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Why Israel Will Never Manage to Destroy All Hamas Tunnels

By Anshel Pfeffer

- The Israel Defense Forces will not destroy all the Hamas and Islamic Jihad tunnels under Gaza. Probably not even most of them. This assessment, which has yet to be voiced publicly, is shared by all levels of the IDF. From the generals, trying to plan what they call a "year of warfare" in 2024, through the brigade and battalion commanders who are spending entire weeks on the ground to destroy just one section of the tunnel system, all the way down to the combat engineering troops, who are now starting to come out of Gaza after three months of fighting with mixed feelings. On the one hand they have carried out an unprecedented number of tunnel demolition missions. On the other, they know many more such tunnels remain intact. The IDF is scaling down its forces in Gaza City with full knowledge that many tunnels have been overlooked. This shouldn't come as a surprise. The tunnels under the Gaza Strip were there even before Hamas' founding in 1987 and it seems they'll be here after this war too.
- Various terror groups made use of tunnels to hide fighters and weapons as far back as the early years of Israel's occupation of Gaza after the Six-Day War in 1967, but the first major digging took place in the early 1980s. After Israel and Egypt signed the Camp David Accords, the neighborhoods of Rafah were divided by a border between Egypt and the Gaza Strip which remained under Israeli control. Several groups dug the tunnels under Rafah and local residents, Bedouin tribes, crime gangs and terror organizations all took part in the ensuing smuggling spree, including, after 1993, Palestinian Authority officials.
- All manner of weapons and civilian products passed through the tunnels, including even a lion, which was intended to be used as a status symbol by one of the Gaza clans. In the first years of the blockade by Israel and Egypt after Hamas took power in a coup in 2007, hundreds of tunnels were in operation. Some of them were broad enough to allow cars to be driven through and then sold in Gaza. You could order a meal from KFC in the Egyptian town of El-Arish, and the chicken would be still warm by the time it arrived on the Palestinian side. Thousands of Gazans poured their savings into local businesses that offered investments in new tunnels.

- On a reporting visit to Egyptian Rafah in 2005, the tunnels were easily identifiable. They were in the villas and walled compounds which had sprung up all around the shanty towns on both sides of the border. Four years later, in a return visit just after Operation Cast Lead, the villas on the Palestinian side had been flattened in Israeli airstrikes and the Egyptian army was busy demolishing those on their side. Two-thirds of the tunnels were estimated to have been destroyed by Israel and Egypt, but hundreds remained and there was no shortage of people near the border offering to smuggle you under for a couple hundred dollars. The IDF's first solution for the tunnels on the Rafah border was the demolition of hundreds of Palestinian homes, carving out the Philadelphi Corridor. The first tunnel there was discovered in 1983 and a Hamas tunnel was first discovered in 1999.
- The building of the tunnel was part of a plan to capture an IDF soldier in Gaza and hide him in Sinai while demanding the release of Palestinian prisoners. Among the planners was the current leader of Hamas in Gaza, Yahya Sinwar, then serving five life sentences for the murder of Palestinian collaborators. For over two decades, the Philadelphi Corridor was a subterranean arms race between Israel and the Palestinians, as the tunnels became deeper and longer and Israel tried to develop new methods of locating and destroying them.
- At first, civilian drilling equipment and conventional explosives were used, then more advanced sensors and the first dedicated underground warfare teams. But usually the Palestinians were one step ahead, as was proven in the early 2000s when they began using the tunnels not only for smuggling but also to blow up IDF outposts and vehicles. After the disengagement from Gaza in 2005, the IDF moved to carrying out airstrikes against the cross-border tunnels during rounds of fighting with Hamas. In between rounds the army had to rely on the Egyptians, who were not always particularly motivated to disrupt the commerce. But even when the Egyptians did act with determination, destroying buildings and shafts near the border and digging a deep trench into which they pumped seawater, they succeeded only in destroying the commercial tunnels.
- A number of longer and deeper tunnels operated by Hamas and Bedouin smugglers who collaborated with the Sinai branch of ISIS remained. These were used mainly for smuggling weapons into Gaza and members of terror organizations out for coordination and training. The massive quantities of relatively new arms and

missiles discovered over the last three months by the Israeli army in Gaza, along with up-to-date military literature and the interrogations of captives who told how they were sent from Gaza for training in Lebanon and Iran, prove beyond a doubt that Israel failed in dealing with the smuggling tunnels. Aided by the corruption of Egyptian officials manning the Rafah Crossing, who often turned a blind eye towards shipments of military materiel, Hamas foiled the 16-year blockade on Gaza. The experience gained in tunneling under the Egyptian border was to be of use to Hamas in other parts of Gaza. Another underground front was opening up with Israel, this time on its own border with Gaza. The first cross-border tunnel to Israel was discovered by the IDF in late 2005, just four months after the disengagement. Much worse was in store.

- The first major underground attack under the border with Israel was on an IDF tank near Kerem Shalom in June 2006. Two crew members were killed and the gunner, Gilad Shalit, was snatched into Gaza. Hamas had dug the tunnel together with a couple of smaller terror organizations. The Palestinian Authority was still nominally in control of Gaza at the time and Hamas' own tunneling efforts only really took off after the coup in 2007. In the following decade, the main focus of the Israeli security establishment centered on these cross-border attack tunnels. A small number of these were located through intelligence efforts and destroyed, at first in raids within Gazan territory and then, from 2010 onwards, by airstrikes. These were cat-and-mouse games amid which Hamas managed to dig at least forty tunnels, some of which penetrated hundreds of meters into Israel.
- They were meant to be used for a large-scale attack on Israel but before that happened Israel embarked on Operation Protective Edge in 2014, destroying over thirty of the tunnels. Hamas managed to launch attacks through four tunnels during the fighting, three of which were successful in killing a total of eleven soldiers.
- A Haaretz investigation following the fighting between Israel and Hamas across several weeks from 2008 to 2009 (also known as Operation Cast Lead) reported that the IDF units sent to the outskirts of Gaza lacked the necessary equipment and training to deal with the Hamas tunnels there. Two State Comptroller reports in 2007 and 2017 warned of serious shortcomings in the IDF's preparations and the cabinet's strategic discussions which had failed to prepare for the tunnel threat. Finally, more than a decade after the first tunnel was discovered in 2005, work began on the

underground "obstacle," which included deep concrete barriers and geological sensors. The "obstacle" was completed by the end of 2021 and apparently proved itself on October 7: Instead of launching its attack from underground, Hamas went over, through the border fence which had been left exposed and unguarded. And when the attackers returned to Gaza with the 250 hostages they had abducted, they spirited them away into the tunnels.

- The successful prevention of cross-border tunnel attacks came with a price. Not only did it create the illusion within the security establishment that grand attack plans by Hamas' military chief Mohammed Deif had been stymied, it also diverted their attention from another subterranean threat: the network of tunnels beneath Gaza which don't cross any border with Israel or Egypt. "The obstacle meant that the tunnels within Gaza became a low priority for intelligence targeting," said an intelligence official who observed Hamas over many years. "It's not that nothing was done about them, but there was a feeling that as long as they don't cross the border, they're much less of a threat." And since the Israeli army had not operated on the ground in Gaza for over nine years, from the end of the 2014 Gaza War (Operation Protective Edge) until this war, there was less of an immediate need to confront those tunnels.
- In May 2021, the IDF thought it knew enough about the tunnels under Gaza to launch Operation Blue Thunder, more widely known as the operation against the "Gaza metro." It was an attempt to trick Hamas into thinking Israel was about to launch a ground attack, in the hopes of making its fighters take shelter in the tunnels which would then be targeted by airstrikes, killing hundreds of them. Ultimately only a handful were killed. Without speculating about why the operation failed, it's now clear that the IDF was aware of only a few of the tunnel locations.
- Hamas has ample room to spread out its forces underground and there probably aren't enough bunker-busting bombs in all the air forces of the world to take out all the tunnels at once. Even after the operation's meager results became known, there were those in the IDF who thought it was a success because Hamas would in a future confrontation be wary of using the tunnels again. That has proven baseless over the past three months. The IDF's operational assessment at the start of this war was that the main threat from the tunnels was that they would serve as launching

pads for ambushes.

- Just as they were used in Cast Lead back in 2014 during the Battle of Shujaiyah when a Golani force was ambushed and 13 soldiers killed. In another ambush launched from a tunnel in Rafah in the same war, three Givati Brigade soldiers were killed, including Lt. Hadar Goldin, whose body was snatched into the tunnel.
- Many ambushes were indeed launched from the tunnels in this war but already in the early days of the ground maneuver, commanders felt that there were nowhere near as many as they had expected. "From what we know of the number of Hamas fighters here, I would have assumed much more ambushes," said one of the brigade commanders. At first, the IDF saw this as a sign of success. Instead of entering Gaza City from the east and moving westwards, as they had in previous ground operations, its two main armored divisions first went in from north and south along the coastline and then began moving eastwards through the city. "Instead of having to deal with the tunnels, we're going over them," one general said at the time.
- This time around, they had left Shujaiyah, with its tunnels under the streets overlooking the border and the kibbutzim of Nahal Oz and Kfar Azza, for the later stages in the ground campaign. Only gradually did the IDF realize that the tunnel network was much more extensive than it had previously understood and that their main use by Hamas was not for launching arsenals, but for preserving its forces. Another assumption that was proven wrong was that it would be enough to control the ground above for a few weeks for Hamas fighters, starved of food, water and oxygen to be forced to emerge.
- Unlike in 2014, in this war, the army's ground forces, especially the combat engineering corps, had at least arrived well-prepared on the battlefield. As part of the lessons of Protective Edge, the Yahalom special forces engineering unit had been expanded and acquired new drones and robots for exploring tunnels. Other special forces had also undergone underground training, including the "Oketz" canine unit, whose dogs were sent with cameras into the tunnels. Also, the regular and reserve engineering battalions had all improved their tunnel-destroying capabilities and new teams had been assembled. Other munitions designed to clear tunnels without blowing them up were also developed.

- The IDF began this war with an unparalleled array of underground capabilities which proved to not be enough. Commanders in the field discovered that it would often take an entire battalion days, even weeks, to locate, plan and carry out the demolition of just a few hundred meters. And during this time, hundreds of soldiers had to remain in a war zone, securing themselves from Hamas ambushes and missiles. Destroying a tunnel network the size of a major city's public transport system is a complex engineering task which would take months, even if not in a war zone. According to a few separate reports in the foreign press, the IDF had high hopes for a project named "Atlantis" that would involve pouring seawater into the tunnels with the intention of flooding them. Israel's national broadcaster Kan 11 reported that a successful pilot for the project was conducted. In reality, it is unclear if the flooding caused serious damage to the tunnels and one might wonder if the move was mostly a type of psychological warfare, meant to cause the militants to flee above ground.
- A frustrated officer in one of the advance command posts tossed aside the map of his sector on which the assumed locations of the tunnels had been charted by military intelligence. "It's no longer relevant," he sighed. His men had already found dozens of tunnel shafts in places not appearing on the map. This week, the New York Times reported from IDF sources that the original assessment had been of around 248 miles of tunnels under Gaza and that now the assessment holds that there could be over 434 miles.
- The size of some of the tunnels also took them by surprise, like the one discovered a few hundred meters from the Erez Crossing, which a small car could drive through. As one commander of a brigade busy locating and destroying tunnels put it, "It's all a matter of time and the price we're prepared to pay." His brigade is no longer in that sector after blowing up only a fraction of the tunnels there. Brig. Gen. Dan Goldfus, commander of the 98th Division which has been fighting in Khan Yunis for over six weeks now, told reporters last week that "we are maneuvering above ground and we are maneuvering underground." Using special forces inside the tunnels is a departure from the orders given in the previous stages of the war not to risk sending soldiers underground and to use remote cameras and dogs instead.
- Goldfus, a former naval commando in Flotilla 13, has been adapting his old unit's tactics, which combine underwater and surface warfare, for Gaza. It's a daring and

creative move but also a recognition that his forces have limited time to try and achieve their objective of destroying Hamas forces, locating its leadership and rescuing hostages in a 99 mile maze of tunnels beneath the southern city. He knows there's no way of destroying them all and no alternative but to fight in them. Instead of destroying all the tunnels, the IDF is now talking of "denying" their future military use to Hamas. But no one has a clear idea of how to do that. It isn't certain that all the main tunnels have been located, though the IDF has already discovered over a thousand shafts.

And even if it did find them all, which ones should be prioritized? And what's to prevent Hamas from rebuilding? The tunnels may be as organic to the earth under Gaza as Hamas. A day will come when the Israeli security establishment will have to admit that destroying the tunnel networks was never a realistic objective. The IDF can perhaps deal with the prospect of a threat from underground, but the tunnels will remain beneath Gaza. Perhaps the most accurate assessment was that of a man who never dealt with tunnels, the aeronautical engineer Yair Ramati who was one of the fathers of Israel's missile defense systems. He said, "in the skies, Israel will always have the technological advantage. So Hamas will always try to drag us underground."