

The Bombing of Ukraine



This is in Vinnytsia, just across the river from the Cathedrals. This bombing happened July 14, 2022. It was not the first time Vinnytsia was bombed. The tally goes back, yearly now, since the start of the full-scale invasion. But on this regular day, in July of 2022, at 10 o'clock in the morning, 5 Kalibr high precision cruise missiles blasted into a medical center, an elementary school, and a concert hall. 28 people died, including 3 children, and over 200 others were injured. These missiles were launched from either a submarine in the Black Sea, or from Transnistria - the russian occupied territories of Moldova. These missiles are considered high-precision, meaning that they are landing exactly where they are intended to. War, in itself, is cruel. But targeting school children is beyond cruel - there's just not a word for this. And what is happening all around Ukraine - well there just aren't enough words.





My personal exposure to bombings has been low. The closest I came was last year in Kyiv a cruise missile landed a kilometer away. I heard it come in. And it changed me. It was the sound, and the feeling of the sound in my body that affected me. The feeling of that sound was the most un-natural, the most un-human, the most un-Earthly sound beyond ... beyond... anything knowable. I also heard drones, and anti-aircraft artillery. And I heard almost daily air raid sirens in Kyiv last year.

But this year, Kyiv is getting pummeled, severely. Air raid alerts are going almost continually - sometimes overlapping alerts. Vinnystia, where I am now, is relatively safe. We are getting daily air raid sirens, drones are getting shot down, but not many are landing in populated areas.

For military security, the public is not informed with a lot of detail about missile launch pads, their supplies, capabilities, etc. But what has been explained to me is that the ballistic missiles can't quite reach Vinnytsia unless they are launched from the Black Sea. And because of the ports, and Ukraine still controlling the Black Sea, the area is better able to be defended. And thus Vinnytsia is relatively safer. Drones can still fly in, and they are coming in daily, sometimes avoiding interception. Tho generally the flight path is long enough that the drones can be tracked and shot down before they land in the city.

Safety is tenuous though. The Russian aggression has highly escalated. They have not made significant territorial gains on the Eastern Front - though they continue to destroy whatever land they do control, and they continue to shell border areas, and they continue to mine the kill-zone. And the Russians continue to assault the people living in the occupied areas.

I mostly get my information from Telegram channels. There are many channels, some with many thousands of followers, and they provide almost all the information available to the public. For Ukrainians, the next most common source of information is YouTube and social media, and then regular news outlets. For me, because I am a foreigner, people are friendly and I also learn things by talking to them. I ask them hard questions, and they readily answer with as much information and detail as they can.

When news comes to the US about Ukraine it is usually about a bombing tally from a thirty-thousand-foot view. I wonder about what is being reported these days because the bombing in Kyiv has significantly escalated. Ukraine, without US support, no

longer has defense capabilities against ballistic missiles and russia is just sending drone after drone, bomb after bomb. This year also, the drone technology has significantly "improved" - now they are jet powered (apparently they sound like jets too) and are more highly maneuverable, much faster, and with a lot more AI control.

One level of the escalation started last fall, with russia bombing energy infrastructures. This left people in Kyiv without power and heat for sometimes days in a row. The consequences of no power affects commerce, and schools, and personal functioning - like your refrigerator and your phone. But it also means the city is dark, that high rise buildings stand as shadows on the landscape, sometimes the streets are without lights or traffic signals, only the headlights from cars. No heat means that it is cold of course, but it also means that toilets will freeze - another layer of complexity.

The day-to-day air raid sirens are hard to repeatedly negotiate, and many people completely ignore them because you can get mentally sick from again and again responding to them. But what many people do too, is that they reach for their Telegram channels and try to figure what the actual threat is, and whether they need or don't need to respond to it.

On Telegram, you can join channels for your local area that will give you live tracking data for all the different flying objects that can explode in your neighborhood.

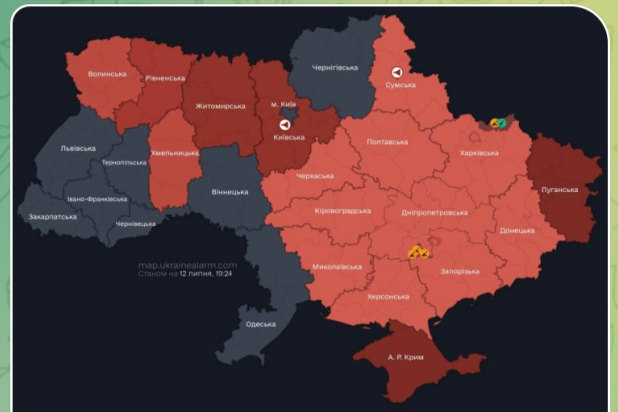


These channels run on donations. They laughingly say that they only need money for coffee - and they post this "sticker" and people know to donate.

These channels are run by civilians though the military will help with access to data (and also monitor the channel to make sure sensitive info is not getting into enemy hands). These channels also get information by listening to radio broadcasts, monitoring russian communication channels, as well as input from the population.

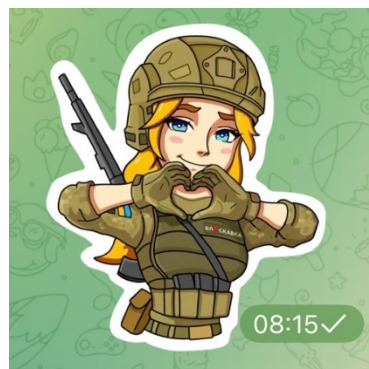
These channels will tell you why the air raid siren has gone off. Is it because russian MiG fighter jets are revving up on a runway somewhere? or is it because there seem to be preparations for a ballistic missile launch? or drone activity? Ballistic missiles come in so fast there is not much monitoring possible and it is said that they usually hit their targets before an air raid siren can go off. Drones fly slower and can be tracked. They used to be much slower, and sounded like a two-stroke motorcycle engine. Some drones are kamikaze drones - launched towards a target and will land where they are initially aimed. Some just 'plain old crash', and others have explosives that go off when they crash. Most drones are maneuverable and the channels will tell you where they are, and where they are going. Literally their direction, their turns, and which neighborhoods they are headed to, or hovering over - as some are reconnaissance drones too. Some of the debris from the crashed drones is set to not explode until

later - so the public is warned not to approach "suspicious" objects. It can be exhausting to follow these channels in detail. There are numerous channels and the info coming out of them can sometimes be a text every few minutes. The next day, some of the channels will give you summaries of the night before. This map came out a few days ago, for example:



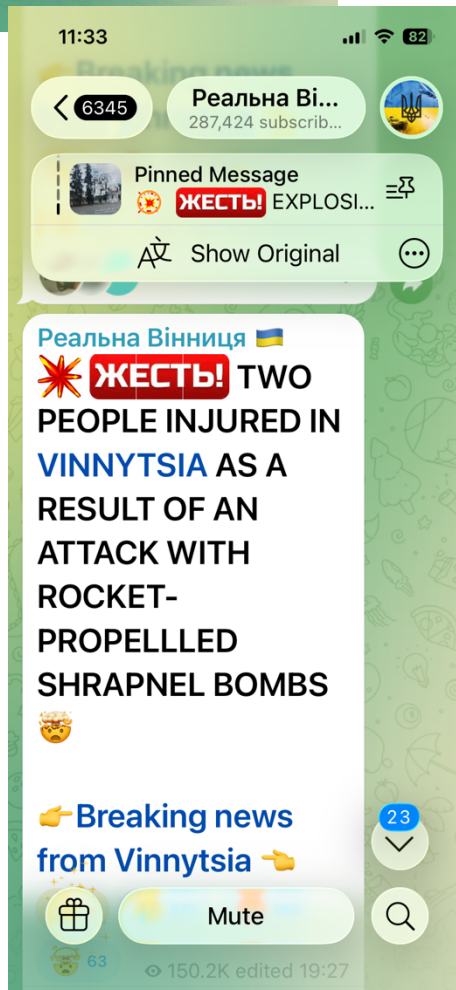
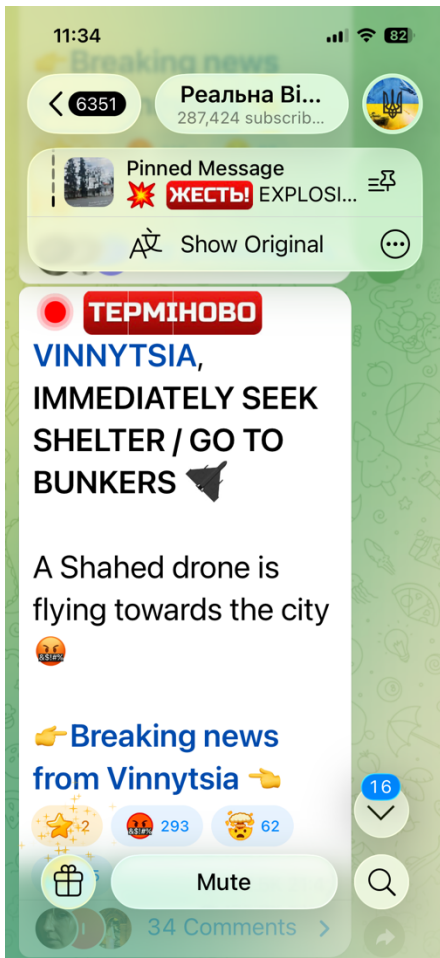
 **Air raid alert map as of this moment.

The channels will also report on Ukrainian attacks on Russia - after they have happened.



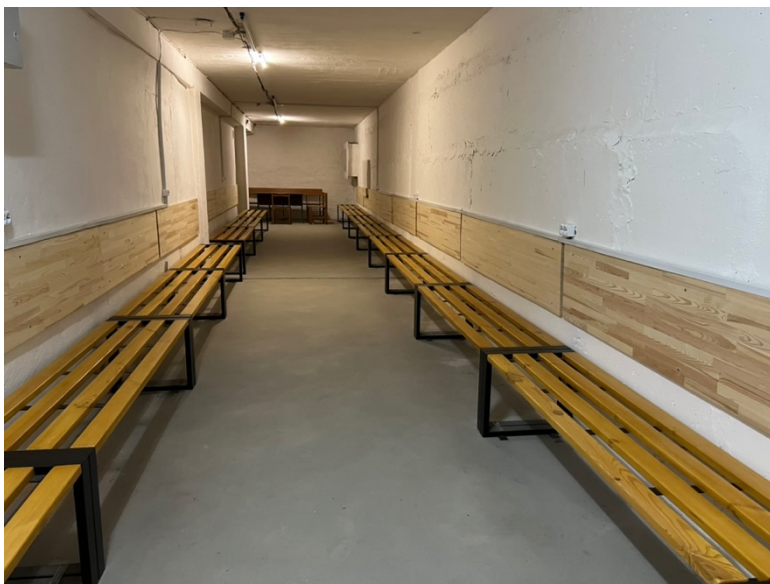
Some people in Kyiv are going into the metro stations. They are so deep into the ground that your risk of dying, even from a direct hit is close to zero. However, the public health risks of living in the metro could make you sick. The air quality is bad, the bathrooms are overused, and the complexities of people's children and pets, water supply etc. is just not healthy. Metros are not made to be lived in.

Here in Vinnytsia we are mostly getting drones, and we don't get a lot of detail about their turns here and there (I am not sure why - it may be about resources). But here is a sample of what came out yesterday, in Vinnytsia. The air raid sirens are loud - they definitely wake you up if you are sleeping.



Yesterday, I was visiting some students and professors at the Pedagogical University when another one of these alert sirens went off. We were sitting outside sipping coffee when we were interrupted. This is how the conversation went: They asked me if I wanted to go to the shelter. And I said, no, that I didn't need to. And they said, well we should go... and then explained that because we were on a university campus we were required to go to the shelter or leave the grounds. So, I said sure let's go. They further explained that it was the start of the school year and schools are targeted more at this time.

So, we go inside the shelter - this is what it looks like:



I ask my new friends why is it empty? (it's 3 in the afternoon). And they say that all the students have already gone home. All? - I ask. And they say yes, all... but that this shelter can be packed if the air raid siren happens during class time. I am still confused because I had just seen hundreds of students pour out of buildings earlier and am sure they would not all fit in here. Clearly, I am still figuring out the system...

Each time before I came to Ukraine, I asked AI to calculate my risks around the bombings. Compare the stats from last year at this time, from last month, how many died compared to the size of the population, different towns, etc. And, all those numbers can be re-assuring. After all, Ukraine is a big country with many people. But other than being re-assured, I wanted to make sure I wasn't being foolish, or not understand what I was getting into. The last thing Ukraine needs is a foreigner taxing their resources. (and I'm also saying this with full respect for all the victims - as for them, statistics mean nothing.)

But please note - that I, even making this calculation, am coming from a place of privilege. ...coming in for a short time while everybody else is here every day. The toll is quite different mentally. I know I will leave - so this exposure will not imprint as deeply. I also know I can leave at any time, which is different than most. I have friends here now, and I feel more deeply because of that, but I am not 'from' here - the wound is not as deep. The schools or the hospitals that are bombed I didn't know before. I also don't know as many people - so I don't personally know people that have died. My personal life is not being affected by the war - my kids having to go to school, or my employment changing, or my business in decline. The civilian PTSD from war trauma comes from the repeated daily toll on the psyche, and feeling the pain of the loved ones around you.

