

Lebanon's Exploding Devices

On 17 Sep, nine people, including a young girl, were killed across Lebanon and over 2,800 including Iran's Ambassador to Lebanon were injured some of whom were critical after handheld pagers used by member's Hezbollah to communicate exploded. The toll has now risen to twelve deaths.

The next evening, multiple blasts again took place in different parts of Lebanon, twenty people were killed and at least 450 injured as a result of the explosions and targeting walkie-talkies.

Hezbollah blamed Israel for 'This Criminal Aggression' and vowed that it would get 'Just Retribution'.

Thereafter, on 20 Sep, a senior Hezbollah military figure, Ibrahim Aqil, was the target of Israel's strike on Southern Beirut that leveled a building, killing at least eight people and injuring 59 others.

Aqil was accused of involvement in the 1983 United States (US) Embassy strike, which killed 63 people, as well as the Hezbollah bombing of the [Beirut Marine barracks](#), which killed 241 US personnel later that year when he was a member of Islamic Jihad, the militant group that claimed the two 1983 attacks.[\[1\]](#)

Israel has said a '[New Era](#)' of war is beginning and is turning its focus to its [northern border](#) with Lebanon.

Tensions Rise post 07 Oct

A day after the 07 Oct incident, the Hezbollah began attacking Israel from Lebanon using various rockets and missiles. This daily exchange of fire has resulted in the displacement of a large number of Israelis from Northern Israel bordering Lebanon.[\[2\]](#)

Hours before the first explosions, Israel's Security Cabinet had said that stopping Hezbollah attacks on the north of the country to allow the safe return of the displaced 60,000 residents was an official war goal.

The Israeli Defence Minister Yoav Gallant during a meeting with US envoy Amos Hochstein on 16 Sep had stated that the only way to return the Northern residents was through 'Military Action' and 'The possibility for an agreement is running out as Hezbollah continues to 'tie itself' to Hamas, and refuses to end the conflict'.[\[3\]](#)

Since 08 Oct at least 589 people have been killed in Lebanon, the vast majority of them Hezbollah fighters. On the Israeli side, 25 civilians and 21 members of security forces have been killed. Now booby-trapped pagers and walkie-talkies constitute the latest salvo in the conflict. The Hezbollah moved to use pagers to thwart Israeli hackers and signals intelligence collection and due to their reliability in tunnels. Israel found a vulnerability in the move Hezbollah's need to import a large consignment of pagers.

Imagination Knows No Bounds

Imagine knowing that a particular batch of pagers manufactured by one Company have been ordered by the Hezbollah and then putting a small amount of explosive in each

device. Thereafter possessing the technology to create a virus that heats up the device at a particular time causing the lithium batteries to overheat and explode.

The attackers would have needed to work with the manufacturers of either the devices or of a particular component of the devices to have been able to implement this. Further, it opens up endless possibilities of targeting mobile phones, laptops and other electronic devices in the future. But such an operation would have also needed the involvement of operatives who were part of Hezbollah's procurement process.

As per reports the devices were Taiwan-based Gold Apollo. However, Gold Apollo founder Hsu Ching-Kuang said the pagers used in the explosion were made by a Company in Europe. Apparently the AP924 pagers were manufactured by BAC Consulting KFT in Budapest Hungary which has had a licensing agreement with Gold Apollo for the past three years.[\[4\]](#)

While the batteries of the walkie-talkies used by Hezbollah were laced with a highly explosive compound known as PETN. The way the explosive material was integrated into the battery pack made it extremely difficult to detect. The walkie talkies that exploded showed labels reading 'ICOM' and 'Made in Japan'. But the Company said it halted production a decade ago of the radio models identified in the attack, and that most of those still on sale were counterfeit.[\[5\]](#)

There is no doubt that like the placing of an explosive device under the bed of Ismail Haniyeh in Tehran there has to be a degree of complicity. But this attack raises serious concerns regarding the security at the manufacturing plants and a larger net of complicity which will particularly affect those countries which rely more heavily on imported components from manufacturing plants where security concerns loom.[\[6\]](#)

Vulnerabilities of supply chains will now be a concern in the security world as adversaries are gain access to products whilst they are being manufactured and delivered. Earlier attacks were focused on software. Hardware attacks are far rarer as they involve getting hands on to the components and more difficult to implement.

A former British Army munitions expert, told the BBC the pagers would have likely been packed with between 10g and 20g of military-grade high explosive, hidden inside a fake electronic component. Once armed by a signal, called an alphanumeric text message, the next person to use the device would have triggered the explosive, the expert said.[\[7\]](#)

As per a report quoting a Lebanese source said the devices had been modified by "At the production level". "The Mossad injected a board inside of the device that has explosive material that receives a code. It is very hard to detect it through any means. Even with any device or scanner". The pagers exploded when a coded message was sent to them, simultaneously activating the explosives.[\[8\]](#)

Lina Khatib, a Middle East analyst at the UK-based Chatham House think tank, said "Israel has been engaging in cyber operations against Hezbollah for several months, but this security breach is the largest in scale".

Nicholas Blanford, a Beirut-based fellow the Atlantic Council, said: "Israel in one fell swoop has rendered combat ineffective hundreds if not thousands of Hezbollah fighters, in some cases permanently". [\[9\]](#)

The Attacks

Pagers were considered to be a more secure alternative to cellphones, as they were harder to hack or infiltrate and more so easier to use in tunnels. In fact, Hassan Nasrallah had even advised members not to carry cell phones, warning that they could be used by Israel to track their movements and conduct targeted strikes.^[10]

Till now, most cyber-attacks have mainly been confined to targeting critical infrastructure, financial systems, or data networks, leading to disruptions. However, this attack represents one of the major times that a cyber-attack has directly caused physical harm to individuals, pushing the boundaries of what cyber threats can achieve and blurring the line between kinetic and cyberattacks. By exploiting vulnerabilities in devices, attackers can trigger explosions, fires or other physical events that cause injuries or deaths. Weaponisation of ordinary everyday devices is a reality with far reaching consequences.

Conclusion

There is no doubt that this is attack that is unprecedented in the use of technology, scale and nature is a harbinger of modern-day warfare. A masterly demonstration of covert action, both from the kinetic and supply chain aspects. It marks a new phase in technological warfare which is acquiring a form of its own. Weaponisation of daily use objects is a dangerous trend.

The incident could be a meant to disrupt Hezbollah's communications networks before a broader Israeli attack. Or the attack could have been conducted to demonstrate the ability of Israel's intelligence penetration.

Hezbollah's would now face extreme pressure from within to retaliate. Hence the attack marks another dangerous moment if not the most dangerous moment in the ongoing Hezbollah-Israel conflict.

Undoubtedly these sophisticated attacks are a game changer and defining moment in cyber warfare. They mark a new chapter in the Middle East and will have reaching implications. The consequences and scale of losses are already devastating, and are likely to shape global politics as we head into a vortex of violence.

Endnotes

[1] Burke, Jason. 2024. "Ibrahim Aqil: a founder member of Hezbollah's military wing." The Guardian, September 20, 2024. <https://www.theguardian.com/world/2024/sep/20/ibrahim-aqil-a-founder-member-of-hezbollahs-military-wing>.

[2] Maj Gen Jagatbir Singh (Retd) pagers: Supply chain attacks will now be a concern - The Sunday Guardian Live. The Sunday Guardian Live. <https://sundayguardianlive.com/investigation/exploding-pagers-supply-chain-attacks-will-now-be-a-concern>

[3] Lukiv, Jaroslav. "Israel sets new war goal of returning residents to the north." September 17, 2024. <https://www.bbc.com/news/articles/cglkkrj94ldo>.

[4] Ben Blanchard. Gold Apollo says Budapest-based BAC produces model of pagers used in Lebanon blasts, 18 September 2024, The Reuters, <https://www.reuters.com/world/middle-east/gold-apollo-says-it-did-not-make-pagers-used-lebanon-explosion-2024-09-18/>

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[6] Maj Gen Jagatbir Singh (Retd) pagers: Supply chain attacks will now be a concern - The Sunday Guardian Live. The Sunday Guardian Live. <https://sundayguardianlive.com/investigation/exploding-pagers-supply-chain-attacks-will-now-be-a-concern>

[7] Gritten, David. 2024. “Hezbollah blames Israel after deadly pager explosions in Lebanon.” September 18, 2024. <https://www.bbc.com/news/articles/cd7xnelvpepo>.

[8] Laila Bassam and Maya Gebeily, Israel planted explosives in Hezbollah's Taiwan-made pagers, say sources, 20 September 2024

<https://www.reuters.com/world/middle-east/israel-planted-explosives-hezbollahs-taiwan-made-pagers-say-sources-2024-09-18/>

[9] Gritten, David. 2024. “Hezbollah blames Israel after deadly pager explosions in Lebanon.” September 18, 2024. <https://www.bbc.com/news/articles/cd7xnelvpepo>.

[10] April Glover, 'This cell phone is the collaborator and the killer': Why Hezbollah operatives use pagers instead of modern phones, 18 September 2024, <https://www.9news.com.au/world/hezbollah-pager-explosions-why-what-happened-explainer/d77c2ab9-f9ab-45c1-8dc4-54a61e0ee5ec>

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Article uploaded on 24-09-2024

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