# Haunt the BUK (revised)

Michael Kobs and others



This paper is the preliminary result of joint effort and ongoing discussion of an international group of investigators, including engineers, forensic scientists and lawyers.
All findings are based on publicly available sources and are verifiable.

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# Summary

On July 17, 2014 the Airliner MH-17 was shot down over Ukrainian territory occupied by pro-russian separatist. Just a few hours later the culprit seemed to be certain. The chain of evidence includes phone calls the Ukrainian secret service SBU intercepted, a number of messages from social networks and anonymously mailed photos and videos.

The crucial elements in this chain of evidence are two photos that were leaked from an anonymous source to the French magazine Paris Match. Both photos are of very low quality and show a supposedly unique Volvo tractor with a red Faymonville low loader that has loaded a missile defense system BUK-M1. This BUK system appears to have remains of an inscription, which was linked by the Social Media searchers "Bellingcat" to the Russian BUK "3x2".

According to Bellingcat the intercepted phone calls, the reported sightings in the social media and the photographic evidence prove that this Russian BUK equipped with 4 missiles was conveyed on the morning of July 17 by the Vostok Battalion of Donetsk to Snizhne and unloaded there.

Bellingcat claims that all their knowledge is based on public sources and therefore can be verified by anyone, but our in-depth investigation of the chain of evidence presented has determined following:

- 1. The BUK system did not drive in a convoy of the Vostok battalion.
- 2. The contents of the intercepted telephone calls are contrary to the actual events.
- 3. The presented telephone recordings show indications of manipulation.
- 4. A part of the alleged BUK sightings in social media relate to an actual armored convoy without BUK. Another part is only the reproduction of the content of previously posted messages. The main source was far away from the action and just echoed second-hand information in the Internet, while the actual sources of that information are unknown and their information cannot be independently verified.
- 5. Those "sightings" in social media repeatedly reported details that contradict the facts. The fact that these details were mentioned and the moment they were mentioned, leads to the conclusion that social media have been used specifically to create a track in advance.
- 6. At the same time of the alleged transport some efforts by Kiev officials can be observed to facilitate the later representation of a separatist convoy.
- 7. Counter-evidence and information on the part of the separatists were either withheld from the public or temporally incorrectly classified and reproduced just to disfigure the content
- 8. The heart of this chain of evidence the Paris Match photos are demonstrably false.

# The Paris Match photos

On July 17 at about 11:00h EEST a white Volvo FH13 was photographed with a red Faymonville Multimax low loader with a BUK system loaded.

The photo comes from a still unknown source and was published by Paris Match<sup>1</sup> on July 25. According to this article pro-Russian rebels a few hours before the downing of MH17 transported a BUK to Snizhne.



Later the place where this photo was supposedly taken was geolocated in Donetsk (48.004285° 37.872544°). The photo shows the Volvo parked behind a gray appearing Toyota RAV4 with one door open.



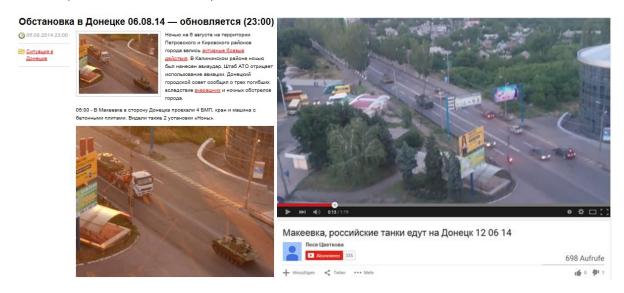
The phone number of truck rental company "Строймеханизация" in Donetsk is clearly visible on the side of the trailer. In an interview<sup>2</sup> the owner of the truck rental explained that separatists took over the company on July 8 at gunpoint and chased away the staff. Since then, he does not know what is happening with his vehicles and according to him the Volvo FH13c is unique in the region.

<sup>&</sup>lt;sup>1</sup> <u>http://www.parismatch.com/Actu/International/EXCLU-MATCH-Un-camion-vole-pour-transporter-le-systeme-lance-missiles-577289</u>

<sup>&</sup>lt;sup>2</sup> http://www.nrc.nl/nieuws/2014/08/04/er-komt-een-vogeltje-aan-reconstructie-neerschieten-vlucht-mh17/

## The red low loader

A low loader with the same appearance has been used several times by the pro-Russian separatists after the 07/17/2014 for transporting damaged military equipment. However, the phone number was removed. According to Informator<sup>3</sup> a tank was transported on August 6. Is there any way to verify the date? A video<sup>4</sup> taken on June 12 shows a military transport from the same perspective at the same location (48.040538° 37.967688°).



A close look reveals a few differences in favor of the known dating.



On August 26 photos<sup>5</sup> and video<sup>6</sup> were uploaded to the VK account and YouTube channel of Boris Borisuitsch. According to comment the pictures were taken on 8/23. Both show the Volvo with low loader, which brings a destroyed personnel carrier of the Ukrainian army from Shakhtarsk to Donetsk for a "counter-parade" on National Day<sup>7</sup>.



<sup>&</sup>lt;sup>3</sup> http://informator.lg.ua/?p=18281

<sup>&</sup>lt;sup>4</sup> https://www.youtube.com/watch?v=w2vlbKiQtzl

<sup>&</sup>lt;sup>5</sup> https://vk.com/albums-76297800?z=photo-76297800 337806785%2Fphotos-76297800

<sup>&</sup>lt;sup>6</sup> https://www.youtube.com/watch?v=GDy8wnfYzVI

<sup>&</sup>lt;sup>7</sup> https://youtu.be/3AjvldelKn4

Interestingly, the red low loader was also photographed at the exhibition<sup>8</sup>.



On 9/2/2014 Sergey Belous photographed the loader during a transport of a probably damaged tank of battalion "Oplot". The photo was taken at a place called the "Motel" (48.003012 ° 37.870756°).



This roundabout at the "Motel" is a well-known checkpoint of the separatists located a few meters from the main camp of battalion "Vostok":



<sup>&</sup>lt;sup>8</sup> http://en.voicesevas.ru/news/yugo-vostok/2842-war-in-the-south-east-online-08-24-2014-chronicle.html

The last sighting so far comes from a YouTube video of Joker News<sup>9</sup> uploaded on 10/16/2014. This video shows the red loader in Snizhne on the factory premises of Udarnik Mine (48.020000° 38.753388°) which is apparently used as a parking area for damaged military equipment.



The satellite images of Google Earth show the tractor-trailer after July 17 parked on the grounds of the truck rental.



July 27



July 30

Why the separatists thoughtlessly continued to use the world's most wanted vehicle and not even changed its color for months?

<sup>&</sup>lt;sup>9</sup> https://www.youtube.com/watch?v=y17D-gDSHb4

# The intercepted phone calls

The Ukrainian secret service SBU claims to have intercepted telephone calls which undoubtedly prove the guilt of Moscow controlled separatists of downing MH17. On 7/17 at 19:12h UTC (22:12h EEST) only 6 hours after the launch of MH-17 the SBU published several telephone calls on YouTube.

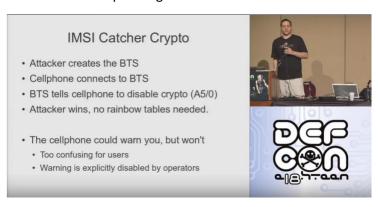
Almost one year later the Dutch Prosecution Service confirmed one name and said of "authentic footage", "from-and-after are investigated" 10

That was a surprising news because firstly a wiretapped telephone conversation always consists of two separate sound tracks (one track per voice) and secondly with the use of modern software for audio production like ProTools or Samplitude one would easily be able to rearrange "authentic footage" without the slightest trace. That's what sound engineers in a movie post-production doing all the time: shortening sentences, eliminating bloopers, combining sentences from different shooting takes, filling the holes with noise etc. etc. Therefore it seems to be impossible to positively exclude any manipulation and in reverse any indications of a manipulation might have all sorts of technical causes.

According to the "Ukrainiancrisis.net" 11:

The militants in eastern Ukraine use Ukrainian mobile telephone networks that are easy to intercept.

And according to Wikipedia the "Telecommunications is the most modern, diverse and fast-growing sector in the economy of Ukraine." Those statements are not contradictory, since the three largest players in the Ukrainian mobile telecommunication using the GSM technology. As shown at the Defcon the GSM technology is easy to intercept indeed<sup>13</sup> <sup>14</sup> e.g. by erecting a fake BTS antenna tower (called IMSI-catcher) that reaches the intercepted region.



In the end all mobile phones in the area will connect to the fake BTS tower and shut down encryption just because the attacking tower says so. The attacker may get hundreds or thousands of mobile phones connected to his fake BTS. Now he can listen to unencrypted conversations, is able to locate the position of the phone and even can read the unique information from the SIM-card of the owner like the International Mobile Subscriber Identity (IMSI).<sup>15</sup> <sup>16</sup> Once a mobile phone was identified and "locked" it even can be followed to BTS towers from other mobile phone networks.

<sup>&</sup>lt;sup>10</sup> https://z5h64q92x9.net/proxy u/nl-en.en/http/www.nrc.nl/nieuws/2015/04/01/russische-legerofficier-herkend-op-justitietape-mh17/

<sup>&</sup>lt;sup>11</sup> http://ukrainiancrisis.net/news/9646

<sup>12</sup> https://en.wikipedia.org/wiki/Telecommunications in Ukraine

<sup>13</sup> http://venturebeat.com/2010/07/31/hacker-shows-how-he-can-intercept-cell-phone-calls-for-1500/

<sup>14</sup> https://www.youtube.com/watch?t=27&v=DU8hg4FTm0g

<sup>15</sup> http://cryptome.org/isp-spy/munich-spy-all.pdf

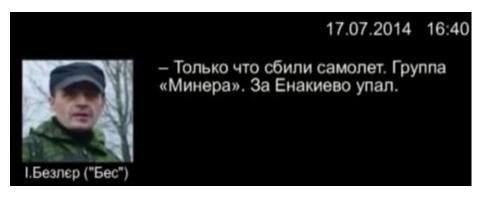
<sup>16</sup> http://habrahabr.ru/company/pt/blog/245113/

Furthermore there are devices for pre-installation by the mobile company themselves like the "Utimaco LIMS" (Lawful Interception Management System)<sup>17</sup>. Once installed in the mobile core network of the company it needs some input of e.g. the IMSI of the target and automatically roots all data directly to a law enforcement agency like the SBU. Either way the agency should input some known target identification or has to intercept and store all and everything for later analysis. Therefore it seems to be reasonable to assume that the SBU knew at least the identity of one side of the wiretapped conversation partners.

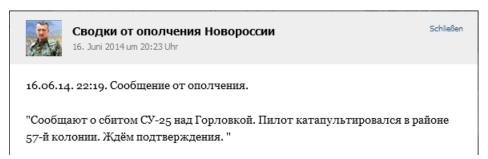
Just 12 minutes after MH-17 hit the ground two faceless fighters nicknamed "Grek" and "Major" say the Cossacks from the Chernukhino Roadblock did it and the plane broke in pieces near the Petropavlovsk Coalmine. That coalmine is just 7km away from the actual crash side. The Chernukhino Roadblock is 25km to the north of the last FDR position of MH17. Nevertheless, nobody ever suspected Chernukhino as the launch spot of some BUK missile. Why not? And what does it tell about the phone call?

Evgeny Kruzhin is a medic in the militia group accused of bringing down the plane. He is known for running the LiveJournal webpage. On 7/18 he told RT that "Major" and "Grek" really do exist but remained in Enakievo the whole day. They neither had contact to the Cossacks in Chernukhino nor explored the crash side. 18 Another "Grek" or "Greek" – a potential "target" to be intercepted by the SBU - was already detained by the Asov battalion on 7/15.19 20

Allegedly just 7 minutes later at 16:40h EEST the SBU heard the voice of commander Bezler "the demon". He says the group of "Miner" did it and the plane fell in Enakievo 30 minutes ago.



Perhaps commander Bezler has a bad place and time estimate or sent his boys already 10 minutes before the crash in the wrong direction or that phone call already took place on 6/16, when Bezlers group "Miner" shot down an Ukrainian SU-25 jet over Gorlovka.<sup>21</sup>



<sup>&</sup>lt;sup>17</sup> https://lims.utimaco.com/products/lawful-interception-management-system/

<sup>&</sup>lt;sup>18</sup> http://www.rt.com/news/173964-ukraine-malaysia-intercepted-calls/

<sup>&</sup>lt;sup>19</sup> https://burkonews.info/anti-terrorist-operation-summary-for-july-15-2014/

<sup>&</sup>lt;sup>20</sup> https://news.pn/en/criminal/108945

<sup>&</sup>lt;sup>21</sup> http://vk.com/strelkov\_info?w=wall-57424472\_3093%2F1b1608ff02d1a4dc5d

# Bezler on July 18<sup>22</sup>:

"We really did discuss over the telephone the searches for a plane, but those who think that we shot it down, have to pour the kefir out of their brains.

On the tape, it is clearly audible that the talk was about a plane in Enakievo. The Boeing fell in the area of Snezhnyoe. There are 100 kilometers between them, I don't have weapons capable of downing planes at such a distance."

Of course, the last FDR-position of MH-17 was just 40km away from the center of Gorlovka but no one ever suspected a BUK launch spot in Gorlovka. Why not? And what does it tell about these phone calls?

Also the Cossack Nikolay Kozitsyn was not an "unknown target" to the SBU and probably he also was intercepted since weeks. During the whole 30 seconds conversation Kozitsyn said only two lines that could still be plenty misunderstood. He said: "It means delivered spies. Neh ... to fly, now the war is." So the Vice Host told him what he understood<sup>24</sup>:



After an embarrassing start the interview could only be saved by translating at least the last two words quite freely.



He replied "не скажу". Of course "no comment" sounds a little guiltier than the quite simple translation "don't know". Anyway, the online translation of <u>dic.academic.ru</u> might help with all the possible translations.

<sup>&</sup>lt;sup>22</sup> http://www.interpretermag.com/evidence-review-who-shot-down-mh17/

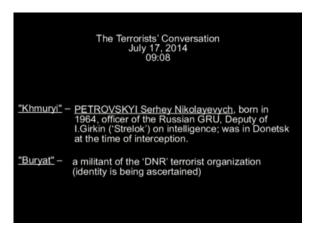
<sup>23</sup> https://www.youtube.com/watch?v=V5E8kDo2n6g

<sup>&</sup>lt;sup>24</sup> https://www.youtube.com/watch?v=H977TX8N6bk



Even "Say no evil" would be a possible translation but might sound more like a recrimination.

Several calls allegedly occurred in the morning before the Paris Match photo<sup>25</sup> was taken. According to the SBU two calls were intercepted at the very same time at 09:08h EEST<sup>26 27</sup>:



- "Khmuryi" PETROVSKYI Serhey Nikolayevych, born in 1964, officer of the Russian GRU, Deputy of I.Girkin ('Strelok') on intelligence; was in Donetsk at the time of interception.

  "Botsman" Russian GRU officer (identity is being established)
- B: Where should we unload\* this beauty, Nikolaievich?
- K: Which one? This one?
- B: Yes, the one I've brought. I'm already in Donetsk.
- K: Is it the one I'm thinking about? "B...,"M" one?
- B: Yes, yes, yes. "BUK", "BUK".
- K: Is it on a tractor?
- B: Yes, it's on it. We need to unload it somewhere, in order to hide.
- K: Is it with a crew?
- B: Yes, with the crew.
- K: Don't hide it anywhere. She'll go there now.
- \* initially translated as "load" by the SBU

- K: Yes, Botsman, I'm listening.
- B: Hello, big brother. How are you?
- K: Not so well. We are in Mariinovka. That's why not well. Carrying on.
- B: What's wrong?
- K: What do you think? ... attacking with "Grad" ... all the time, finally now we're having a little break. We've just hit a plane, Su-type. Because we've got BUK-M. They are now in Zelenopillja, trying to break free, but their way out is only through me. Yesterday we hit 2 Su jets, today another two. Thank God "BUK-M" arrived today in the morning. It became easier. But in general, of course, it's tough.
- B: What can I say, if you need anything, call me and I'll arrive immediately.
- K: Thanks, brother. I'm going in two hours. Seems like it's a lull. In two hours I'm heading to Donetsk. Because I was sent three more "Gvozdika" (self-propelled artillery).
  Will carry "Gvozdikas" here because it's really tough now.
- B: Maybe we should cover them with Grad?
- K: The thing is that we have Grad, but no spotter. And secondly, we are waiting for Russia to f... them from their side.

According to these conversations Khmuryi was in Marinovka and used a short break in the ongoing shelling of Zeleopillja to quickly make some calls. According to the corrected translation of the first call

<sup>&</sup>lt;sup>25</sup> https://www.youtube.com/watch?v=G5SjPhZhPdI

<sup>&</sup>lt;sup>26</sup> http://www.liveleak.com/view?i=9bc 1405702620

<sup>&</sup>lt;sup>27</sup> http://www.forbes.com/sites/paulroderickgregory/2014/07/19/what-more-smoking-guns-are-needed-for-mh17-the-worlds-first-sam-terrorism/

the BUK is already loaded at 09:08h EEST. According to the second 09:08h EEST call the BUK already arrived in Marinovka and was used to shoot down one SU jet.

Khmuryi apparently does not know how many planes were shot down and when.

Khmuryi: We've just hit a plane, Su-type. Because we've got BUK-M. [...] Yesterday we hit 2 Su jets, today another two. Thank God "BUK-M" arrived today in the morning. It became easier.

One could easily count a total of 4 SU-type aircrafts but the term "ещё вторую" could also mean "another one" or "a second one".

At the same time Strelkov knew the score precisely. He told the press at noon on 7/17 that after the downing of two SU-25 on  $7/16^{28}$  <sup>29</sup> <sup>30</sup> no further Ukrainian fighter jet was sighted. This statement confirms some kind of stand down order for Ukrainian fighter jets – not for civilian airplanes of course – and at least until noon of 7/17. Furthermore, on 7/16 Strelkov gave an interview right at the GRADs in Marinovka<sup>32</sup> where the Telephone-Khumryi in the morning of 7/17 claimed to be. So how is it possible that his deputy commander Khmuryi counted 3 or 4 downed SU-type fighter jets?

17 Juli 2014, 14:16

Kampf an Grenzkontrollstele Marinowka im Süden von Donbass geht weiter - Tote zu beklagen



archivfoto: RIA Novosti/Andrey Stenin

STIMME RUSSLANDS Der Kampf neben der Grenzkontrollstele Marinowka im Süden des Gebiets Donezk ist am Donnerstag fortgesetzt worden. Die Volkswehr versucht, die Gruppe Militärs zu umzingeln, die zu den Hauptkräften durchdringen wollen. Nachdem am Mittwoch zwei Su-25-Flugzeuge abgeschossen worden waren, gab es keine Flugzeuge der ukrainischen Luftstreitkräfte über der Region mehr. Die Volkswehr nahm die Militärleute gefangen und verhört sie derzeit.

However, Marinovka was taken in the early morning of 7/16. The shelling of Zelenopillja started on 7/11 allegedly with help of GRADs from the no-man's-land between Russia and Ukraine. Two SU-25s were downed on 7/13. On 7/14 an AN-26 and again on 7/16 two more SU-25s were shot down. In the afternoon of 7/17 there was a short period of time when one might have gained a false impression. For about one hour after the disaster of MH-17 news of another downed SU-25 circulated in the internet. In the morning of 7/17 at "09:08 am" or in the evening at "09:08 pm" EEST the calls (or the SBU translations) don't make any sense.

<sup>28</sup> http://vk.com/strelkov\_info?w=wall-57424472 7111

<sup>&</sup>lt;sup>29</sup> http://vk.com/strelkov info?w=wall-57424472 7115

<sup>&</sup>lt;sup>30</sup> http://de.sputniknews.com/german.ruvr.ru/news/2014\_07\_17/Kampf-am-Kontrollpunkt-Marinowka-im-Suden-von-Donbass-geht-weiter-es-gibt-Tote-6055/

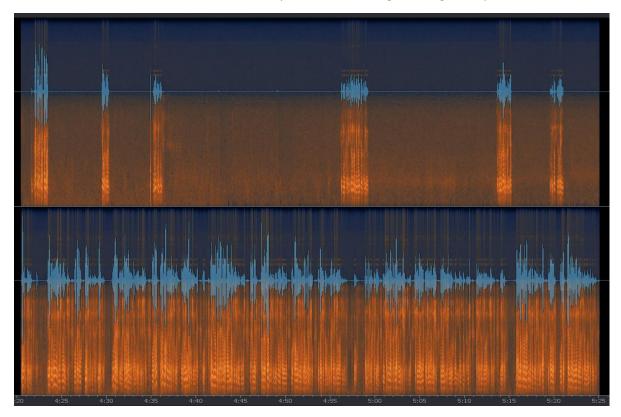
<sup>31</sup> http://rusvesna.su/news/1405583841

<sup>32</sup> http://slavyangrad.org/2014/07/16/igor-strelkov-on-the-field-of-battles/

Finally, Khmuryi announces that he wants to go to Donetsk in two hours to pick up three new "Gvozdikas" (self-propelled guns) and bring them to Marinovka. As to be seen, in the Donbass it was near to impossible to move any piece of military equipment without being immediately documented and posted on the Internet but seemingly no one saw or reported something that slow and loud as Khmuryis "Gvozdikas" en route from Donetsk to Marinovka. No one saw or heard a loud and slow BUK that drove on its own from the Russian border all the way to Donetsk to be loaded onto a low loader there. It makes no sense that Buryat first drove the BUK to the truck rental company, loaded it on the red low loader only to call Khmuryi: "I have a loud and slow BUK for you. I loaded it because we have to unload it in order to hide it." And Khmuryi hangs up and the same minute makes a call to Russia: "We shot down at least 3 fighter jets. Everything is easier now because we have BUK BUK BUK now."

In other words, the story behind those Khmuryi calls makes no sense at all.

In essence the conversation between the Russians "Botsman" and Khmuryi is a monologue that lasts for more than a minute. However, while Khmuryi speaks, the Botsmann-channel is basically dead. "Botsman" does no breath, move or make any noise. No rustling, nothing but a persistent noise.



Sometimes Khmuryis inhalation suddenly ends and - after a little silence - another inhalation starts in the middle of the breath. Between the cropped breaths the same persistent noise in the Khmuryi channel prevails. The pieced breathing might be the result of a malfunctioning VAD (voice activity detection) as used to lower the bandwidth of mobile phone connections. <sup>33</sup> Nevertheless, one should expect a VAD to delay the reaction and to fade the sound in always the same manner. In case of the Khmuryi-calls the "VAD" reacts sometimes somehow rapidly. One interesting example can be found at 4:41 min in the SBU video. <sup>34</sup> It seems the SBU even underlined the sentence for a better recognition.

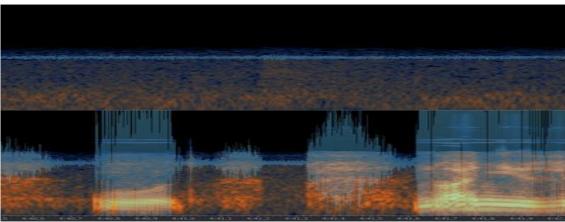
http://www.youtube.com/watch?v=YgdqdklrqDA&t=4m35s

<sup>33</sup> http://note.sonots.com/SciSoftware/IVAD.html



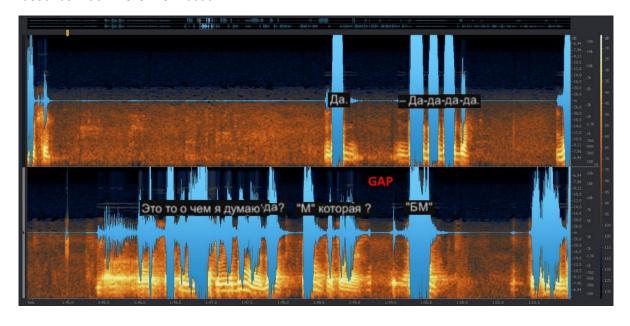


GAP



The gap in the breathing is visible in the middle of the lower channel. In the original Russian version one can hear it without any technical aids. For any reason all other language versions are mixed down into two mono tracks.

A similar gap is right before Khmuryi says "B...M". Not to say that "B...M" is hardly recognizable because it sounds much more like "Baaaam" <sup>35</sup>.



15

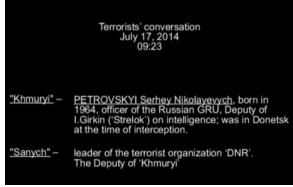
<sup>35</sup> http://www.youtube.com/watch?v=YgdqdklrqDA&t=1m45s

So either a VAD or the simulation of the natural rhythm of speech might account for those gaps. Of course, any sound engineer would close those gaps with noise. However, significant editing can explain the apparent absurdity of these conversations, a rapid VAD cannot.

Two more talks were held almost at the same time:

Khmuryi calls Buryat and Khmuryi calls Sanchy. Of course, Buryat and Sanchy are faceless "terrorists" with their own sound channel and some essential information. Still Khmuryi doesn't get if "it" is loaded or unloaded. So he needs to ask again. The answer is devastating – not for Khmuryi but for Russia. "It crossed the line" seems to be a pretty nonsensical answer to the question but in the SBU translation as "Russian border" anything else about these conversations – all the nonsense and half breathes – faded.





K: – Tell me, have you brought me one or two?
B: One, one. Because they had a misunderstanding there.
They didn't give us a tug. We unloaded\* it and went at their own pace.

K: Did it go on her own or on a tug?

B: It crossed the line (border).

K: And now have you brought it on a tug? Don't put it anywhere... I'll tell now where it should go, it will go together with "Vostok" tanks.

\* initially translated as "loaded" by the SBU

K: Sanych, the point is that my "BUK–M" will go with yours, it is on a tug. Where should I drive it to put in a column?

S: There, behind "Motel", not reaching Hornostaevka. K: Just after the Motel, right?

Did Buryat really say the BUK went at its own pace? ...32 tons during the night the whole way from the "line" to Donezk without being seen or heard by anyone?

Somehow Khmuryi never gets the answer he asks for but he understands anyway. So he is able to give the right order: "It will go together with "Vostok" tanks." Still he doesn't anticipate that no one will follow his order just like his "Gvozdikas" never drove to Marinovka.

Some seconds later Khmuryi calls some Sanchy of the Vostok battalion to request the best parking position for his "BUK-M". His initial secretiveness about "B...M" already imploded due to Buryats straight and unmasking "Yes, yes, yes. "BUK", "BUK". So Khmuryi gave a \*\*\*\* this time and asked straight forward. Sanchy now accurately describes the park strip behind the "Motel" and before the entrance to the Vostok battalion. At this exact spot the BUK was photographed for Paris Match but Paris Match was told its Snizhne. From a Twitter message of some "Buzzing Rock" is known that the BUK previously should have been parked just 1400m away at the intersection of Illycha Street and Shakthobudivnykiv Boulevard (48.002375° 37.855124°).

<sup>36</sup> https://twitter.com/Buzzing\_Rook/status/489704260045910016



In a fifth phone call at 09:54h EEST Khmuryi calls a faceless and nameless fighter and entrusting him with the task of driving the truck and at the same time with the responsibility to select the right team. Apparently at this time the BUK is already at its position but nobody tells Khmuryi that the Vostok tanks already left. So who is the left behind faceless and nameless fighter? Is it the cook? Probably we will never know.



Khmuryi calls "DNR militant"

Khmuryi: Listen to me carefully, behind the circle near "Motel" there will be you know what. Call to "Bibliotekar". Bring inside only those, who just came back, only as much as you need for the convoy. Leave everyone else here. Not far away there is Pervomaiskoe, look at the map.

DNR militant: I got it.

Khmuryi: Settle somewhere in that area, bring there those who are left. Your task is reserve, plus protection of this piece, which you will drive now. "Giyrza" will come there too. If anything, I'm on line.

DNR militant: - Ok.

Of course, the SBU added a "(BUK)" behind the "piece" because otherwise the reader wouldn't know what they are talking about. The left behind faceless fighter has a better sense for the hidden meaning. It's enough to say "there will be you know what".

Khmuryis order "as much as you need for the convoy" is somehow funny since the Vostok tanks are already gone and Khmuryi appears to be in Donezk now.

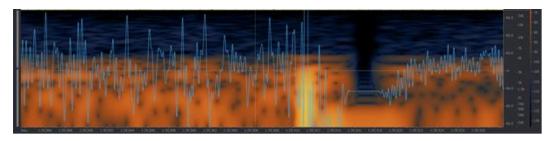
Khmuryi: "Bring inside only those who just came BACK ... Leave everyone else HERE. Not far away THERE is Pervomaiskoe ... Bring THERE those who are left."

Meanwhile the secret BUK is standing in the wide open waiting to be photographed at the ordered spot but the left behind faceless fighter just answers "I got it". Doesn't he know that Strelkov has people executed to let discipline prevail? Does he?

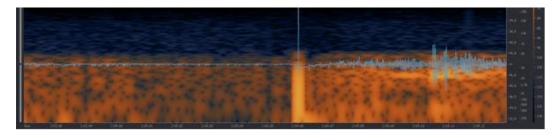
Besides the illogicality of what is said there are other anomalies of a technical nature in the soundtracks of these hastily produced interception videos that may be due to some interference of the telephone

connection or due to some preparations for publication, but could just as well be the result of bad tampering. Just because it would be technically possible to carry out such manipulations without leaving any trace, it is hardly worth of thinking about.

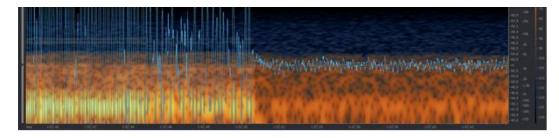
There are gaps in the noise changing the quality of noise:



Sometimes Khmuryi starts to inhale with a little click:



Sometimes Khmuryis voice stops abruptly to talk at any digital value other than average zero:



However, in Khmuryis background even more voices can be heard. These background voices can be heard even in superposition with a short "Да" but as long as Khmuryi doesn't speak the background is completely silent too. Those noisy silence between the actual speak is exactly the goal of a VAD but it is difficult to achieve. Everyone who once called a friend with a babbling brother in the background knows, there will be no complete silence in the line.

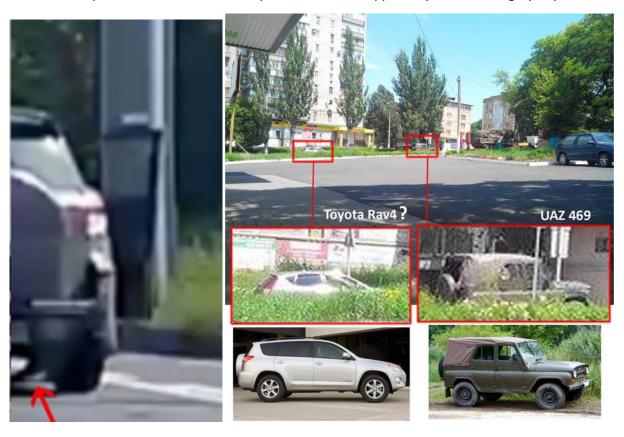
Is there any possible conclusion?

Firstly, the footage might be authentic but the calls appear to be a patchwork of authentic footage recorded during the period of time since the SBU "locked" their targets to be intercepted.

Secondly, the SBU knew their targets for week or month. "Bez", "Greg" and Khmuryi" are not phantasynames but nicknames for real persons. The Dutch investigation authorities may have needed about a year to confirm the identity of one voice. However, the confirmed name already was given by the SBU in a video just hours after the downing of MH-17.

# The Toyota Rav4

As already mentioned, in the second Paris Match photo is a dark gray or silver 2006-2009 Toyota Rav4<sup>37</sup> with the door open in the right lane. In the photo of the BUK in front of the Furshet market in Torez the BUK transport seems to be followed by an UAZ 469 and apparently also a silver-gray Toyota Rav4.



Also in the Zuhres video two civilian vehicles follow, which again seems to be the silver-gray Toyota Rav4 and according to the silhouette a dark VW Multivan.



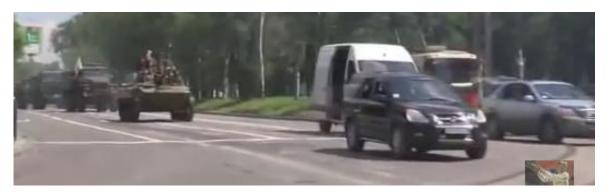
So far no one searches for that Toyota - neither the Ukrainian secret service SBU nor the International Joint Investigation Team JIT.

19

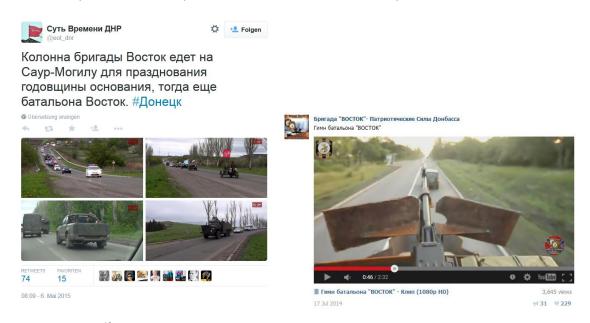
<sup>37</sup> http://www.netcarshow.com/toyota/2009-rav4/

## The Vostok vehicles

On July 10, 2014, the Vostok battalion shot some kind of PR video<sup>38</sup> by their own. They drove their entire convoy around some corners and captured some waving hands with their own camera. Actually in the middle of this convoy appeared a Toyota Rav4. However, it was a black one.



Even on May 6th 2015 accompanied a black Rav4 a Vostok convoy.<sup>39</sup>



In a music video<sup>40</sup> published by the Vostok battalion on July 17, 2014 the convoy follows at least a very similar vehicle. Judging by the angular rear front it is, however, an UAZ Patriot.



In the self-made PR video of the Vostok battalion from July 10, 2014, the following vehicles can be recognized:

<sup>38</sup> https://www.youtube.com/watch?t=26&v=IIJdvbBliGQ

<sup>39</sup> https://twitter.com/eot\_dnr/status/595968753671757824

<sup>&</sup>lt;sup>40</sup> http://vk.com/video-67392358 169361484?list=67c634c93cc17bb4ba

# 1) A black Toyota Land Cruiser 100 VX



# 2) a black Toyota Land Cruiser 2010



3) a black  ${\bf UAZ\ Patriot}$  with red number plate



4) a Kamaz with anti-aircraft-gun



# 5) several armored **Ural**



### The social media

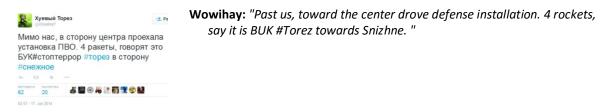
The self-made Vostok PR video was uploaded on YouTube on July 11 around 08:09h UTC (11:09h EEST). Six days later and only two hours prior to the downing of MH-17 this video experienced a strange rerelease. At 11:15h UTC (14:15h EEST) Dmytro Tymchuk<sup>41 42</sup> (formerly employees of the Defense Ministry and coordinator the pro-Kiev news website "Information Resistance") re-uploaded the Video on his YouTube channel. A few minutes later he linked the video on his news website.

Just 43 minutes later at 11:58h UTC another copy of the Vostok PR videos was re-uploaded on the YouTube channel of Euromaidan PR<sup>43</sup>. Tymchuk titled "his" video "Kadyrov's men and Ossetians came by armor vehicle from Russia to Ukraine" while euromaidan overwrote the video with "Kadyrov's proxies Arrive To Ukraine In Support Of Russian invasion". Neither Tymchuk nor Euromaidan indicated any link or source of the original video.

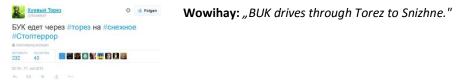


An indication of the reasons for the suddenly awakened interest in this Vostok-PR video deliver the tweets of SBU-contact Wowihay who left Snizhne in June and since then is spreading war-news via Twitter.

## **09:07h UTC (12:07h EEST):** Wowihay tweeted<sup>44</sup>



**09:16h UTC (12:16h EEST): Eight minutes later** Wowihay repeated<sup>45</sup> his message. Meanwhile he knows it was a BUK.



Just 2 minutes later "Buzzing Rock" replied, that BUK came from Donezk. 4 minutes later he knew that the shot down AN26 was just a beginning. 6 minutes later he mentioned that the BUK was parked in

<sup>41</sup> https://www.youtube.com/watch?v=voH-IP3qPlc&feature=youtu.be

<sup>42</sup> http://sprotyv.info/en/news/2373-kadyrovs-men-and-ossetians-came-armor-vehicle-russia-ukraine

<sup>43</sup> https://www.youtube.com/watch?v=UHpbO9v9aoQ

<sup>44</sup> https://twitter.com/WowihaY/status/489698009148837888

<sup>45 &</sup>lt;u>https://twitter.com/WowihaY/status/489700047215685632</u>

the morning at the intersection of Illycha and Shakthobudivnykiv Boulevard in Donezk (48.002375° 37.855124°).

# **10:12h UTC (13:12h EEST):** Wowihay tweeted<sup>46</sup>:



**Wowihay:** "3 tanks and armored KAMAZ with anti-aircraft gun and people on board through Torez to Snizhne. Photos not boxing. I will kindle the whistleblower."

M:ara: "and BUK? Write!

**Otherside:** "armored convoy is traveling bypass [N21], buzzes near the television tower"

Oleg Prawowjedow: "Photos necessarily to SBU"

Thus, at about 10:28h UTC (13:28h EEST) a small 3-tank convoy has reach the TV tower of Torez (48.020278° 38.664167°). However, the striking KAMAZ with anti-aircraft-gun from the Vostok battalion was not there. How could Wowihay describe an authentic Vostok vehicle correctly that provably wasn't there? Are we still dealing with residents and patriots who saw something?

**10:14h UTC (13:14h EEST)**: In the middle of a conversation about anything and everything that started at 11:25h EEST Anna from Torez<sup>47</sup> posted on VK that 3 tanks drove through Torez to Snizhne.



**11:16h UTC (14:16h EEST):** Tymchuk published and linked a copy of the Vostok-PR-video, which shows the striking KAMAZ with anti-aircraft artillery.

**11:58h UTC (14:58h EEST):** Euromaidan also published a copy of the Vostok-PR-video and uses almost the same title.

**12:30h UTC (15:30h EEST):** WowihaY tweeted a screenshot of a chat message<sup>48</sup>, which he received apparently by 12:22h UTC (15:22h EEST).



**Message:** "4 Vostok-tanks, Ural, Kamaz with anti-aircraft-gun, yellow bus full of separatists, black Jeep with red number plate, via Keramzitovy in Snizhne, loaded ammunition at "Furshet", go to Saur Mogila."

**Wowihay:** "And also tanks with white Flags "Oplot" in Snizhne through. Is it a maneuver?"

Whoever watches the Vostok-PR-video will immediately know that the described vehicles must be Vostok. Nevertheless, that chat-message reports the Kamaz again, one more tank and a yellow bus full of separatists.

<sup>&</sup>lt;sup>46</sup> https://twitter.com/WowihaY/status/489714156715909120

<sup>&</sup>lt;sup>47</sup> https://web.archive.org/web/20141110053620/http://vk.com/wall-70279965 83186?reply=83547

<sup>48 &</sup>lt;u>https://twitter.com/WowihaY/status/489749063588257792</u>

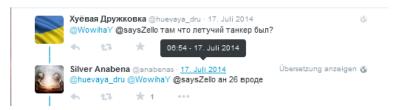
13:40h UTC (16:40h EEST): WowihaY published the photo of smoke plume from MH-17<sup>49</sup>. That image was shot from the roof of the photographer about 7-8 minutes after impact of the debris. Within another 10 minutes the photographer was back in his flat, transformed the NEF-raw-file into a usable file format, sent it to WowihaY and was online.



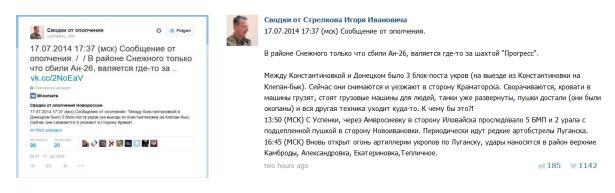
The ensuing discussion revolves around the downing of another AN-26. One thinks about the pilots the other believed that the debris field is located near the Progress mine.

# 13:42h UTC (16:42h EEST):





Most interesting about this Tweet is mainly that the same uncertainty prevails the Pro-Kiev-side which used the same terms (Progress, AN-26) at about the same time like the news at the VK-account of the commander of Donetsk People's Republic (DNR) Strelkov: "17:37 (MSK) Written by militias: in the area Snizhne an AN-26 just been shot down, somewhere near the mine "Progress". 50 51



<sup>&</sup>lt;sup>49</sup> https://twitter.com/WowihaY/status/489766482059198464/photo/1

<sup>&</sup>lt;sup>50</sup> https://web.archive.org/web/20140717155906/http://vk.com/strelkov\_info?w=wall-57424472 7256

<sup>&</sup>lt;sup>51</sup> https://twitter.com/strelkov\_info/status/489766809361723393

Shortly afterwards at 17:16h EEST the Strelkov news has been corrected. "17:50 (MSK) Written by militias: In the area Torez an An-26 been shot down, lies somewhere near mine "Progress". You have been warned, do not fly in our sky." 52

The Strelkov VK-account is a news platform with a number of messages per hour that impossibly can be written by a commander in the war events himself. Nevertheless, this message was presented first by the Ukrainian Crisis Media Center<sup>53</sup> with great propagandistic roar as proof of guilt.



### And further down in the text reads:

Notably, the infamous pro-Russian terrorist and the current commander-in-chief of the self-proclaimed Donetsk People's Republic (DNR) Igor Girkin-Strelkov posted a message on his Vkontakte account just 30 minutes after the plane disappearance, boasting the downing of the AN-26 aircraft that he thought belonged to the Ukrainian Armed Forces. "Warnings have been issued – not to fly in "our sky". Here is the video confirmation of yet another "birdfall," reads the message on his account. Soon after the tragedy the message "mysteriously" disappeared but by then Ukrainian media have already re-posted screenshots proving the existence of such a statement.

Moreover, the State Security Service of Ukraine (SBU) has released a recording of a phone conversation between the terrorists where they discussed the shooting of the passenger plane from the Chernukhino block post [controlled by the terrorists – Ed.] and first civilian casualties

The UCMC claimed that Strelkov boasts in a 4:50 pm message with the downing, which is not the case. The time "17:50 (MSK)" is part of the written text. A screenshot<sup>54</sup> published by the Ukranian Crisis Media Center itself shows clearly the time stamp 17:16h EEST (Ukranian daylight saving time).

whose bodies they found scattered around the area of the crash.



<sup>52</sup> https://web.archive.org/web/20140717155906/http://vk.com/strelkov\_info?w=wall-57424472 7256

<sup>53</sup> http://uacrisis.org/6210-malaysia-airlines-crash

<sup>&</sup>lt;sup>54</sup> http://www.businessinsider.com/igor-strelkov-comments-on-malaysia-mh17-2014-7?IR=T

Furthermore, VK saves the time a message box was opened before the first letter can be typed. Therefore this message was published about one hour after the crash of MH-17 and the correction "Torez" limped 30 minutes behind the knowledge in the Kiev-loyal tweets of Wowihay. Nevertheless the western media still echoing the wrong time and the intentionally wrong interpretation of that message. The original statement "an An-26 been shot down" became a bragging "We just hit down" and reads like this<sup>55</sup>:

Shortly after the passenger plane was downed, Strelkov — seen smirking in propaganda photos — tweeted a boastful message claiming responsibility.

At the time, he apparently believed he had shot down an Antonov-26 military plane of the Ukrainian air force, saying it landed near a mine named Progress.

His chilling message read: "In the area Torez we just hit down An-26, it's lying somewhere in the mine 'Progress'.

-

<sup>&</sup>lt;sup>55</sup> http://www.news.com.au/world/prorussian-separatist-commander-igor-the-terrible-strelkov-allegedly-appears-on-mobile-phone-video-of-mh17-crash-saying-that-was-a-blast/story-fndir2ev-1226993406156

# The Tymchuk convoy

At 19:19h UTC (22:19h EEST) Dimitry Tymchuk began to post his news about the movement of a big "terrorist convoy". <sup>56</sup> According to his Facebook message, the convoy included three tanks, two armored personnel carriers [APCs], a truck with rebels and a truck with mounted anti-aircraft gun. In addition, a load tractor with artillery base, which transported a BUK surface to air missile system.

### **Dmitry Tymchuk: Terrorist convoy movement in Donetsk Oblast**

Posted on July 17, 2014 by tilamuse

 $\label{eq:Dmitry Tymchuk, Coordinator} \textbf{\textit{Pmitry Tymchuk}}, \textbf{\textit{Coordinator}}, \underline{\textit{\textit{Information Resistance}}} \\ \textbf{\textit{07.17.2014}}$ 

Translated and edited by Voices of Ukraine



According to operational data from *Information*\*Resistance group, today around 1:30 PM EEST a convoy of terrorists was recorded in the area of **Snizhne**[Donetsk Oblast].

The convoy included 3 tanks, 2 armored personnel carriers [APCs], a cargo truck with insurgents and a cargo truck with a mounted large-caliber machine gun. And also a tow truck with a gun mount, which transported the "Buk" air missile system.

The convoy was moving in the direction of Dmytrivka [Donetsk Oblast].

This message is remarkable in several respects. Firstly, it describes the "truck with mounted anti-aircraft gun" (the Kamaz) which is particularly striking in the Vostok-PR video re-uploaded by Tymchuk himself but is also described in the WowihaY-tweets. Secondly, it summarizes the BUK sightings with the sightings of tanks to one big convoy although no message mentioned a BUK in connection with the tanks. Under the hood Tymchuk arranges the Vostok battalion to the BUK how it was ordered in the allegedly wiretapped conversations of that morning.

By examination of these sources one must get the impression that the BUK initially has been waiting for more than an hour at the parking lane close to the home base of the Vostok battalion. In the same way the BUK would have been parked from 12:14h EEST until 13:14h EEST in Torez.

Despite these inconsistencies, the Ukrainian secret service SBU<sup>58</sup> substantiated the alleged large Vostok convoy with images under the heading "BUK-M as part of a terrorist convoy".

## «БУК-М1» У СКЛАДІ КОЛОНИ ТЕРОРИСТІВ (ДОНЕЦЬКА ОБЛАСТЬ)







<sup>&</sup>lt;sup>56</sup> https://www.facebook.com/dmitry.tymchuk/posts/529275897201070

<sup>&</sup>lt;sup>57</sup> http://maidantranslations.com/2014/07/17/dmitry-tymchuk-terrorist-convoy-movement-in-donetsk-oblast/

<sup>58</sup> http://www.sbu.gov.ua/sbu/control/uk/publish/article?art\_id=129099&cat\_id=39574

This composite image shows the BUK in a snapshot from the known Zuhres video<sup>59</sup>. Two additional photos show a tank and an armored Ural on the very same road N21. The lighting situation in video and photos is so vague that even a rough estimation about the time of origin of the images is difficult.

With the help of the timely re-uploaded Tymchuk Vostok PR video now the armored Ural can be easily assigned to the Vostok battalion what appears to provide a convincing chain of evidence in conjunction with the allegedly wiretapped conversations.

Amazingly the self-proclaimed "investigative platforms" Bellingcat<sup>60</sup> and Ukraine@war<sup>61</sup> adopted this compilation of a large Vostok convoy 1:1 from Tymchuk and SBU. Thus, for example, Bellingcat easily could confirm the transporting of the BUK by a variety of "sightings".

The Bellingcat report reads:

This time is supported by posts made on Twitter and VKontakte from locals who reporting seeing a convoy of military vehicles moving eastward through Torez towards Snizhne during the early afternoon. Three tweets that describe the missile launcher and an accompanying convoy travelling through Torez were posted at 12:07pm<sup>15</sup>, 12:15pm<sup>16</sup>, and 12:26pm<sup>17</sup> local time. Others on VKontakte report that the convoy included three tanks, with posts at 1:14PM<sup>18</sup> and 2:14PM<sup>19</sup> that confirm the information was posted on Twitter before the downing of MH17.

The repetition of WowihaY at 12:15h EEST became a second "sighting" by the same source. A Tweet that repeated at 12:26h what WowihaY previously had written became the third sighting. Annas VK-message about 3 tanks in Torez became Bellingcats fourth BUK sighting. And finally, there in Anna's Forum about one hour later the question was asked if anyone else has seen the tanks. In fact, someone answered who hasn't seen the tanks but heard the noise. For Bellingcat this is the fifth BUK sighting in Torez stating "the convoy included three tanks".

If you break down the Bellingcat sightings on their actual substance then it was only the SBU conman WowihaY (Vladimir Djukov) who might have seen the BUK at 12:07h EEST but Wowihay left the Donbass in June. He just echoed messages from unknown sources like his chat-message about the Kamaz in Torez. Striking at a Wowihay tweet, however, is that he announces four missiles, while in all photos and videos the missiles are draped with camouflage nets precisely in order to hide those.

The German SPIEGEL just copied the Bellingcat-"sightings" under the headline "Truth in Ruins" 62:

## Tores, gegen 12.30 Uhr

Gegen 12.30 Uhr wird das Buk-Raketensystem in der Stadt Tores fotografiert, von einer Tankstelle aus. Die Anwesenheit der Buk in Tores ist gleich mehrfach belegt: Drei Tweets erwähnen die Abschussrampe, einer um 12.07, ein anderer um 12.15, ein dritter um 12.26 Uhr, die Tweets werden ergänzt von Beobachtungen, die auf VKontakte gepostet werden, um 13.14 und um 14.14 Uhr. Die Posts berichten, dass auch drei Panzer zum Konvoi gehören.

The article opens: "Half a year after the launch of a Boeing Malaysia Airlines a propaganda battle of the culprit is raging on the Internet and in other media - with photos and videos, with documents and forgeries. A team of, "Algemeen Dagblad" and "Corrective" has made the search for the culprit. ..."

<sup>59</sup> https://www.youtube.com/watch?v=Z6-O xyER9Q

<sup>60</sup> https://www.bellingcat.com/wp-content/uploads/2014/11/Origin-of-the-Separatists-Buk-A-Bellingcat-Investigation1.pdf

<sup>61</sup> http://ukraineatwar.blogspot.de/2014/07/russian-transport-of-buk-into-ukraine.html

<sup>62</sup> http://www.spiegel.de/spiegel/print/d-131242892.html

#### Katastrophen

#### Wahrheit in Trümmern

Von Bensmann, Marcus; Buse, Uwe; Crawford, David; Goos, Hauke; Neef, Christian; Schnibben, Cordt; Stock, Jonathan

Ein halbes Jahr nach dem Abschuss einer Boeing der Malaysia Airlines tobt im Internet und in anderen Medien die Propagandaschlacht der Täter - mit Fotos und Videos, mit Dokumenten und Fälschungen. Ein Team von , "Algemeen Dagblad" und "Correctiv" hat sich auf die Suche nach den Schuldigen gemacht.

And of course, the "Truth in Ruins" article was written by Bensmann of "Correct!v" et al. themselves who thinks to know the culprit. He published a "graphic novel" report in the best manner of the worst kind of propaganda including a false witness pointing in the wrong direction<sup>63</sup> (obscured and beyond recognition for the reader due to the prize winning presentation style).



Bensmann even found beer bottles on the wrong field in November suggesting some kind of clue for the presence of Russians in July. According to the Grimme Prize jury that comic-concoction is "An outstanding example for connecting digital storytelling methods with traditional journalistic skills." <sup>64</sup>

This way SPIEGEL backs up Correct!v and Bellingcat, Correct!v backs up Bellingcat and Bellingcat backs up Correct!v and SPIEGEL in an everlasting self-fertilizing circle because each one can (and do) referencing or name-dropping two other "sources" as proof for backed up information.

Bellingcat backs up Correct!v<sup>65</sup>:

Both of these new images, as well as the Correct!v investigation supports the earlier findings of the Bellingcat report Origin of the Separatists' Buk that a Russian provided Buk missile launcher was filmed travelling through separatists held territory towards the alleged launch location of the missile that shot down flight MH17.

# Correct!v backs up Bellingcat<sup>66</sup>:

#### THE BUK'S PATH ACROSS EASTERN UKRAINE

There is a second hot lead discovered by an international investigative team. Bellingcat.com is led by the young journalist Eliot Higgins. His method: meticulously investigate the traces that an event leaves on the internet. Photos, videos, posts in social networks. Higgins has shown that digging around in the depths of the internet can lead to stunning revelations. Among other things, Bellingcat was able to uncover secret arms shipments in Syria and reconstruct a poison gas attack.

<sup>&</sup>lt;sup>63</sup> http://www.broeckers.com/Wordpress/wp-content/uploads/2015/06/150314-Kobs-Analyse-MH-17-Correctiv-Spiegel-1.pdf

<sup>64</sup> https://correctiv.org/blog/2015/06/19/wir-haben-den-grimme-preis/

<sup>65</sup> https://www.bellingcat.com/news/uk-and-europe/2015/01/17/new-images-of-the-mh17-buk-missile-launcher-in-ukraine-and-russia/

<sup>66</sup> https://mh17.correctiv.org/english/

But there is a completely neglected version of truth<sup>67</sup>:

# The Failed Pretext For War: Seymour Hersh, Eliot Higgins, MIT Rocket Scientists On Sarin Gas Attack

MintPress News interviews a Pulitzer Prize-winning journalist, MIT professors and rocket scientists, and a blogger on who perpetrated a sarin gas attack that almost dragged the U.S. into Syria's civil war.

#### That version of truth reads like this:

We know, Eliot Higgins says, it was forces loyal to President Assad who fired the series of sarin gas attacks into the

Damascus suburbs. In an April 7 post titled "Seymour Hersh's Volcano Problem," Higgins shares photos of several rockets ostensibly fired by the Syrian army. These "volcano rockets" appear very similar to the ones shown in photos of the rockets he says were used in the chemical gas attack.

"In all incidents, the rockets have exactly the same design, down to the small nut and bolt, and in three of the four incidents they are described as being chemical weapons." he wrote.



Photo from MIT report: Possible Implications of Faulty US Technical Intelligence in the Damascus Nerve Agent Attack of August 21, 2013.

It might have been a battle between a Pulitzer Prize winner and a data-collecting blogger if a team of rocket scientists and weapons experts from the Massachusetts Institute of Technology hadn't taken issue with Higgins' analysis.

"It's clear and unambiguous this munition could not have come from Syrian government-controlled areas as the White House claimed." Theodore Postol told MintPress News.

Postol is a professor in the Science, Technology, and Global Security Working Group at MIT. He published "Possible Implications of Faulty US Technical Intelligence in the Damascus Nerve Agent Attack of August 21st, 2013" in January along with Richard Lloyd, an analyst at the military contractor Tesla Laboratories who previously served as a United Nations weapons inspector and also boasts two books, 40 patents and more than 75 academic papers on weapons technology.

Higgins, Postol said, "has done a very nice job collecting information on a website. As far as his analysis,

In the end the only remaining source of 5 Bellingcat-BUK-sightings in Torez was far away from the Donbass and well connected to the Ukrainian secret service SBU. Maybe he doesn't even know who sent those messages he echoed on Twitter creating social media "evidence" especially for the point of view of the SBU right in time for a maybe prefabricated narration of the events. <sup>68</sup>



<sup>&</sup>lt;sup>67</sup> http://www.mintpressnews.com/the-failed-pretext-for-war-seymour-hersh-eliot-higgins-mit-professors-on-sarin-gas-attack/188597/

<sup>&</sup>lt;sup>68</sup> https://hectorreban.wordpress.com/2015/08/01/17-july-buk-sightings-planting-evidence-in-advance/

# The Vostok convoy

On 7/17 there was in fact a Vostok convoy from Donetsk to Snizhne after fighting around Marinivka.<sup>69</sup> The reason for this convoy is obvious. To the south of Marinivka large parts of the Ukrainian army had been encircled by the separatists. Without water and supply the soldiers partly fled in underpants over the "line" to the Russian side, the rest desperately tried to break out.



07/16 18:00 MSK Saur Mogila. The AFU (Armed Forces of Ukraine) soldiers dressed in civilian clothing, those who don't have it are in underwear and rush toward the Russian border.<sup>70</sup>

In Tymchucks words that catastrophe sounds like a major success:

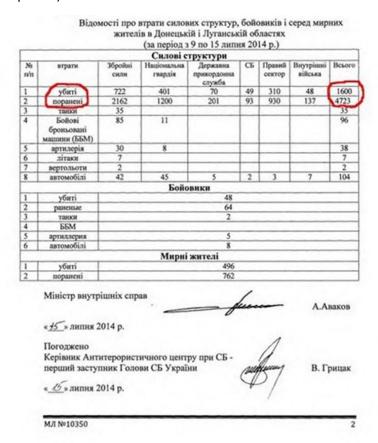


Tymchuck: In the battle near Marynivka the ATO forces destroyed 3 tanks, 2 APC (armoured personnel carriers) and terrorists' cars

July 17, 2014

In the battle near Marynivka Ukrainian Security Forces have repelled 4 attacks and destroyed military vehicles of the enemy.

The SBU report about the losses during the last 7 days sounds different (1600 dead, 4723 wounded, 35 lost tanks, 7 lost airplanes)<sup>71</sup>:



<sup>&</sup>lt;sup>69</sup> http://lifeinua.info/tymchuck-in-the-battle-near-marynivka-the-ato-forces-destroyed-3-tanks-2-apc-armoured-personnel-carriers-and-terrorists-cars/

<sup>&</sup>lt;sup>70</sup> http://cassad-eng.livejournal.com/28920.html

<sup>&</sup>lt;sup>71</sup> http://colonelcassad.livejournal.com/1677949.html

In either way the so called southern cauldron south of Marinivka was a catastrophe for the Ukrainian army. At the same time the separatists tried to close a smaller cauldron at the Luhansk airport.

One thing is remarkable about Tymchuks statement to the press. He mentioned two allegedly destroyed APCs that would otherwise only occur in his compilation of the Vostok convoy.

The actual Vostok convoy was captured on video four more times besides on the SBU Zuhres photos. The second source is the video "MAKEEBKA: Прошла колонна боевой техники ополченцев 17/7/2014"<sup>72</sup> and was recorded shortly after the start in Makijevka (48.045063 ° 38.015715 °). It shows the black UAZ Patriot, one armored Ural, three tanks T-64 and a white van.







The third source apparently was filmed in Torez ( $48.019543^{\circ}$ ,  $38.650495^{\circ}$ ) by a motorist with his cell phone and was later uploaded to Youtube. <sup>73</sup>







The fourth source obviously was shot from a camera some meters in front of the motorist (compare the last tree on the left side of the road) in Torez (48.019543°, 38.650495°) and appeared in a RT documentary "Uncut Chronicles: Ukraine, July 2014 (RAW Timeline)"<sup>74</sup> at minute 44:20.







The fifth source is from a camera team that accompanies the Vostok convoy. This footage was uploaded to YouTube on the same day at 20:26h UTC<sup>75</sup> and was linked a little later with the VK-account<sup>76</sup> of the Vostok battalion.

It should come as no surprise that neither Tymchuk nor the SBU have ever compared these sources with their allegations. However, the self-proclaimed social media analysts of Bellingcat never used or mentioned these first-hand sources to verify their Web-based version of truth. Nevertheless, there is no doubt that four of five sources (the Makievka Hot News, the Vostok Video, the video of the driver, the SBU Zuhres photos) show the same armored Ural:

<sup>72</sup> https://www.youtube.com/watch?v=99Lgd 1Fn-c

<sup>73</sup> https://www.youtube.com/watch?v=I0tkiyKXvwY

<sup>74</sup> https://www.youtube.com/watch?v=COtYvxTg90o&feature=youtu.be&t=44m20s

<sup>75</sup> https://www.youtube.com/watch?v=-OdjOt6TRsk

<sup>&</sup>lt;sup>76</sup> http://vk.com/video-67392358 169363347?list=8fa17ebe36585eafa4

# 1) the Vostok video



# 2) the Torez driver video



# 3) the SBU Zuhres photo



The video created by the Vostok battalion shows the convoy at three different positions. This footage shows the convoy in the same compilation, as well as the video of the motorist. Accordingly, the black UAZ Patriot with the red number plate drove upfront and followed by the armored Ural.





The Ural was followed by three T-64 tanks and a white VW van with the hazard warning light.





The first T-64 carries no number but is marked at the rear "battalion Vostok". The second T-64 bears the number 30, while the third T-64 has no identifiable marking.



On July 19, additional pictures appeared of the Vostok-shooting in a video entitled "Ополчение против фашизма Украины (ДНР А.С. Ходаковский." Мы уже будем здесь изгоями ")"<sup>77</sup> [Militia of Ukraine against fascism (DNR A.S. Khodakovsky: "We are already be outcasts here.")]





The building in the background has been located on the N21 between Shakhtarsk and Torez (48.032252° 38.513680°).

A second prominent point in the video is a roadblock about 2100m on the N21 in the direction of Torez (48.032127 ° 38.542169 °). A street sign indicates the distance to Donetsk with 51km.





<sup>77</sup> https://www.youtube.com/watch?v=gIB1nb6cTGo

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### The Oplot convoy

According to a Facebook message from Anton Gerashchenko at 18:51h UTC (21:51h EEST) five tanks with white flags arrived at 10:00h EEST in the morning in a Snizhne. The source for that information is unclear.



Tanks with white flags were also reported by WowihaY on Twitter. The information seemingly came from the same source who reported four tanks and the Kamaz via chat message.

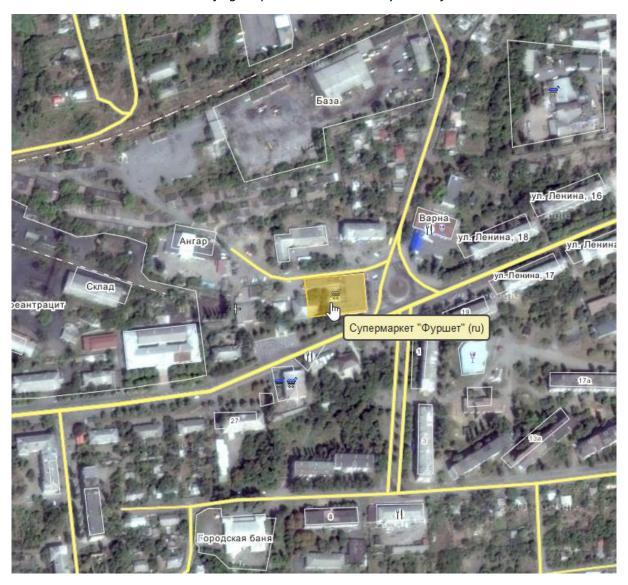
12: 08h UTC (15: 08h EEST): "tanks with white flags and "Oplot" inscription left the center and reaches the ring area near the "Lexus" gas station. Tank with "Vostok" inscription, which have come about Torez, are now in the center. The department store "Udarnik" is now filled with ammunition."

The term "Udarnik" (activist) stands for those mine, on whose premises the red low loader was filmed in October. In the immediate vicinity is the Furshet market in Snizhne so that both terms probably refer to the same place.

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<sup>78 &</sup>lt;u>https://twitter.com/WowihaY/status/489743543892996096</u>

12: 30h UTC (15: 33h EEST): "4 "Vostok" tanks, a Ural, a Kamaz with an anti-aircraft gun and a yellow bus full of separatists, a black Jeep with a red license plate that have come across the Keramzitovy in Snizhne, have first reloaded ammo at "Furshet" and drove afterwards toward Saur Mogila. ... and at the same time the tank with white flags "Oplot" that are driven by Torez after Snizhne. Is it maneuver?<sup>79</sup>



The "Udarnik" or "Furshet" supermarket<sup>80</sup> is located just south of that parking area for defective munitions "База" ("base") where the red low loader was videoed in October. Two blocks south of the supermarket is that point at which the BUK was photographed in the early afternoon on 7/17. Two blocks east of the supermarket (Lenin St. 14) is the 5-floor apartment building, which was hit by three missiles of the Ukrainian Air Force in the morning of July 15.

<sup>79</sup> https://twitter.com/WowihaY/status/489749063588257792

<sup>80</sup> 



According to the WowihaY tweets the Oplot tanks resupplied at the Furshet market near the "База" (base) and drove back out to the west of the city<sup>81</sup>, while the small Vostok convoy first drove to the supermarket to go a little later together with the Oplot tanks towards Saur Mogila.



Previously an "Oplot"-Konvoi with white flags was taken on video twice in Makievka. The convoy was accompanied by a white car. In both videos the tanks followed by a dark green van with posters on both sides of the cargo area.

This convoy comprises four T-64 tanks with the numbers 101 10x 103 104. A time of day cannot be determined due to the diffuse light conditions, but it stands to reason that this 4-tank convoy also took the N21 about Torez after Snizne. Nevertheless, it is striking that Anton Gerashchenko indicates "5 tanks with white flags" while WowihaY tweeted "4 Vostok-tanks". Both seem to exaggerate each to one tank.

<sup>&</sup>lt;sup>81</sup> http://www.cbsnews.com/pictures/fighting-from-the-barricades-in-eastern-ukraine/4/

Sighting 1<sup>82</sup>: Типичный день в Донбассе





Sighting<sup>83:</sup> Макеевка танки





https://www.youtube.com/watch?t=33&v=4Co587-K4Qc https://www.youtube.com/watch?v=QKUUsaso5Pk



### Time of the Paris Match photos

According to David Clinch of Storyful (Atlanta), the Paris Match photos was taken around 11:00h EEST.



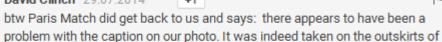
#### David Clinch 28.07.2014

Paris Match has not got back to us yet to explain why they locate this image in Snizhne while geo-location seems to indicate it was actually taken in Donetsk.

Übersetzen



#### David Clinch 29.07.2014



Donetsk, on the road towards Snijne.

Other than that : yes, it's taken at about 11 am on the morning of july 17th.

Fyi another media crew (not the Paris Match team) spoke briefly to the BUK crew once in Snijne and said they were nearly 100% convinced, from their accent, that some of the crew were not Ukrainian but Russian.

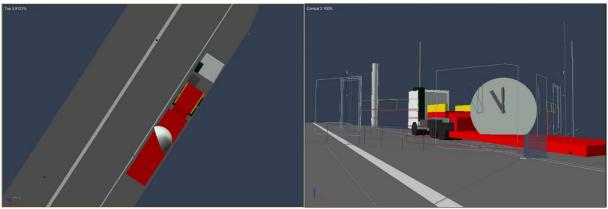
\_\_\_\_

the picture we took isn't very high def so there's no better reading of it than what's already online

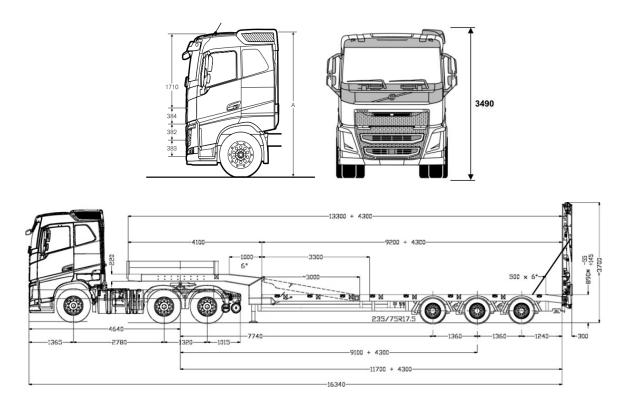
(btw if you read french: the truck they used to transport it was stolen!) http://www.parismatch.com/Actu/International/EXCLU-MATCH-Un-camion-vole-pour-transporter-le-systeme-lance-missiles-577289

Übersetzen

To confirm the actual time of origin of the Paris Match photos the surroundings and the vehicles have been recreated in a 3D model. This model makes it possible to simulate the exact sun position for different times of day in order to compare the shadows with the ones visible on the photos. The position of the camera was reconstructed by superimposing the model with the photos based on the perspective vanishing lines (vertical masts, white line on the road, etc.). Instead of the semi-trailer BUK an animated clock was charged, so that each frame of the animation is inextricably linked to the represented time in the image.



The key features of the 3D model are the height of the outer edge of the cab (327cm) with the black shaft (349cm) and the poles at the roadside. The defined height of the cab is crucial to the length of the shadow and thus the height of the sun. The mast behind the cab can simultaneously indicate the angle of the shadow on the road.

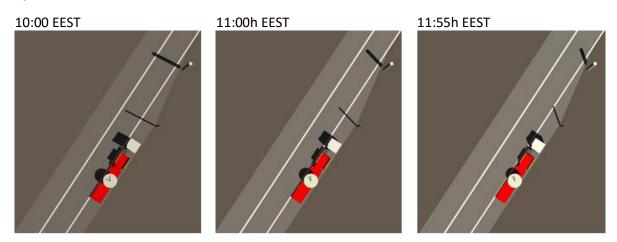


The position of the camera was found in the center of the left lane and about 1.4 m above the ground.

The position of the sun was animated with the following values:

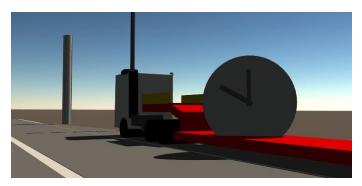
UTC	EEST	Azimuth	Elevation
08:00	11:00	90,66°	29,72°
08:30	11:30	96,44°	32,72°
09:00	12:00	102,65°	39,67°
09:30	12:30	109,48°	44,48°
10:00	13:00	117,18°	49,09°
10:30	13:30	126,03°	56,36°
11:00	14:00	136,38°	57, 14°
11:30	14:30	148,5°	60,2°
12:00	15:00	162,4°	62,28°

# Top view:

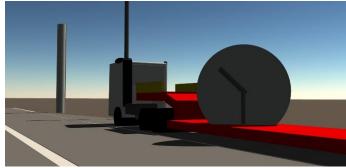


## Camera view:

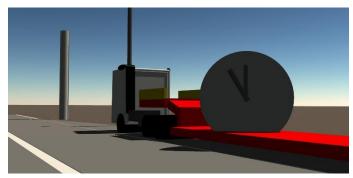
10:00 EEST



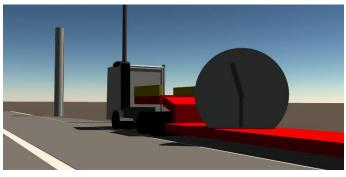
10:30 EEST



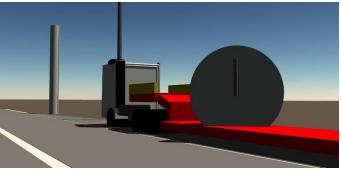
11:00 EEST



11:30 EEST

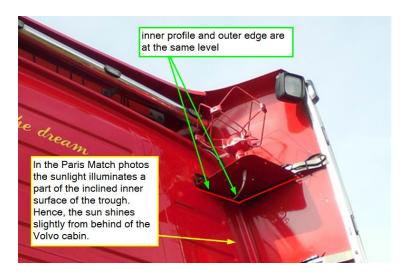


12:00h EEST





In addition to the length and angle of the shadows, there is another characteristic feature in the photo. On the rear front of the cab, there is a groove along the outer edge, which is commonly used to mount a wind shield to the cabin. At the time of the photo the sun is already in this channel and.

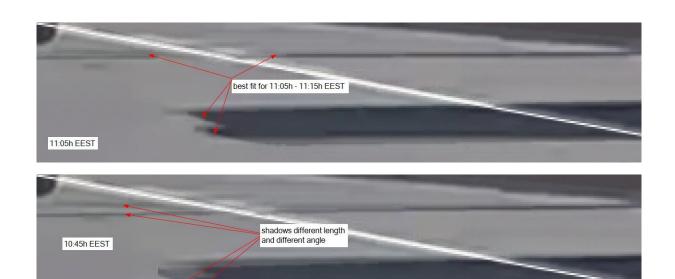


The final overlay of the animation with the photo shows best matching length and angle for the period from 11:05h EEST to 11:15h EEST. This result is in good agreement with the statement of the source.

### Overlay at 11:05h EEST



This method can exclude a start of the BUK transport before 11:00h EEST because the change of the length and angle of the shadows is clearly visible at this time of day.



## Timing the Vostok convoy and BUK transport

In early video from Markievka the convoy passes through the intersection of the General Danylova Prospekt corner Susanina Str. (48.045059° 38.015606°). The videographer is standing at the level of the pedestrian crossing.



When the videographer turns to the left to follow the minibus a recessed sand path becomes visible indicating the position of videographer. On the opposite side of the street is a bus shed. To the left of the bus shed on the videographer's side of the street is a pole and a tree. The shadow of the tree runs straight for the videographer indicating the exact direction of the sun.



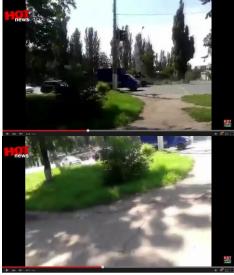
From the angle of the shadow results an azimuth of the sun of approximately 120°.



So direction of the sun suggests that the small Vostok convoy crossed the intersection at about 10:05h EEST.

Depending on lane the vehicles needed 3 seconds to drive the 26-31 meters from the pedestrian crossing to the line of sight of the videographer to the corner of the bus shed. This results in a speed of 30-36 km/h.





At this speed, the convoy took 16-19 minutes from the Vostok base camp up to this intersection. Therefore the convoy started at about 9:45h - 9:50h EEST at the base camp.

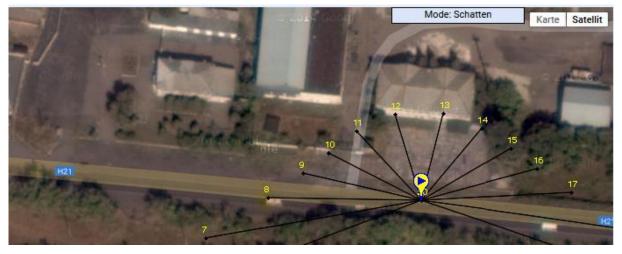
This fact alone makes the allegedly wiretapped phone calls of Khmuryi appear even more absurd. If one follows the narrative of the SBU, as the person responsible Khmuryi requested at 09:28h EEST at Sanchy from Vostok battalion, where he should park the BUK, so that they can go with the Vostok convoy. Sanchy gives precise directions, but the convoy starts at 09:45h EEST without BUK. At 11:00h EEST the BUK is still there.

In the self-made video of Vostok a building in the background can be located with no doubt as position 48.032252° 38.513680°. At this position the following Google Earth photo can be found:



The car park with the small house and only one window can be seen also in the Vostok-footage.





While the three tanks of the Vostok convoy passed this building on the outskirts of Shakhtarsk, one recognizes under the canopy, the roof, the structure on the gable and the air conditioners vertical shadows with no apparent inclination.



According to this angel and the location of the building the convoy passed that spot between 12:40h and 12:45h EEST.



This building is located only 7.8km away from the spot of the famous photo of the BUK in front of the Furshet market in Torez.



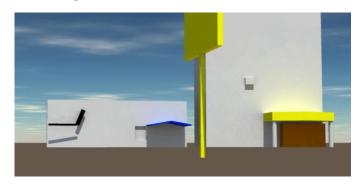
For an additional analysis the situation on Furshet market in Torez was simulated. As both buildings are exposed to the same sunlight, both buildings were put into one model next to each other for easy comparison.



The most striking shades are under the yellow canopy, among the air conditioners and the mast of the sign structure. The shadows match best for the time 12:07h EEST at the Furshet market and ...



...for 12:45h EEST for the building on the outskirts of Shakhtarsk.



Hence, the slow Vostok convoy (ca. 30km/h) passed the building in Shaktarsk about <u>40 minutes after</u> the Buk was allegedly photographed already 7.8 kilometers further down the route in Torez. Hence, the Buk on the photo was not a part of the convoy – neither in Makievka nor in Shaktarsk nor in Torez and never was reported accompanied by the tanks in Snizhne.

# Alternative explanations

According to the possible time frame, the BUK and the low loader went an average of 60 km/h and overtook the Vostok tanks. It is clear that the BUK on the low loader with its escort vehicles was about 40 minutes plus the time for the distance from Shakhtarsk to Torez ahead of the Vostok convoy in Torez.

The SBU-conman and Infowarrior Wowihay announced the BUK just in the minute, when it was actually photographed in front of the Furshet market.

In both videos the Vostok convoy is moving at about 30km/h. This speed matches the messages of 3 tanks in Torez by Anna Reschtanenko at VK<sup>84</sup> 13:14h EEST and Lisa Avetisyan at Twitter<sup>85</sup> 13:16h EEST. Lisa Avetisyan even posted a photo of tank 30 of the Vostok convoy that passed her window.<sup>86</sup>





Thus the tanks passed Torez about one hour after the BUK was photographed in front of the Furshet market.

The SBU-Tymchuk-compilation of images as evidence of a big "terrorist convoy" are a deliberate deception. The SBU got the Zuhres images either directly from source or had even installed an observation post. In both cases the photographer must have known that the BUK-transport and the Vostok convoy passed his house with a little less than one hour distance.

The re-upload of the Vostok-PR videos by Tymchuk and Euromaidan is either an incredible coincidence or a conscious preparation for the SBU-interpretation of a large "terrorist convoy" with a BUK. According to the analyzed time for the BUK in the Paris Match photo and also in front of the Furshet market results in an average speed of 60 km/h for the heavy transport of the Volvos with a low loader and a 32t heavy BUK. In contrast, the speed of the BUK-transport in the Zuhres video can be estimated to be only 25 km/h on a straight road without apparent traffic. Again, the question arises whether the

<sup>84</sup> https://web.archive.org/web/20141110053620/http://vk.com/wall-70279965 83186?reply=83547

<sup>85</sup> https://twitter.com/LisaAvetisyan/status/489715200657219585

<sup>86</sup> https://twitter.com/LisaAvetisyan/status/489720875038826496

heavy transport has significantly reduced its speed in front of the SBU observation post or was it an incredible coincidence. The speed itself appears very unusual.

The Furshet market photo and the-minute coverage of 4 rockets by Wowihay have to be noticed in a similar manner, since any reducing of speed requires that this heavy load went much faster than 60 km/h to other road sections.

Furthermore, the question arises, why that BUK – against the Khmuryi order - fled the Vostok-tanks, tried to hide in Snizhne, waited until all tanks left and drove away in a different direction. Why did "Sanchy" in the allegedly wiretapped telephone conversation at 09:23h EEST not realize that the Vostok-tanks are already on the move? Those questions were raised much more urgent since "Khmuryi" allegedly is the voice of Sergey Nikolayevich Petrovsky, a retired Major General of the Russian military intelligence GRU and Strelkov's deputy commander since April 2014 as the Ukrainian secret service SBU thinks to know<sup>87</sup>. Even at the moment when that overhasty BUK has overtaken the Vostok convoy, it does not remain - as ordered by Khmuryi – with the tanks but roars past, to hit the brakes just before the window of a SBU observation posts.

Recently Bellingcat acquired a satellite photo from DigitalGlobe. According to the metadata it was collected at 08:08h UTC (11:08h EEST). The picture shows the car park near the "motel" and about 12 km of the road towards Snizhne. That first third of the way leads through urban area and allows hardly steady 60km/h. On the conditions that the BUK could be set off at the earliest immediately after the emergence of the Paris Match photos, Bellingcat should be able to locate the BUK and low loader safely in the satellite photo from DigitalGlobe.



Nevertheless Bellingcat has not yet found the heavy transport.



In the typical Bellingcat manner they simply changed the start time of the BUK on ~10:45h EEST<sup>88</sup> without any analysis and even if the anonymous source says otherwise.

http://www.nrc.nl/nieuws/2015/04/01/russian-officer-recognized-on-tape-by-dutch-investigation-team-mh17/

<sup>88</sup> https://www.bellingcat.com/news/uk-and-europe/2015/07/16/in-their-own-words/comment-page-5/

The generaly accepted timeline of Buk 3×2, which is suspected in the downing of MH17, with very approximate and broad ranges of time:

#### 1. Left Donetsk, eastbound along H21: ~10:45am (Kyiv time)

Similarly Bellingcat imputed a Nikon D7000 to a wrong time setting for no apparent reason, sold tank-sightings as BUK sightings to the world press, raised a sagging rubber mat to a "fingerprint" of a BUK and bent the metatag "Photoshop" into the shape of an evidence of forgery by the MoD. All these distortions in their totality serve only one goal: to confirm a preconceived thesis. The thesis is the "generally accepted timeline of Buk 3x2, which is suspected..." In fact this thesis is the only reason why Bellingcat totally neglected the Vostok footage of the Vostok convoy.

So what is the "striking evidence" Bellingcat provided for their "3x2" thesis? It's the Paris Match photo.

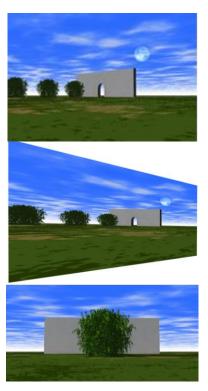
# A second look at the Paris Match photos

The only BUK-transport-images that allow closer scrutiny are the Paris Match images published on July 23 and 25.<sup>89 90</sup> The resolution and quality of those anonymous images is that bad that the alleged "evidence" is much more a question of faith than fact.



To compare these questionable details with a Russian BUK Bellingcat did a more questionable trick: it took the optical warped BUK from the Paris Match images, dewarped the images and compared the position of some details with similar details in a perpendicular side-view of the Russian Buk 3x2.





<sup>&</sup>lt;sup>89</sup> http://www.parismatch.com/Actu/International/Exclusif-Ukraine-Notre-enquete-sur-les-lieux-du-crash-comment-le-MH17-a-ete-abattu-576889#

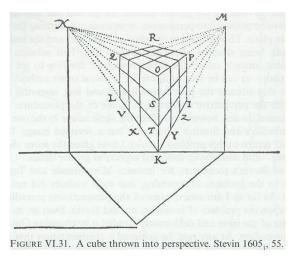
<sup>&</sup>lt;sup>90</sup> http://www.parismatch.com/Actu/International/EXCLU-MATCH-Un-camion-vole-pour-transporter-le-systeme-lance-missiles-577289

It should be obvious that all the details of the questionable "fingerprint" have changed their relative position. That problem becomes obvious when looking at the ramp below the missiles. Usually the horizontal part of the ramp has 3 flaps. In the de-warped Bellingcat-image that ramp appears much shorter and seemingly has only two flaps.



The reverse effect can be observed at the rubber used for the "fingerprint". That rubber extents to the yellow board of the low loader while the alleged damage can be found right below the white of the serial number.

However, this procedure of de-warping the perspective reveals some other difficulties. One should expect the perspective equalization of the BUK would also straighten out the driver's side of the Volvo and semi-trailer. One can easily see that the perspective lines of the BUK not even run approximately parallel to the edges of the yellow sign. May be the front of the BUK is slightly tilted towards the cabin but for any further analysis it is important to know some laws of perspective as described in "Van de Deursichtighe" by Simon Stevin in 1605. 91



**Definition of vanishing point:** the point to which parallel lines appear to converge in the rendering of perspective, usually on the horizon. (Collins English Dictionary)

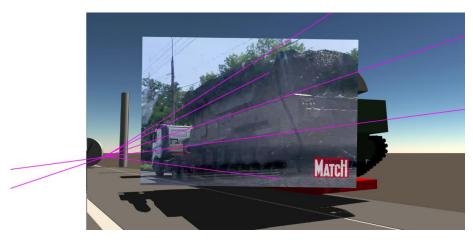
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<sup>91</sup> http://www.ottobw.dds.nl/filosofie/perspect.htm

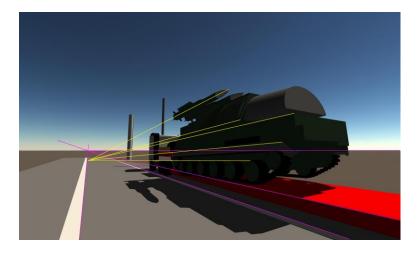
The definition perfectly describes the convergence of the trolly bus wires, the white lines on the street, the horizon and the red low loader.



The perspective lines of the BUK obviously converge in a different vanishing point. If the BUK is tilted towards the front then the vanishing point of the BUK-lines should be found exactly below the vanishing point of street + horizon + wires + low loader.



That's not the case. The lateral displacement of the vanishing points already proves that the front of the BUK points in a different direction. That's of course pretty dangerous for a heavy and fast transport like this or the result of a fake. The vanishing point of the Paris Match BUK is just slightly below the horizon. Therefore the BUK in the image is just minimal tilted towards the front. One needs to know that any tilt angle towards the Volvo cabin displaces the vanishing point just vertically.



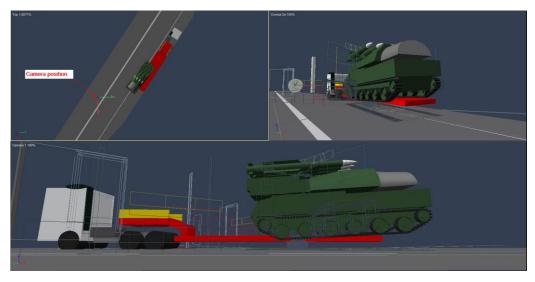
As one can see in the images above, a scaled 3D model of a BUK-M1 was used to roboscope the view of the Paris Match photos. (BUK height: 3.8 m, Low Loader height: 0,88m, Volvo cabin height: 3.49 m) Once again the shadows for about 11:05h EEST perfectly match the shadows of the cabin and the low loader.



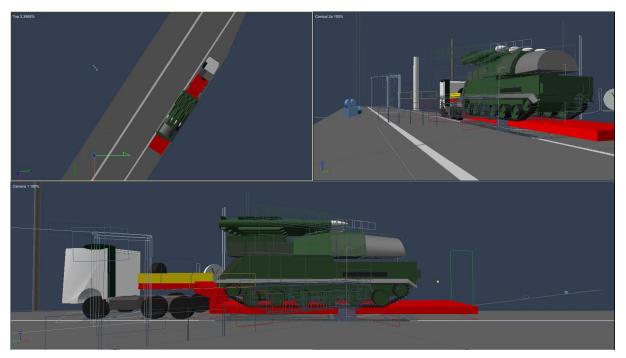
However, the layered model makes a whole number of other problems clearly visible.



One might think the missing missile is the most alerting feature of these Paris Match images. No, it is not. The most alerting feature is the actual position of the BUK relative to the low loader. Of course, that relative position is hardly recognizable in the photos. The following image shows how the BUK must be arranged in 3D space to approximately fit the 2D view of that Paris Match image:



The position of the "flying BUK" (images above) suggests that the Paris Match BUK was closer and higher relative to the camera than to the Volvo and the low loader. The "flying BUK" model matches best the rear of the Paris Match BUK. In contrast, the BUK-model was correctly loaded and slightly tilted towards the Volvo cabin (images below):



The superimposed Paris Match images reveal the problem:



Now the outline of the front approximately matches but the rear of the Paris Match BUK appears like turned towards the camera. The missiles in the photos are much more tilted, the rear in the photos appears much higher but still almost horizontal.

Since the left edge of the BUK approximately corresponds to the expected contour, it was also checked whether the BUK was rotated towards the camera.







Indeed, a rotated low loader almost match the closer Paris Match image.

The driver obviously shot both Paris Match images within less than 5 seconds on a straight path along the left lane of the street. A reflection along the lower edge of both images confirms that the camera angle wasn't changed. A different camera or lens can be excluded too.

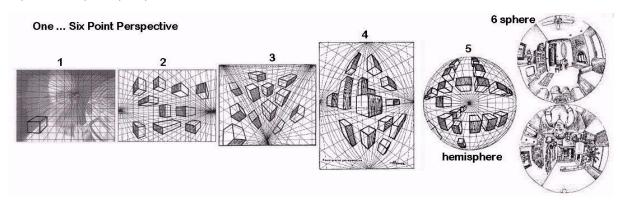


The problem is obvious.

Even a closer and lower point of view in combination with a shorter focal length cannot solve the problem because any change of the POV (point of view) tilts the trolly wires and the white line on the street in comparison to the vehicle and the vertical pole in the background.

So is it may be some lens distortion?

According to the laws of perspective, any distortion may bow the parallel lines, but nevertheless all parallel lines will converge in the same vanishing point. The perpendicular lines on the rear side of the BUK will converge in a different vanishing point but usually at the same horizon as can be seen in the 2-point or 4-point perspective<sup>92</sup>:



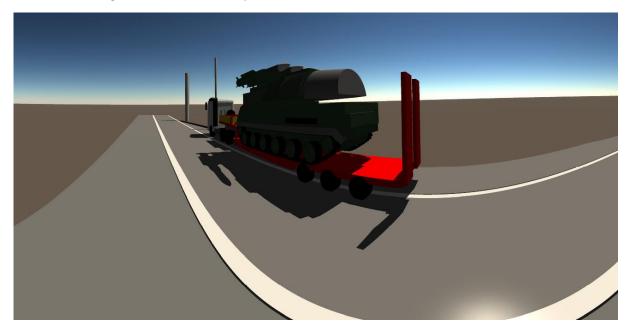
In other words, a lens distortion of a close view of BUK and Volvo would tilt the edges along the back side of the BUK in a very different angle than distant the horizontal edges across the back side of the Volvo cabin.

61

<sup>92</sup> http://www.ottobw.dds.nl/filosofie/perspect.htm



As one can see above, a close view would allow to look "behind" the ramp and the BUK appears much bigger than the Volvo. Nevertheless, the almost horizontal edges along the back side of the BUK in the Paris Match images demand a camera position at the same level.



At a height of 3m the camera would see the rear of the BUK still horizontal but an elevated camera would change the position of everything else in the frame. Therefore a very close spherical camera can be excluded as well.

So what if the Paris Match images are just a little part of a larger dashcam image?



An applied lens correction capable to put BUK and Volvo in a nearly fitting relation tilts the white line on the street enough that the camera in the 3D-model would have to be placed much lower and/or far to the left of the actual position. Keep in mind that any change of the camera position would immediately change all other relations too. Furthermore, a "pillow" correction of this kind already bows the straight lines in the image while a necessary "correction" should do the opposite.

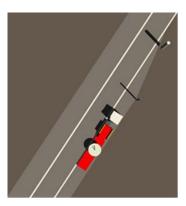
Finally, one has to ask if that BUK is a part of the original image at all. Indeed, the easiest way to "fit in" the shape of a BUK is the very same way of 2D distortion Bellingcat did – just vice versa.

At least some 2D-layer could explain the only sharp part of all the heavily blurred outer edges of that BUK.



The vertical part of that dark edge is just the outer side of a steel sheet. It hardly seems to be possible that for example a camouflage net was draped just for a moment exactly along that edge. It seems to be much more likely that this edge was forgotten to make it unrecognizable with a strong blur effect.

At about 11:00h EEST the sun was to the right of the street and shines slightly from behind the driver with the camera who shot at least the images of the Volvo.



At the bottom of the Paris Match photos a reflection of the ventilation shafts at the top of the dashboard is superimposed with the BUK.



A shadow across the dashboard helps to estimate the dashboard profile.



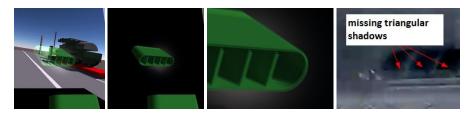
The sunlight in the rounded end of the shaft and at the flat structure close to the windshield suggest the direction of the sun. Keep in mind that the bottom side of the reflection is the windshield side of the dashboard:





Apparently the sunlight in the reflection shines more from behind than from the right side of the driver. Seemingly the shadow in one of the Paris Match images was altered in a way that suggests a sun direction to the right of the driver.

A tilted shaft allows the sun to shine into the curved end of the shaft but casts triangular shadows.



Therefore the reflection seems to represents a different time of day. So may be the reflection was added to a layered composit image like a Photoshop PSD.

There are a few more clues that point in the very same direction. Firstly, the reflection of the bright and sunlit areas of the dashboard hinders motorists because it obstructs the view, while dark or black areas reflect no light and therefore not interfere with the view through the windshield.



The pictures above demonstrate that the dark area of the ventilation duct acts like punched holes in the reflection, through which the structure of the road and the blue hood can be seen clearly.



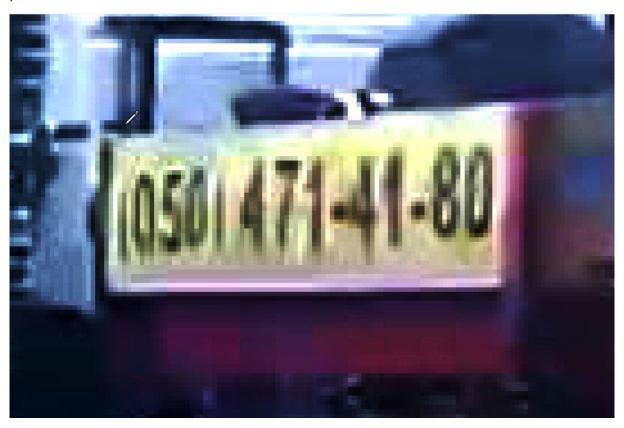
In contrast, the dark areas of a photo-layer consists of black color and obscure the view, like the slightly enhanced Paris Match foto demonstrates. A true reflection of the dashboard would show the red of the trailer most clearly in the "black holes" of the ventilation duct.



It is worthwhile to look at this picture section in more detail. Apparently the sun has not yet reached the angle of the rear yellow board, although the sun - as already shown - shines on the back of the Volvo. This confirms the rotated trailer and ideed allows only a very short timeframe.

So the rear board is in the shadow but the yellow exactly board opposite to the sun appears much brighter.

In addition, due to a slightly steeper gradation a strange horizontal edge in the yellow color below the phone number becomes obvious.



There is no doubt that the telephone number was inserted into the bright area of the original board. The lower edge of the inserted number is pixel by pixel exactly horizontal. In the yellow area every pixel has its own gray tone. The original more whitish color of the board below that yellow edge shows

lines of 8 pixels of the very same gray tones. Those 8px-lines are obviously caused by the blocking artefacts of an earlier JPEG-compression and perfectly correspond to the blocking of the red area below the board or even the white rear of the Volvo cabin. The yellow area shows no blocking and therefore the number obviously was added after the initial JPEG-compression of Volvo and low loader.

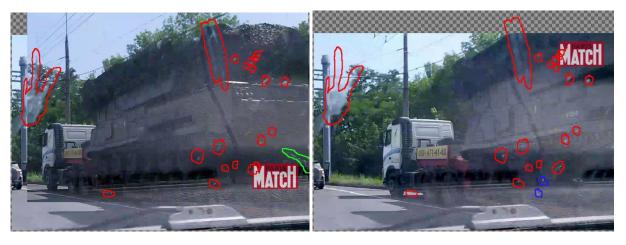
Furthermore, the telephon number is distorted and tilted in a wrong angle for the perspective. Obviously the forger deformed the number parallel to the upper edge of the board and blurred only the upper edge of the yellow insert.



By the way, the whitish color of the lower edge corresponds to other photos of the low loader used by the separatists.



There are still more clues for a layered photo-editing. In the whole area of the BUK is white dirt on the windscreen. If one layers the dirt of both images on each other, it is found that in the edge region of the Buk some dirt tracks are missing.



One should think about a plausible reason for the appearance and disappearance of some dirt tracks along the edges in the one or the other photo taken less than 5 seconds apart. The best explanation is retouche.

Another fact strikes the eye when looking at this comparison above. The camera wasn't turned towards the BUK because any rotation of the camera would immediately change the angle of all perspective lines like the white line on the street. Therefore both Paris Match images obviously are just sections of two larger images pointing in the very same direction or - more probably - of two frames of a dashcam video.

More precisely both images appear to be composites of at least two different dashcam videos: one video that shows the Volvo and a different video that shows the BUK. The BUK-video apparently was taken from a low POV on the lane next to the BUK. The low loader was taken from the second lane left of the parked Volvo, maybe because the parked Toyota RAV4 prevented a perfectly fitting dashcam video. The best matching frames apparently were added, the edges were blurred and a layer of a reflection provides the impression of a unified whole.

Finally, it is a law of nature that every edge in direct sunlight casts a shadow. Nevertheless, the 1 meter wide edge of the gooseneck between truck and low loader casts no corresponding shadow:





There is no way to explain the missing contour but by a mistake of the forger. In other words, the Paris Match images were altered and there is only one expanation, why the forger had to alter the contour of the shadow. Apparently the original contour had a straight edge like a container for example.



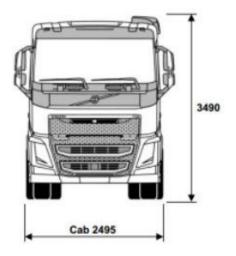
So let's go back to the best fitting Paris Match image to see the expectable contour of the shadow clearly. Obviously the forger tried to draw the contour of some netting that wasn't there.



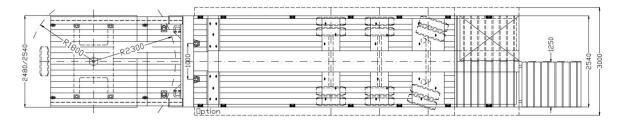
So if the Paris Match images are a proven fake – and there can be no doubt about it as long as the laws of nature do not change – what does it mean for the other photos showing the "BUK" on a red call-me-please-low-loader?

At this point the investigation authorities might start with a look at some defined relations:

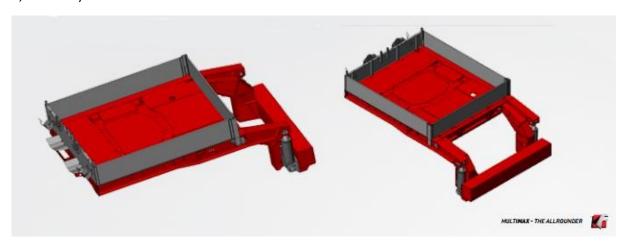
The Volvo Cabin has a width of 2495 mm.



The Faymonville Multimax has a width of 2540 mm and is 45 mm wider than the Volvo cabin. In other words, the low loader is 1.8% wider than the Volvo cabin.



The board on the backside of the yellow box on top of the gooseneck is as wide as the low loader. Therefore in a distant shot the yellow board on the backside should appear as wide as the cabin (or 1,8% wider).



The gooseneck and the low loader do not hinge sideways. The only hinge is between the Volvo and the Gooseneck.

The right side of the BUK front has a vertical edge and the perspective of the BUK in front of the Torez market should look like this.



So either something as white as the building and perfectly aligned with the corner sits between BUK and yellow box or half of the yellow box in Torez is missing.

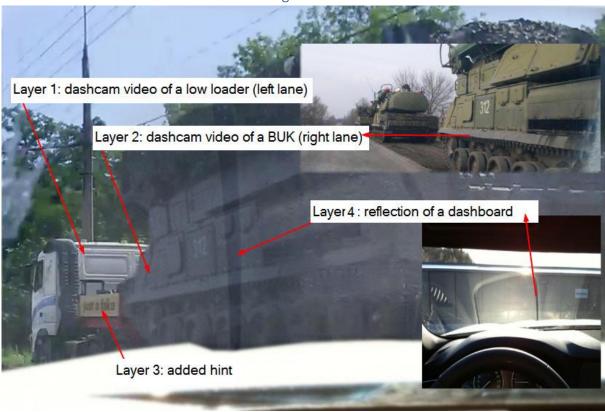


Once again it is the space above and below the gooseneck that causes some "confusion". And strangely enough the yellow board in Torez also has these whitish borders. Once again the source of the image is unknown. Once again the quality of the image is terrible. It appeared on the internet right minutes after the message that allegedly a BUK is standing in front of the Furshet Market in Snizhne. ... just like the Paris Match images initially were published as showing a BUK in Snizhne.

So what's left? ...the Zuhres video without a traces of "3x2" and whitish boards without a number driving at about 25km/h while the alleged BUK-transport must have driven at an average speed of 60km/h? That Zuhres-BUK that deliberate was connected to the wrong convoy to present a huge terrorist column driving down the road to ...

...the place of an airstrike by the way.

Handicraft instruction for a Paris Match image:

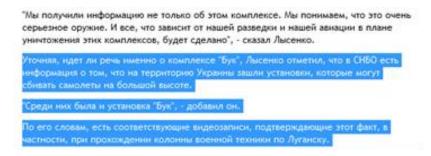


## The missing evidence

At a press briefing of the National Security Council on 7/17 spokesman Andriy Lysenko said: "We have received information not only about this complex. We understand that this is a very serious weapon. Everything will be done, depending on our intelligence and aviation, to destruct these systems."

At 18:10h EEST the Ukranian "Liga Novosti" cited Lysenko and wrote:

Specifying whether it is about the complex "Buk" Lysenko said that the National Security Council has information that installations went to the territory of Ukraine, which can shoot down aircraft at high altitude." Among them was the installation of "BUK", - he added. According to him, there is a corresponding video, confirming this fact, in particular, the passage of the column of military equipment in Lugansk.



There is no mistake about the time or day. The article was saved on 7/17 at 19:54h UTC (22:54h EEST) in the system of the Wayback Machine of archive.org. <sup>94</sup>



Within hours after the downing of MH-17 the Ukrainian side presented an overwhelming variety of videos, photos, names and wiretapped conversations to document the "major terrorist convoy" of the Vostok battalion. Only that one particular video showing a BUK in Luhansk has been withheld from the public for over a year now. Instead the SBU presented two videos allegedly showing BUK-systems in the early morning of 7/18 close to the Russian border.

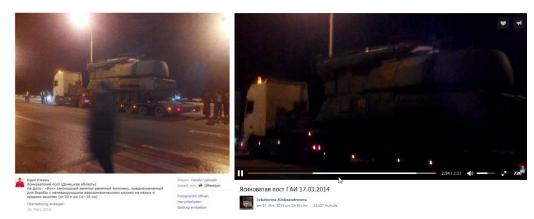
«БУК-М1» В НАПРЯМКУ КОРДОНУ УКРАЇНИ З РФ



<sup>93</sup> http://news.liga.net/news/politics/2564391-v ukrainu zashli rossiyskie zrk buk snbo.htm

<sup>94</sup> http://web.archive.org/web/20140717195434/http://news.liga.net/news/politics/2564391-vukrainu zashli rossiyskie zrk buk snbo.htm

The lower right image was debunked as a fake within hours because images of the same transport already were published on 3/18 on VK<sup>95</sup> and Facebook:



The second image was published by the SBU as a video taken in the early morning of 7/18 in Krasnodon but in fact it was filmed at a bypass road on the northeastern outskirts of Luhansk heading south. In the days leading up to the 17<sup>th</sup> of July that area was under the control of the Ukranian army.

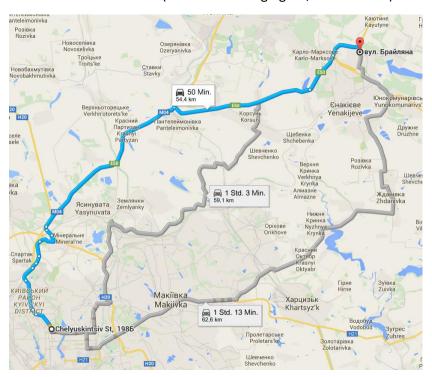
Since the SBU-Luhansk-BUK video was presented together with a proven fake and since no other known video shows a BUK in Luhansk, there is a good chance that the presented SBU-Luhansk-BUK video is the one Lysenko already mentioned on 7/17.

<sup>95</sup> http://vk.com/video246185435\_168140448?hash=c2fc6c689b4fb0db

## The ghost convoy - A possible track

On 07/15/2014, two days before the transport of a BUK, a convoy under a convoy under Russian flags were spotted between Yenakiyevo and Donetsk, photographed and filmed on video.

This convoy apparently came down the highway M04 from the direction of Luhansk and then turned toward Yenakiyevo to the south. From this initial screening through to the Donetsk Arena, the convoy took the longer route and smaller streets (see the following figure, 1 hr. 13 min.).



Sighting $^{96}$ : "Енакиево, Небольшая колонна танков и САУ ДНР"

48.269193° 38.218688°



75

<sup>96</sup> https://www.youtube.com/watch?v=yNBs\_qjKdHs

Sighting $^{97}$ : "Енакиево: колонна ополченцев идёт на помощь Донецку 15.07.2014" apparently 48.204495° 38.231300°



Sighting<sup>98</sup>: Енакиево. Колона танков Идут в сторону Донецка новости сегодня 15 июля 2014 48.192739° 38.237341°



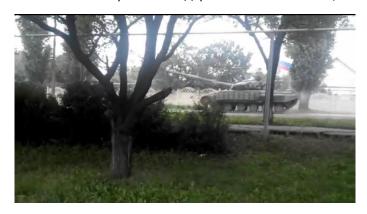
Sighting<sup>99</sup>: Макеевка танки ,makeevka tanks apparently 48.043615° 38.035484°



https://www.youtube.com/watch?v=z2Y\_jjAxREs
 https://www.youtube.com/watch?t=25&v=gkno8BcotvM

<sup>99</sup> https://www.youtube.com/watch?v=vs0LC8UcPuE

Sighting $^{100}$ : Макеевка - к ополчению прибыло подкрепление 15.07.2014 / Makeevka



Sighting<sup>101 102</sup>: Макеевка: Прошла колонна боевой техники ополченцев. Украина новости 15.07.2014

48.017922° 37.983570°



Sighting $^{103}$ : Российские танки САУ 2С1 Гвоздика уже в Донецке,возле Мотеля 15 07 2014 48.003864° 37.870476°



https://www.youtube.com/watch?v=fSp-\_krCfno https://www.youtube.com/watch?v=fJ5z64D3TA0 https://www.youtube.com/watch?v=X9kFIa3yzEk

<sup>103</sup> https://www.youtube.com/watch?v=VT34BNjrSsQ

Sighting $^{104}$ : Колонна российской бронетехники возле "Донбасс Арены" 48.020192° 37.807275°



Sighting $^{105}$ : Донецк: колонна ополченцев 15.07.2014 48.020192° 37.807275°



Sighting<sup>106</sup>: Donetsk 48.023069° 37.805073°



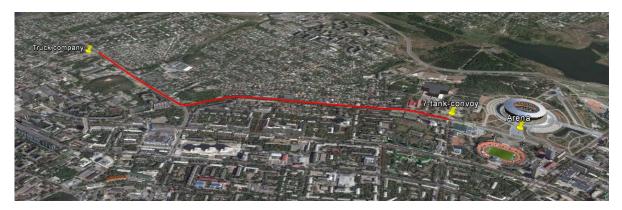


https://www.youtube.com/watch?v=U8vVah 6RN4 https://www.youtube.com/watch?v=B ba79w8hQw http://cassad-eng.livejournal.com/26295.html

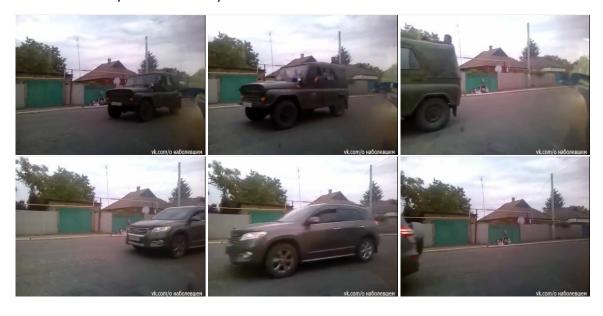
Sighting<sup>107</sup>: Donezk



At the last known sighting this convoy was near that truck rental from where the Volvo with red Faymonville low loader allegedly was taken.



While all the other videos show either a parking situation or do not show the entire convoy, the video of the second sighting clearly shows an UAZ 469 has taken the lead with the flashing light on. The UAZ 469 was followed by a dark silver Toyota RAV4.



 $<sup>\</sup>frac{107}{\text{http://hronika.info/videonovosti/27771-na-pomosch-doneckim-separatistam-pribyla-kolonna-voennoy-tehniki-pod-flagami-rf-video.html}$ 

Both vehicles match in type and color of the escort vehicles of the BUK heavy transport. The Toyota RAV4 appears again in the Makiievka video<sup>108</sup>:





The UAZ 469 is also visible in front of the Donezk Arena. Therefore both vehicles are part of the convoy all the way from Enakievo to Donezk.

Several factors are apparent regarding this convoy:

First, the pro-Russian side had no plausible explanation for this convoy. The message of "Colonel Cassad" could only guess:

"For now it is announced that through Yenakiyevo into Donetsk a convoy of the DPR armor passed into Donetsk (4 tanks T-64, 1 UAZ, 1 truck, 1 APC (BTR-80), and what is the most interesting 1 SPH "Gvozdika").

The question of from where so much is purely rhetorical. Mr. Strelkov recently complained that after a break-out from Slavyansk he only has 1 tank (2 others were lost during the break – 1 exploded, the other was abandoned), so now they are compensating with overhead (somewhat earlier several "Grads" were redeployed under Donetsk)."

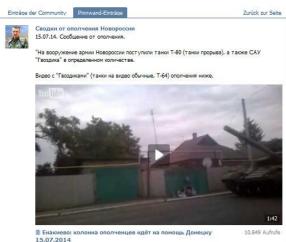
Even the VK-account of Commander Strelkov<sup>111</sup> expressed the news somehow awkwardly:

15:07:14. Written by militias:

"The army of New Russia received T-80 tanks (tank breaker) and ACS "Gvozdikas" in a certain amount.

Video with "Gvozdikas" (the tanks in Video are usual T-64) of militias below.

That message does not have any proper evidence of their T-80 and took what they could find on the internet. That is probably a similar behavior as it resulted in a hasty launch of an AN-26-downing-report just two days later.



<sup>108</sup> https://www.youtube.com/watch?v=X9kFla3yzEk

<sup>109</sup> http://cassad-eng.livejournal.com/24952.html

<sup>&</sup>lt;sup>110</sup> http://colonelcassad.livejournal.com/1671158.html

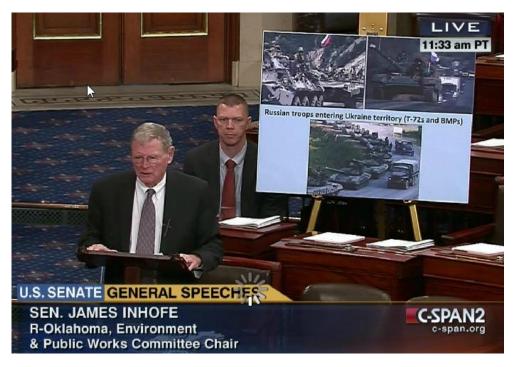
<sup>111</sup> https://vk.com/wall-57424472 6897

The pro-Kiev press appears similarly surprised and reacted similarly strange. From about lunchtime onwards it is claimed, that a gigantic convoy of 34 tanks, 34 self-propelled artillery units (SAU) and two armored personnel carriers is on its way from Luhansk to Donetsk. <sup>112</sup>



Напомним, по Снежному был нанесен авиаудар силами российской авиации. Авиация украинских силовиков выпетов не совершала, так как с 14 июля временно приостановлены все полеты авиации АТО из-за сбитого над Луганском Ан-26. В результате обрушения жилого дома в Снежном погибли четыре человека, еще четверо получили ранения разной тяжести.

The only evidence of this gigantic clout is a photograph that was also passed to Senator Imhofe as proof of the Russian intervention.



However, the photo comes from the Georgia war of 2008 and therefore proved to be an embarrassing fake. 113 114 115

<sup>112</sup> https://news.pn/ru/RussiaInvadedUkraine/108929

<sup>113</sup> http://www.c-span.org/video/?c4528166/senator-inhofe-shows-fake-photos-ukraine-war

 $<sup>\</sup>frac{\text{114}}{\text{http://www.nytimes.com/2015/02/14/world/europe/sifting-ukrainian-fact-from-ukrainian-fiction.html? } \text{r=1}$ 

http://freebeacon.com/national-security/exclusive-photos-show-russian-military-in-ukraine-arming-separatists/

Of course, the pro-Kiev press "verifies" that this gigantic convoy came straight from Krasnodon. On the bottom line, however, only 4 tanks, 3 self-propelled artillery units and one armored personnel carrier remain, which appeared from out of nowhere into Enakiyevo and disappeared on strange detours near the car rental company in Donetsk again.

## Reports of Russian Armour on Move From Lugansk to Donetsk 12:04 (GMT)

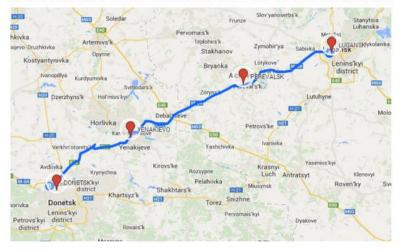
LB.ua reports that there are eyewitness reports of Russian armoured vehicles heading towards Donetsk.

They report seeing two columns of separatist fighters with military vehicles manned by Russians. LB describes reports of 34 tanks, 34 self-propelled guns and 2 BTR armoured personnel carriers.

One witness told LB that the column had ground up the tarmac road covering in Perevalsk as they passed through.

We have not yet seen any photo or video evidence taken in Perevalsk, however a video was uploaded today which apparently shows the same column further down the road to Donetsk in Yenakievo.

The apparent route, from Lugansk to Yenakievo via Perevalsk matches that made clear by sighting of T-64 tanks on June 20. Those tanks were located travelling from Krasnodon (right on the border with Russia) to Gorlovka, just to the north-west of Yenakievo. It seems likely that these vehicles followed the same route across the border via Krasnodon and Lugansk.

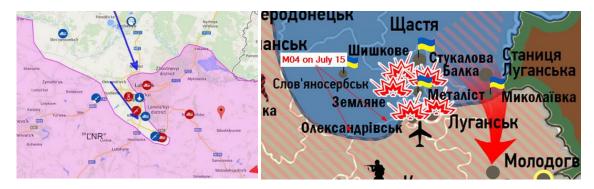


However, it seem that there was no way through in the days about July 15th for Russian flags and tanks on the M04 from Luhansk on Perevalsk after Enakiyevo. According to what at least confirm both warring parties, the Ukrainian army had beaten a trail in the territory occupied by separatists to free the Luhansk airport. On July 14th, the day before:





On July 15th the Ukranian army at least had managed a convoy with heavy losses to the airport. But now they were shot at from the city of Luhansk with GRADs and the way back was too dangerous. At the same time, the Ukrainian army began to shoot the city of Luhansk. According to Kiev loyal media, the airport was considered to be exempted, according to the separatists, the airport was considered to be blocked. The official press release of the Ukranian army described the situation in the daily map and claimed "The settlements of Metalist, Oleksandrivsk, Bile and Rozkishne have been freed from militants" 116:



At the same time the pro-Russian side described a tactical retreat by the Ukranian army. However, Luhansk was on fire. The Kiev-loyal media blamed the separatists, who allegedly had threatened to lay Luhansk in ruins, if the Ukrainian army wouldn't withdraw its troops. But still the separatists were inside of Luhansk and which tactical or strategic sense should arise from shooting their own people?



Either way the highway M04 from Luhansk to Perevalesk appears to be suicidal for a 7-tank-convoy under Russian flags. Khmuryis "Gvozdikas" - of which we know only from the "intercepted" phone conversations - disappeared seemingly unseen, from the tanks 35-38 absent any further notice and also the personnel carrier BTR 265 never reappeared again. As expected Bellingcat has thrown together a vague image of a Russian BTR with that 7-tank-ghost-convoy BTR 265 in their vehicle-search-project. Now it's proven, just like the "generally accepted timeline of Buk 3x2", isn't it?

<sup>116</sup> http://en.interfax.com.ua/news/general/213604.html

http://colonelcassad.livejournal.com/1668948.html





One has to wonder why that BTR was provided with new paint and a significant number for the export to the war zone, while the pro-Russian separatists rather endeavor to erase the old numbers.

The bottom line is one cannot exclude that those small ghost-convoy from out of nowhere runs under a false flag. And just this convoy was accompanied by that Toyota, which apparently occurs only a little over 24 hours later as a support vehicle of the BUK-transport.

Should there be a surprise that Informator.lg.ua<sup>118</sup> on July 18th not only evokes the great Tymchuk-SBU-convoy, but also explicitly refers to that ghost convoy on July 15th.



Можно предположить, что колонна частично состояла из бронемашин, которые 15 июля передвигались по центральным улицам Донецка, до этого ехали в Перевальске, в Енакиево и в Макеевке. Тогда были замечены 2 авто с боевиками, 4 танка, 3 самоходных артиллерийских орудия 2C1 «Гвоздика», грузовик и БТР.

INFORMATOR: "It can be assumed that the column was part of the armored vehicles, which on July 15 moved through the main streets of Donetsk, went before Perevalsk in Yenakiyevo, and Makeyevka. Then it was seen 2 cars with militants, 4 tanks, three self-propelled guns 2S1 "Gvozdikas", a truck and an APC."

-

<sup>118</sup> http://informator.lg.ua/?p=10815

And while something big was underway, President Arseniy Yatsenyuk visited with thoughtful countenance the exhibition of captured "Russian" ammunition in Slavyansk. Most pieces remember a little too much the German Wehrmacht "Nebelwerfer" fog bombs.



