



## **Assessing Targeting of Open-Air Venues and Mitigation Measures**

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Recent high casualty attacks by terrorists against open-air venues highlight the significance of understanding their motivations for attacking such soft targets, the tactics, techniques and procedures (TTPs) they employ in such attacks, the vulnerabilities of such locations to attack, and mitigation measures that can be implemented to make it more difficult for them to be successfully attacked. These are the issues that will be discussed in this article.

### **Defining Open-Air Venues**

Open-air venues are spaces that are not contained in an enclosed building, but are outside, in the open air. Examples include (but not excluded to) outdoor markets, outdoor sporting events, parking areas outside stadiums, street demonstrations, outdoor concerts or political rallies. A distinguishing characteristic is their crowd congestion in relatively unprotected, centralized environments.

### **Types of Weapons Used to Attack Open-Air Venues**

As illustrated by the incidents listed below, a spectrum of low-technology weapons and devices are generally used in conducting attacks against open-air venues. These include the use of improvised explosive devices (IEDs), whether vehicular-borne or as explosive belts worn by suicide bombers; firearms; edged weapons, such as knives; and vehicles, whether trucks or cars that are used to ram into crowds.

In terms of future trends, more sophisticated attack methods and high-tech weapons may be employed in future attacks. These might include weaponized unmanned aerial systems (UAS), such as drones that are equipped with light, explosive payloads. Another high-tech method might include cyber-attacks that attempt to disrupt electronic security controls that manage an infrastructure connected to an open-air venue together with a physical attack against it.

### **Motivations to Target Open-Air Venues**

Several factors motivate adversaries to target open-air venues. First, with regard to ideologically-extremist terrorists, in the case of Islamist groups and their operatives and lone-wolf adherents, in December 2016 their leaders called for attacking their Western adversaries, using "all available means" and targeting them in "their homes, markets, street gatherings and anywhere they do not think of." In the case of using vehicular ramming attacks, as suitable targets a November 2016 issue of ISIS's online magazine *Rumiyah* specified open-space venues such as "large outdoor conventions and celebrations, pedestrian-congested streets, outdoor markets, festivals, parades, and political rallies."

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Second, with regard to psychologically-driven active shooters, such as Las Vegas shooter Stephen Paddock (see, below), although his motivation, as of late January 2018, was still under investigation, it is possible that he had targeted such a large outdoor crowd for his shooting rampage as an act of his own mass fatality collective suicide.

Finally, for all such adversaries successfully attacking soft targets with high fatalities and injuries will likely generate global media coverage that will magnify the attackers' self-perceived cause and capability as a 'world class' destroyer.

### **Significant Open-Air Attack Incidents**

Significant attacks include the following:

- October 1, 2005: Joel Hinrichs, 21, detonated an IED on a bench 200 yards away from the University of Oklahoma football stadium, where nearly 85,000 people were in attendance.
- May 1, 2010: Faisal Shahzad, 31, attempted to detonate his IED-laden SUV vehicle in the middle of Times Square, New York. If it had succeeded, it would have caused mass casualties in the crowded area.
- April 15, 2013: Tamerlan Tsarnaev, 26, and his younger brother, Dzhokhar Tsarnaev 19, detonated two IEDs near the finish line of the Boston Marathon, killing three people and wounding and injuring 260 others.
- July 14, 2016: Mohammed Lahouaiej Bouhlel, 31, drove a large truck into pedestrians gathered on a promenade to watch a fireworks display at the Bastille Day celebration in Nice, France. Eighty-six people were killed and hundreds were wounded.
- November 28, 2016: Abdul Ali Artan, 18, used his vehicle to attack pedestrians on a sidewalk at Ohio State University, Columbus, OH, wounding 11 people. In his attack, he also got out of his car and attempted to stab additional victims.
- December 19, 2016: Anis Amri, 24, stole a 25-ton commercial truck and drove it into pedestrians at a Christmas market in Berlin, Germany, killing 12 people and wounding 48.
- August 12, 2017: James Alex Fields Jr., 20, rammed his car into a crowd protecting a white supremacist rally in Charlottesville, VA, killing one person and wounding several others.
- August 17, 2017: Assailants used a van to drive into pedestrians at a popular shopping area in Barcelona, Spain, killing 14 and wounding 100.
- October 1, 2017: Stephen Paddock, 64, opened fire from his room at the 32<sup>nd</sup> floor of the Mandalay Bay Hotel and Casino, Las Vegas, NV, on a crowd of concertgoers at the [Route 91 Harvest](#) music festival held at the [Las Vegas Strip](#), below, killing 58 people and injuring 851 others.
- October 31, 2017: Sayfullo Habilbullaevi Saipov, 29, used his rented pickup truck to drive for about a mile along a crowded bike path in lower Manhattan, New York City, mowing people along the way. Eight people were killed and 11 others were wounded.

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## **Vulnerability of Events at Open-Air Venues**

Attackers attempt to exploit several vulnerabilities at open-air venues. These include the following:

First, open-air venues are vulnerable target because they extend into areas such as multiple approach routes and transport hubs that encircle closed facilities, such as sports stadiums, that are hardened with stricter perimeter security measures. In this scenario, the threat against a first-order hardened target would be displaced by targeting the nearby soft target instead. In an example of such displacement of how terrorists decide to strike at such open-air areas, on November 13, 2015, a three-man ISIS-affiliated cell was prevented from entering the heavily security-hardened Stade de France, where a European soccer championship game was being held, so they detonated their explosive belts outside the stadium. This still caused damage, with the three operatives killed by their explosives, but only one other person was killed, far less than they would have inflicted had they been able to enter the crowded stadium. Thus, routes to and from a venue, tailgating outside stadiums, or parking areas associated with such events, are at greater risk for attack, despite the stringent security measures implemented at a stadium site.

In a second vulnerability, as is the case with public events that occur at closed or open-air venues, events that draw large crowds of people are usually scheduled and announced in advance, such as a running marathon, street concert, or national celebration. This greatly facilitates the adversaries' attack planning and surveillance activities to target them on their scheduled day of occurrence.

A third vulnerability involves the dynamics of crowd control and how to manage the flow of people in the course of being threatened by an attack. The congestion and bottlenecks resulting from an attack would likely cause mass panic, with the resulting stampede away from the scene of the incident causing large ancillary casualties.

Finally, with security-hardened venues difficult to attack, there are so many more soft targets that it is difficult for security planners to protect each one of them from terrorists who decide to employ 'low-tech' tactics and weaponry, which are difficult to detect. Under such circumstances, therefore, the threat against open-air venues has become more difficult to defend against because attacks can occur potentially any time, any place, and at any location where crowds gather.

## **Mitigation Measures**

To mitigate the likelihood of successful targeting of open-air venues, several measures can be implemented. These are based on the principle that it is important to extend the security zone beyond that of the already hardened target, with the establishment of secondary and, if required, even tertiary perimeter zones, accompanied by the appropriate explosive detection tools, so that the adversaries are aware that the outer perimeters are not being

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overlooked. In another security measure, increased security can result from banning backpacks and other types of bags from high publicity outdoor events. This was the case in the recent New Year's celebration in Times Square, which went off without an incident.

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