

Two missiles theory

In 2022, the administrator of the Russian discussion forum mh17.webtalk.ru sent a report to the court, the prosecution, the JIT and the defense, containing the conclusion of eight years of MH17 research by the forum's participants. That conclusion reads: there was a Russian Buk-Telar in the agricultural field near Pervomaiskyi and it fired too, but only after MH17 had already been hit. The fatal shot probably came from a Ukrainian Buk-Telar that was positioned near Shaposhnykove. That one targeted MH17 in order to blame the separatists and the Russians. For those who do not give any credence in advance to whatever Russian claims, but still have a great deal of faith in what is claimed from the American side and get all excited when hearing the name Bellingcat: American Bellingcat contributor Aric Toler was previously impressed by the way in which members of the Russian forum had [established the recording time of the iconic "Buk smoke trail photo" by Pavel Aleynikov](#). See the article [Shadow of a Doubt: Crowdsourcing Time Verification of the MH17 Missile Launch Photo](#) dated Aug. 7, 2015.

It is not known who the administrator of the Russian discussion forum is. He writes under the pseudonym Bootblack. That he prefers to remain anonymous may have a good reason. He refutes the official Russian position that no Russian Buk-Telar has ever been on Ukrainian territory. He also strongly criticizes the way Russian authorities have taken the MH17 case in hand. Bootblack informed the author of this book that he underwent training as a military radio engineer at [the A.F. Mozhaysky Military Space Academy](#), after which he was trained as an investigator. In this latter capacity, he also carried out professional activities. He also displays relevant knowledge and skills at the forum. For example, he knows a thing or two about missile technology and geometry. The MH17 webtalk forum features numerous impressive 3D visualizations by his hand of [flight trajectories of missiles](#), [explosions of warheads](#) and related topics. The author of this book [found out about the website as late as March 2023](#), even though it has been around since 2014 and there is no other one to rival it. The main language is Russian, but with the forum's built-in Google Translate, almost everything said there is nowadays easy to follow in English, Dutch or other languages.

According to Bootblack, what exactly happened? The Ukrainians were informed well in advance that the separatists would receive a Buk Telar from Russia, he thinks. They set up observers along the route where the Buk would be brought in to gather visual evidence. At the same time, the Ukrainians brought a Buk of their own to the edge of the area controlled by the separatists. Quietly they waited for the arrival of the Russian Buk. Once they arrived at the agricultural field near Pervomaiskyi, the crew of the Russian Buk was told that an airstrike was imminent or that the Ukrainians would carry out a drop. That information was incorrect, but it was not clear to them at the time. The Telar was therefore moved from readiness stage 2 to readiness stage 1. Possibly the crew then received an urgent message from someone indicating that something was coming in their direction. This may have stemmed, according to Bootblack, from

Bezler and Stelmakh's "bird call". (See Chapter 8.) It may also have been a message from a Ukrainian posing as someone from the separatists. From the radar echo of MH17, the crew did not immediately infer that it was an enemy object approaching, but since it could be a military IL-76 transport aircraft, they took it into their sights as a precaution. All alarm bells went off when they suddenly saw the radar image change dramatically. It looked like something was detaching itself from the approaching aircraft. At the same time, they caught an anomalous sound through their headphones. They did not realize at the time that it was a disintegrating passenger plane that had just been hit by a Ukrainian missile. Perhaps the Russian Buk crew mistook the radar reflection from the wreckage for chaff (anti-radar snow) dropped by an enemy aircraft or for a missile strike on the Telar. [The Buk crew then launched a missile](#), but it missed the wreckage and then [destroyed itself north of the village of Grabovo](#). (See image M4) The missile reportedly destroyed itself because of a disrupted communication with the Telar. The Russian Telar was standing 30 meters from a row of trees 12 meters high. (See Images F13 and F14.1) At the moment the MH17 wreckage had descended to about 3 kilometers, the Telar could no longer "see over" the row of trees and [the radar beam the Telar was transmitting to the wreckage was interrupted](#). As a result, the Telar no longer caught radar reflections and ceased the guidance signal it was transmitting to the fired missile. In such a case, Buk missiles destroy themselves within four seconds.

As evidence for his scenario, Bootblack refers, among other things, to the Director of National Intelligence's (DNI) statement on U.S. satellite data. As we saw in Chapter 5, according to the U.S. intelligence community, a Buk missile was launched 6 kilometers south of Snizhne "at the moment contact was lost with MH17." Thus, a Buk missile would have been fired from that location "at the time" that MH17 had already been hit. This is consistent with Bootblack's belief that two missiles were launched shortly after each other by two different Buk Telars, with the first missile fired from the Ukrainian Telar hitting MH17. The missile the Americans saw, he said, would have been the Russian missile fired later. Eyewitness statements would indicate that shots were fired from Pervomaiskyi at an aircraft wreckage. For example, Bootblack cited M58, who was considered a key witness by the Hague District Court. M58 testified that he saw at close range how a Russian Buk Telar fired a missile at the Boeing. He also reportedly saw the aircraft before it was hit and was amazed that [it was flying so low](#). (See Chapter 9.) Bootblack further points to statements by three witnesses who observed a flash of light near the spot where the Buk missile allegedly destroyed itself. Furthermore, three witnesses (M58, [Pyotr Fedotov](#) and a woman interviewed by journalists Gert-Jan Dennekamp and Bert Lanting) stated that the missile made a strange movement: wobbling, rocking or zigzagging. Bootblack explains this movement from the idea that the falling wreckage caused a diffuse and erratic radar image. This disrupted the missile's on-board computer, which calculated the meeting point with the target.

The sound that many local residents believe they heard from fighter jets was in reality that of the Boeing crashing, Bootblack believes. Those who stated that they saw Sukhois, [actually saw parts of the Boeing](#)

[come down, the fuselage and tail section](#). The bangs that people in Torez heard were from successively the decompression of MH17 (the loss of air pressure in the plane's cabin would have been accompanied by an explosion) and the missile launch from Pervomaiskyi.

According to Bootblack, the fatal missile was allegedly fired by a Ukrainian Buk Telar that was deployed near Shaposhnykove. This hamlet is 3 kilometers south of Zaroshchenske, at the edge of the area where Buk manufacturer Almaz-Antey says the missile that brought down MH17 came from. (See Figure A4) As we saw in Chapter 5, this was a rural area not fully controlled by either warring side. Bootblack refers to an interview on Russian state broadcaster Rossiya 1 with a [local resident, one Sergey, who on July 17 had observed military vehicles of the Ukrainian army](#) in the vicinity of Shaposhnykove, including a vehicle with a radar installation. At that spot, a Google Earth satellite image also shows traces that may have come from a Buk installation, albeit it is not clear on what date they occurred. In another interview on Russian channel NTV, a resident of Shaposhnykove, one Vera Vasilyeva, had stated that she heard a loud bang on the afternoon of July 17. Furthermore, Bootblack refers to [the statement of a couple from Amvrosivka, who say they witnessed a missile launch](#). From their residence, they could easily have seen a launch in Shaposhnykove, located north of it, Bootblack says. The couple was questioned by Russian authorities. The transcript of the interrogation was sent to the JIT. However, the prosecution said at the June 9, 2020 hearing that it was unable to test the couple's testimony for truth from satellite images. This was because the husband and wife had not clearly indicated exactly where they had seen the launch. In open sources, the prosecution had also found no publications or footage about a Buk system in the Amvrosivka area or a missile launch from that area. Furthermore, no other witnesses had come forward to confirm the couple's sighting. Bootblack points out, however, that there were indeed [other witnesses to a missile coming from that direction](#), including one Norair Simonyan. An interview with him, provided by citizen journalist Stefan Beck, appeared on the Dutch YouTube channel Novini on Sept. 17, 2018, under the title MH17 - "A missile flew that way." Simonyan was in Shakhtarsk, which is north of Zaroshchenske and Shaposhnykove, during his sighting. [He saw the missile approaching from the south](#). Bootblack further finds it suspicious that [on July 22 Shaposhnykove came under heavy Ukrainian fire](#). According to him, the village would not have had any strategic value. He suspects the Ukrainians tried to cover tracks and keep Malaysian aviation investigators at bay. The shelling began immediately after the Malaysians arrived in Donetsk (July 21) and the Russian Defense Ministry had indicated in a press conference that it had observed two Bucs near Zaroshchenske (July 22).

Bootblack stresses that it is of great importance to determine exactly when the missile at Pervomaiskyi was launched. This is because of the possibility that another missile was fired from a different location around the same time. The Americans claim to have observed a missile launch, but never disclosed the exact launch time. The prosecution assumes that the fatal missile was launched at 16:19:31, but has not substantiated this in any way. It is an assumption probably based on the determination of when MH17

was hit, according to the prosecution (16:20:03) and an estimate of the time it took for a Buk missile to reach MH17 from the agricultural field near Pervomaiskyi (about 32 seconds).

According to Bootblack, the missile from Pervomaiskyi was not launched at 16:19:31 but at a later time, somewhere [between 16:20:10 and 16:20:20](#). That is too late for MH17 to have reached the location where the plane was at the time it was hit. The missile from Pervomaiskyi would have been fired only after MH17 had already been hit by a Ukrainian missile.

As evidence for the "later" missile launch from Pervomaiskyi, Bootblack points, among other things, to the two photographs of a white smoke trail taken by Pavel Aleynikov from the ninth floor of his flat in Torez. (See: images G2.1 and G2.2; and chapters 4 and 9.) The prosecution sees these photos as smoking guns. They would have been taken, judging from the metadata of the photo files, at 4:25 p.m., that is, about five and a half minutes after the launch. According to Bootblack, this cannot be true. [He thinks of malicious intent](#). The metadata would have been altered to disguise the actual time of recording and thus the time when the smoke trail appeared in the photos. Bootblack points out that a shooting time of 4:25 p.m. and a missile launch of 4:19:31 p.m. do not match what is seen in the photos. The smoke trail should have dissolved in five and a half minutes and thus been invisible to Aleynikov who shot the photos from 12.3 kilometers away. Also, the location of the top of the trail would not match a missile trail five and a half minutes old. The east wind had moved the track westward and so it showed. Based on the environmental features in the photos, Bootblack determined that the track was 600 to 700 meters west of the firing location identified by the JIT. However, that distance after five and a half minutes would only be explainable at a wind speed of 1.8 to 2.1 meters per second. This is wind force 2. According to Bootblack, however, a much higher wind speed applied. Indeed, this would be evident from the many videos taken of the black smoke rising from the burning plane at the Grabovo crash site. (See images G3 and G9) Bootblack calculated that that smoke was moving at a speed of about 11 meters per second. This is wind force 6. At such a wind speed, the smoke trail should have been much farther away from the launch site than shown in the photos: about 1364 meters. Therefore, the smoke trail would be from a later missile launch. As mentioned, Bootblack estimates that it must have taken place sometime between 4:20:10 pm and 4:20:20 pm.

For his assertion that Aleynikov's photos must have been taken minutes earlier than 16:25 Bootblack also points to the two smoke trail photos taken from Snizhne by Irina Mazurova. (See Chapter 4 and Figure G6.) Mazurova's photos were reportedly published on the Internet as early as 4:22 pm. In those photos, the plume is in a location not far from the plume in Aleynikov's photos.

Furthermore, a shadow angle measurement would also have shown that Aleynikov's photos were taken much earlier than 4:25 pm. Bootblack used the shadow on the roof of a house shown in the Aleynikov photos as a starting point. A Torez resident took a series of 12 photos of that roof in 2015. He made these available to Bootblack, who then submitted them to forum members asking which of these photos showed

the shadow on the roof most similar to the shadow on the roof of that same house in the Aleynikov photos. Bootblack's choice fell on a photo taken on August 1, 2015 at 16:35:46 with an azimuth (compass direction) of 260.52 degrees, corresponding to a time of July 17, 2014 at 16:21:35.

Furthermore, Bootblack assumes that the engine casing and venturi found by a Dutch recovery team was from the missile that brought down MH17. Documents provided to the JIT by the Russian ministry would indicate that the missile was sent to a Ukrainian unit on Dec. 29, 1986. As we saw in Chapter 3, the Dutch prosecution thinks otherwise. It has stated it has found no evidence of a link between the two missile components found and the downing of MH17. The prosecution has also expressed doubts about the authenticity of the Russian documentation. However, according to Bootblack, the prosecution knows better. The Dutch ultimately did not offer the engine casing and venturi for evidence. They allegedly refrained from doing so to protect Kiev.

According to Bootblack, the Buk delivered to Ukraine was equipped with a 9N314M "butterfly" warhead. This would appear [from one of the documents provided to the JIT by the Russian Defense Ministry](#). It concerns the pick list of the missile whose engine casing and venturi were found. Although the list indicates that the missile in question was equipped with a 9N314 warhead (i.e., without butterfly-shaped fragments), above it an 'M' is added in pen. That addition would indicate a 9N314M warhead, i.e., with butterflies.

How does Bootblack explain the absence of butterfly-shaped impact holes in the MH17 plane wreckage? Shouldn't they be visible if the aircraft was hit by a Buk with butterfly warhead as he assumes? Bootblack explains [the missing butterfly-shaped impact holes from the collision course or perpendicular orientation the missile would have had relative to the Boeing](#). On such a course, butterfly-shaped particles from a Buk warhead would cause few, if any, butterfly-shaped impact holes. Bootblack sees the absence of this type of impact hole as additional evidence that the missile must have come from the direction he indicated. As we saw in Chapter 5, the Russian Buk manufacturer Almaz-Antey is also of the opinion that the fatal missile must have approached the aircraft from a collision course.

Although Bootblack argues that witnesses have mistaken descending wreckage for a fighter jet, he makes an exception for witnesses who, independently and each from a different location, have stated that they saw an aircraft making circling movements. They also identified the same location: the vicinity of the town of Shakhtarsk. Bootblack does not rule out that [the circling aircraft shot down MH17, with a Buk missile](#), but says he does not know if this is at all possible, flying under the radar, and with such a missile.

[Punished Without a Crime](#) (Final conclusions)