swings (marked with blue rectangle); corner of the first floor of an apartment building with an air conditioner on external wall (marked with green rectangle); as well as a sequence of high rise apartment buildings visible behind (marked with red rectangle). Right - A screenshot of <u>one an image</u>³⁸ of "Skate Park" from Google Maps depicting the same objects marked (Credit: Google Maps).

³⁷ https://maps.app.goo.gl/iCwyGzr9g5DtsEGv6

³⁸ https://maps.app.goo.gl/zFNgAEUVCfv5j5LH6



Top: A screenshot from S8V1 taken at 01:17 with a person pointing towards the area near supermarket "Arbuz" where Incident A happened. The person is standing next to the munition remnant embedded next to the playground. The playground has a yellow slide with a yellow roof (marked in green), a yellow slide on a green hill (marked in red) and a set of orange swings (marked in blue). Bottom right: Same details visible in a still (cropped) taken from S7V1 at 00:02. Bottom left: An image of the "Skate Park" from <u>Google Maps</u>³⁹ depicting matching details (Credit: Google Maps).

Thus Incident B could be geolocated at 50.0165, 36.2136⁴⁰.

When Was the Incident B?

Sources 1-4 were posted on 28/02/2022 in the afternoon, with the earliest being Source 1 at 13:25 EET. Sources 5 and 6 were posted on Youtube on 28/02/2022 at 14:16 EET and 17:21 EET accordingly. Source 8 - an article about Kharkiv shelling, was published also on 28/02/2022 at 15:25 EET.

³⁹ https://maps.app.goo.gl/zFNgAEUVCfv5j5LH6

⁴⁰ https://maps.app.goo.gl/u1GqGDTC4547WS5e9

According to <u>SunCalc</u>⁴¹, in this location, the sun rose at 06:20 and set at 17:15 - a range in which the Incident falls within. Other techniques to determine the exact time, such as shadow analysis, were not possible due to the cloudy conditions.

As such, it appears the Incident likely took place on 28 February at an undetermined time after dawn, but before 13:25 EET.

It is worth noting that S5V1 provides audible sounds of explosions starting at <u>02:27</u>. The person who took the video was walking in the area near the supermarket "Arbuz" and the pet store among the people standing in lines. The first sounds of explosions seem to come from far away. Starting at 02:42 the volume of these explosions increases, and one of the voices behind the camera comments: "This is somewhere closer already". At 02:47 a loud noise, which seems to be consistent with something approaching and impacting, is audible. The person taking the video turns the camera towards what appears to be a playground, possibly due to the noise originating from that direction. At 03:02 there is another loud noise consistent with something approaching and impacting. The person taking the video as well as other people around start to run away from the area in panic. Considering the location of Incident B, the sounds heard in S5V1 and the reaction of the person filming, it is considered possible that Incident B happened a few seconds before Incident A.

What Kind of Munition Was Used?

S5V1 focuses on the crowd present and only briefly shows what appears to be a cone from a rocket motor, which likely originated from Incident A. S7V1 and S8V1 show the munition remnants embedded on the ground. The images of the remnants depicted by both sources clearly match the distinct tail of a 9M55K rocket.



Left: A screenshot of a rocket motor from S8V1. Middle: A <u>reference image</u>⁴² from the official Twitter page of the Human Rights Watch Associate Arms Director. Right: A screenshot of a rocket motor from S7V1.

⁴¹ http://suncalc.org

⁴² https://twitter.com/MarkHiznay/status/1496719886009126912?s=20&t=YjisQbzlIfzMFdp_0zO0Kw

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

Based on the angle of the rocket motor as observed in S7V1 and S8V1, the investigator made an assessment of the likely direction of origin. While the motor initially appeared to be pointing in a northerly direction, examination of the point of impact indicated a slightly different orientation, as the motor appeared to have created a linear trench on impact, indicating its direction of origin.



Still from S7V1, showing the trench created by the impact.

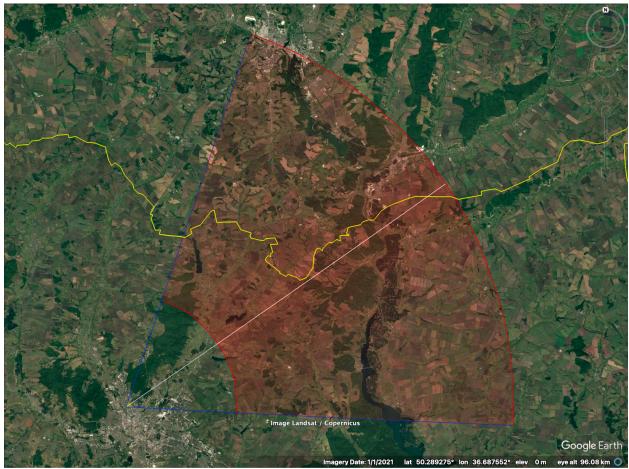
Taking this into account, the direction of origin was assessed as being along a bearing of 55 degrees from the point of impact.

According to the <u>Army Recognition</u>,⁴³ a 9M55k rocket has a range of 20 to 70 km. When combined with the arc of direction of origin, this gives us an area of origin within which this 9M55K was likely fired.

43

 $https://www.armyrecognition.com/russia_russian_army_vehicles_system_artillery_uk/bm-30_smerch__9k58_300mm_multiple_rocket_launcher_system_technical_data_sheet_information_description.html$

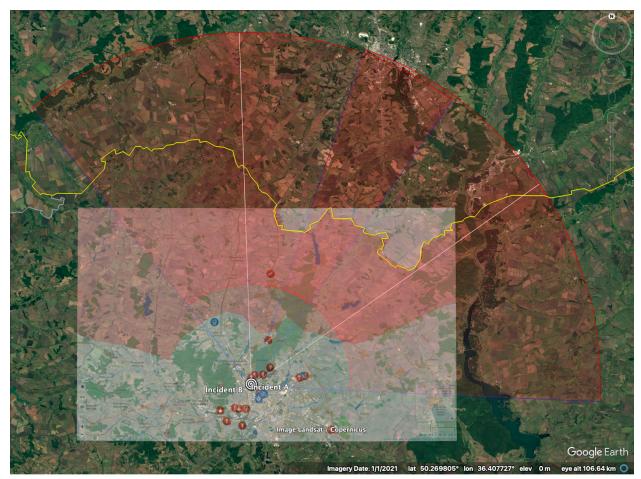
The investigator applied the standardized BM-30 direction of origin template, in order to assess the likely area of origin.



A satellite imagery from Google Earth Pro showing the area, from which the attack related to Incident B was likely to have originated from, overlaid with a 70 km arc (Credit: Google Earth Pro).

The direction of origin arcs for both Incident A and Incident B were combined with the data from <u>LiveUAMap</u>⁴⁴ showing the assessment of the presence of the Russian military. This data should be regarded as relatively rough.

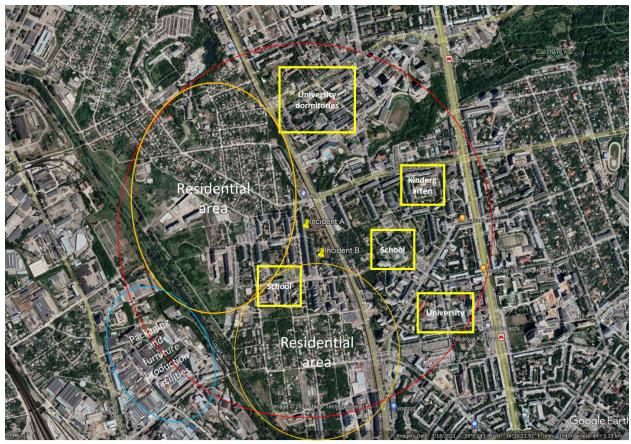
⁴⁴ https://liveuamap.com/



A screenshot of Google Earth Pro overlaid with a LiveUAMap view as of 28/02/2022 showing the area under control of the Russian army (red areas on the semi transparent white rectangle), and 20 and 70 km area in which the attacks related to Incident A and B likely originated from.

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

No military objects were identified through open source research within the area of 1 km radius around the two Incidents.



Screenshot of a satellite view from Google Earth Pro of the area of 1 km radius around Incident A and B marked with a red circle. This area mostly consists of residential blocks (marked with orange ovals), schools, kindergartens, universities and university dormitories (marked with yellow rectangles). On the south-west from the Incident there are some production facilities of furniture and packaging (marked with a blue oval) (Credit: Google Earth Pro).

However, at the 1 km limit from the point of impact at Incident A, the <u>Ivan Kozhedub National</u> <u>Air Force University</u>⁴⁵ is located. This university is run by the Ukrainian Ministry of Defence. The direction of origin for the rocket motor in Incident A appears to pass directly over this location.

⁴⁵ https://www.hups.mil.gov.ua/



Map depicting the impact points, the assessed directions of origin, and the Ivan Kozhedub Air Force University highlighted in yellow.

Were There Any Casualties?

Source 8 mentions 11 people in total killed in attacks in Kharkiv on 28/02/2022. According to reports by <u>Izvestia⁴⁶</u> and <u>Hromadske⁴⁷</u>, at least nine persons were killed as a result of attacks in Kharkiv on 28/02/2022. The media reports do not specifically mention how many people were killed fin which area of Kharkiv on this day.

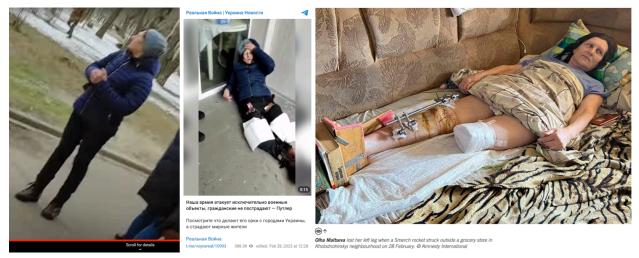
Sources 1, 2 and 8 mention a woman who had her legs amputated as a result of the rocket motor, which impacted as a part of Incident A. <u>A report</u>⁴⁸ of the Amnesty International on "Indiscriminate Attacks by Russian Forces In Kharkiv, Ukraine" also mentions an injured woman at Klochkivska Street on 28/02/2022. They name her as "Olha Maltseva".

⁴⁶

https://izvestia.kharkov.ua/proisshestvija/harkiv-zaznav-masovanogo-udaru-gradami-ie-zagibli-video-18

^{/47} https://hromadske.ua/posts/unaslidok-obstriliv-u-harkovi-zaginulo-9-lyudej-she-desyatki-poraneni

https://eurasia.amnesty.org/2022/06/13/sotni-vbitih-u-harkovi-vnaslidok-bezzhalnih-rosijskih-bombarduvan-nove-doslidzhennya-amnesty-international/



Left: A still from S5V1 made a few seconds before the strike depicting the woman looking in the direction of what seems to be the noise of explosions. Middle: A still from S2V1 depicting the victim after the strike waiting for an ambulance. Right: A screenshot taken from report of the Amnesty International.

Any Other Relevant Information?

Based on a <u>social media report</u>,⁴⁹ there was another incident at the same building located at 197 Klochkivska Street on 28/02/2022. As seen on a video, the top floor of the building was hit by what could be munition remnants or a projectile. The <u>Media report</u>⁵⁰ appears to contain a screenshot from an Instagram post, which is relevant to this event. This incident is investigated separately as part of CIV1907 due to an assessment that it may have occurred some time after CIV0082.

Incident CIV0119 in Bellingcat's Civilian Harm database may be connected to this event. In this incident a burnt-out vehicle vehicle is seen in a Telegram <u>post</u>⁵¹ containing what are claimed to be human remains. The post states that this was caused by a shelling from "Smerch", and the video was posted on 28/02/2022, the same date CIV0082 occurred. The weather is consistent with what is seen in other content from this date.

The vehicle is completely burnt-out and so any damage which could have been caused by fragmentation is not visible. No impact or fragmentation marks are visible on either the tarmac or grass. This incident could be geolocated to the south-eastern corner of the National Air Force University, approximately 1 km away from the points of impact of Incidents A and B.

 $^{^{49}}$ https://web.archive.org/web/20220613231815/https://t.me/hueviykharkov/47046 $^{_{50}}$

 $https://www.newsroom.kh.ua/news/v-harkove-na-klochkovskoy-upali-reaktivnye-snaryady-est-ranenye\,^{51}\,https://t.me/Tsaplienko/1319$



Left: A building marked as the "<u>Faculty of Information and Technical Systems</u>"⁵² (Credit: Google Street View). Right: A burnt-out car as seen in CIV0119 with what appears to be a matching building in the background.

⁵² https://maps.app.goo.gl/NkRhuqQqVbD7BvVr8



Map showing the location of CIV0119 in relation to the impact sites, as well as the assessed directions of origin and a 1 km circle.

Russian ground forces tried to capture the Ukrainian city of Kharkiv on 27/02/2022, but their attack was defeated. According to the Kharkiv officials⁵³, Ukrainian forces had expelled Russian forces from the city by 12:00 EET on 27/02/2022. According to the reports,⁵⁴ Kharkiv was shelled from 27/02/2022 untill 01/03/2022 sporadically and chaotically killing and injuring tens of people. Many other incidents happened in Kharkiv on 28/02/2022, including: CIV0083, CIV0091, CIV0093, CIV0097, CIV0463 and others.

Timeline of the Incident

On 27/02/2022, fighting occurred within the city limits of Kharkiv, but, according to the Kharkiv Regional Governor, the Russian forces were repelled by 12:00 EET that day.

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

https://helsinki.org.ua/articles/khronolohiia-podiy-u-kharkovi-ta-kharkivskiy-oblasti-pid-chas-rosiysko-ukrainskoi-viyny-27-liutoho-1-bereznia-2022-roku/

- <u>Governor of Kharkiv post on Facebook</u>;⁵⁵
- <u>The Guardian</u>;56
- <u>CNN</u>.57

On 28/02/2022, according to the sources listed below, shellings of Kharkiv started at the early hours of the morning and continued periodically during the day killing and injuring multiple people, and causing structural damage. One of such incidents took place on 197 Klochkivska Street in the city of Kharkiv at around noon.

- <u>CNN</u>58
- <u>NYTimes</u>⁵⁹
- <u>Reuters</u>⁶⁰

Statements from Parties of the Conflict

Ukraine

• President of Ukraine in his <u>daily address on the war⁶¹</u>, mentions attacks on Kharkiv but not this incident specifically .

Russia

• Kremlin's spokesperson Dmitry Peskov <u>denies</u> use of cluster munitions in Ukraine.⁶²

Conclusion

An attack on 197 Klochkivska Street took place sometime before 13:25 EET. At least one person was reported injured. It appears the rocket motors in both incidents are from 9M55K rockets, indicating that this was a cluster munition attack. No military structures, installations or other assets were identified within 1 km radius of the location of the incidents, however the Ivan Kozhedub National Air Force University was identified just outside this radius.

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⁵⁶ https://www.theguardian.com/world/2022/feb/27/kharkiv-fighting-russia-ukraine-invasion

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

https://www.cnn.com/europe/live-news/ukraine-russia-news-02-27-22/h_b78f64afe6aabdcea47f11a27f 22906e

 ⁵⁸ https://www.cnn.com/2022/02/28/europe/ukraine-russia-invasion-monday-intl-hnk/index.html
 ⁵⁹ https://www.nytimes.com/2022/02/28/world/europe/russia-ukraine-war-kharkiv.html

https://www.reuters.com/world/dozens-killed-rocket-strikes-ukrainian-city-kharkiv-says-ukrainian-official-2022-02-28

https://www.president.gov.ua/news/zlo-ozbroyene-raketami-bombami-j-artileriyeyu-treba-zupiniti-7325 7; https://youtu.be/kTavdD6ob6I

⁶² https://www.gazeta.ru/politics/2022/03/01/14589073.shtml

Further Action

CIV0463 occurred on the same day approximately 400 meters away to the north-east from 197 Klochkivska Street. The timing of this event should be analyzed as CIV0463 was a cargo section landing on a street and may be connected to the rocket motors impacting as part of CIV0082. Further analysis is merited on the relationship between the attack on Novhorods'ka Street and Klochkivska Street as they likely occurred at similar times.