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## In Focus

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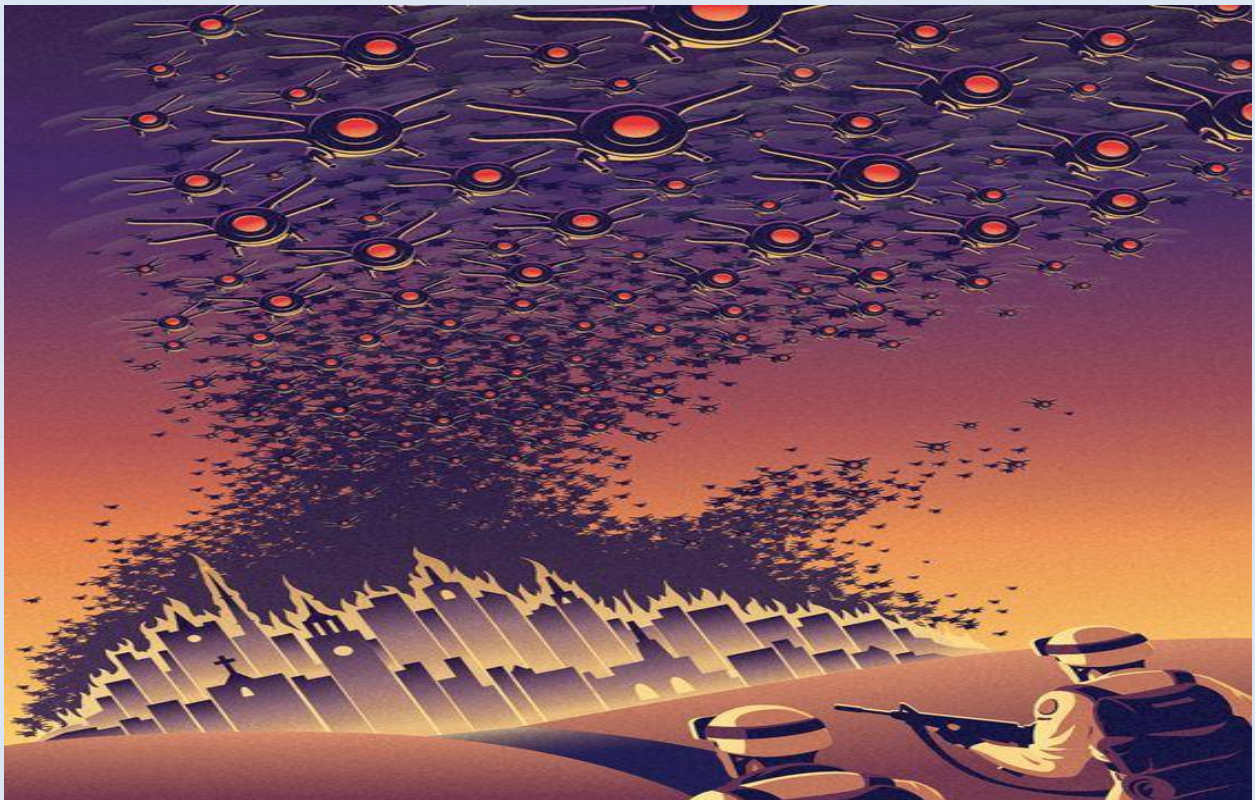
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## India's Ability to Defend Against Massed Drone Assaults

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Iran-Israel tensions have been long reaching the boiling point and have finally blown up. Iran started an airborne attack against Israel, launching over 300 drones as a part of what it calls 'Operation True Promise'. A barrage of objects was seen flying over through the night sky of Bethlehem from Iran and headed towards Israel. Sirens were activated in Jerusalem<sup>1</sup> at around 1:45 am local time. Loud explosions were heard with the air-defense systems shooting down objects over the city. It was the multiple interceptions that had lit up the sky. The Israelis were well informed of the fully operational air defense systems intercepting threats wherever required. Even the Israeli Prime Minister Benjamin Netanyahu tried to reassure the citizens that their country is ready<sup>2</sup> for any incoming threats and for any scenario both defensively and offensively.

Naming the mission as Operation True Promise seems apt, as a statement from Iranian military confirms that it was in retaliation for Israel's repeated crimes that includes that attack on the Iranian Consulate<sup>3</sup> in Syria on April 01, 2024. Iran plans to strike again considering if it sees any retaliation from Israel as such. Article 51<sup>4</sup> of the UN Charter has sort of provided a strong backing, as it pertains to legitimate defense and according to that the member states have the inherent right of individual or collective self-defense if an armed attack does occur. It has been the first time that Iran has launched the direct attack on Israel with drones and ballistic missiles. The attacks were always seen by the Iranian proxies over the recent years. Now that Iran has launched a direct attack on Israel, it seems nothing but an escalation of war. The assembled coalition of UK and US helped Israel in shooting down Iranian drones over the skies of Jordan, Iraq and Syria to blunt the attack and in an effort to prevent any sort of escalations. But the question is Will there be any escalation of war?

## Global Reactions

The President of the United States Joe Biden, has been meeting his War Cabinet and closely monitoring the situation with the Israeli Prime Minister. The US made it quite clear that should Israel retaliate in any manner in response to the attacks, the US must know beforehand. On the contrary, the decision provoked Iran to ask the US to stay away<sup>5</sup>. The US on the other hand, has promised Israel that it will support it in its defensive operations, making the whole situation with Iran quite tense. Undoubtedly, the US does not want to get into an escalation with Iran as well, since it is an election year, and more or less everything is based on internal interest. The overall situation implies that Iran tried to play smartly, not only planning the direct attack on Israel but also thinking

strategically. As stated before, that it was the first time that Iran did not use its proxies, it must have taken a thorough planning, simultaneously making sure that the escalation is not from its soil. To be precise Iran had planned the attack as just a matter of retaliation and not escalation. Should there be a retaliation from Israel post this attack, then it can be called as the escalation, as also it plans to destroy Iranian nuclear facilities and as well as its revolutionary guard.

### **India's Future Preparedness**

Well, the escalation will not only be in terms of increased number of drones, missiles or rockets flaming up in the sky, it will also impact the market sentiment across the globe. Iran happens to be the third largest producer of crude oil within the Organization of the Petroleum Exporting Countries (OPEC). If the tensions escalate further the supply of crude oil also impacting the prices, will be severely disrupted. This will eventually hit the Indian stock market<sup>6</sup> as it is the third-largest consumer and importer of crude oil.

Considering the security aspects, in a very hypothetical situation, India would need adequate early warning of the impending attack. As far as radars are concerned, India has long range Swordfish radars<sup>7</sup> based on the Israeli Greenpine radars for early warning. The catch is that these radars possess the capabilities to detect ballistic missiles flying at high altitudes and not the small carbon-fibre made drones that unlike missiles, fly at low altitudes. Airborne Warning and Control System (AWACS), though can be helpful for detection, but since there are only few of them available in the Indian Air Force (IAF) inventory, the option does not turn out to be feasible at times.

India however, does have the potential and capability to intercept drones. India's fleet of fighter jets, including variants like the Sukhoi Su-30MKI and the upcoming Rafale jets, can prove to be extremely useful in providing aerial surveillance and interception capabilities. Systems like the Bofors 40 mm L-70 and Zu-23-2 guns are effective against low-flying drones<sup>8</sup>. They provide a point-defense capability, especially for protecting critical infrastructure or military installations. These guns function in a specialized manner and hence require professionally trained personnel to operate them. Portable air defense systems (like MANPADS) like the Igla-S can be deployed by ground troops to target drones at shorter ranges and lower altitudes<sup>9</sup>. They were found to be extremely helpful in the conflict between Russia and Ukraine.

India possesses a variety of SAM systems, including the Akash, SPYDER, and MRSAM which are capable of intercepting drones at various altitudes and ranges<sup>10</sup>. Soft-Kill Counter-Drone Systems utilize electronic warfare techniques to disrupt or neutralize drone operations without

necessarily destroying them physically. They can be effective against drones employing electronic guidance systems. As India continues to modernize its defense capabilities, systems like the Quick Reaction Surface to Air Missile (QRSAM), Akash-Prime, and Akash-NG will not only work on enhancing its ability to counter evolving drone threats but also offer improved range, accuracy, and engagement capabilities compared to their predecessors.

It has to be realized that though these systems can turn out to be amazingly effective, some drones in swarm situations can actually make their ways to the targets. In addition to physical attacks, adversaries often employ electronic warfare (EW) and jamming tactics to disrupt or degrade the effectiveness of defensive systems. When facing massed drone attacks, India would need to consider and counteract potential EW threats. Alongside EW capabilities, India must enhance its cyber defense measures in order to protect its critical infrastructure and command-and-control systems from cyber- attacks aimed at compromising defense operations.

### **Way Forward**

One thing remains clear; the volley of attacks and counter-attacks between Iran and Israel has changed the strategic landscape of the Middle East. On 01, April, an Israeli attack on the Iranian consulate in Damascus led to the killing of seven Islamic Revolutionary Guard Corps commanders. Two weeks later, the world saw a retaliation from Iran with barrage of drones and amazingly, almost all of them were intercepted. Israel on the other hand, quite swiftly responded with its won missile and drone attack on an airbase in Iran. This exchange will clearly shape regional security and the politics of Middle-East for the foreseeable future. The bigger question, as the attacks line up, is whether the world is ready for another war at a time when tensions soaring high in West Asia, and the tensions between Russia and Ukraine as well. It is understood that we have got into a same situation as it was during the Cold War. The world saw the Soviet Union backing the Arab front and the United States backing the Israel side. The trajectory today shows some similar trend where Iran and Russia can be seen as very closely allied and in turn Israel is being backed by the US. It is more about the influence of world powers and not just about the relationship between Iran and Israel. It is more about the regional powers as well, which is what somehow complicates the matter.

When it comes to India for that matter it imperative to integrate these diverse defense systems into its overall air defense architecture, by implementing this it will not only create a robust and layered defense against drone threats, including those that may arise from conflicts in the Middle East or elsewhere but will also contribute in ensuring comprehensive protection against drone incursions.



**NOTES:**

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