Iran Announces Dome Defense against Drones

OE Watch Commentary: The Iranian government has utilized unmanned aerial vehicles for almost 35 years, and has engineered several generations of surveillance and attack drones. In recent years, Iran or its proxies have put these to use in Iraq, Syria, Lebanon, and Yemen, or against Israel and Saudi Arabia. Until recently, Iran had a qualitative military edge in drones over its immediate neighbors and was second only to Israel in its ability to deploy drones.

According to the excerpted article from the *Fars News Agency*, a conservative outlet close to the Islamic Revolutionary Guard Corps, the Iranian government is now recognizing that it is vulnerable to unmanned aerial vehicles launched by its adversaries. The article alleges that a surveillance drone triggered anti-aircraft fire over central Tehran in 2016, and suggests that drones increasingly pose espionage and security risks to Iranian facilities. The Iranian military, therefore, has reportedly developed anti-drone and low altitude

Iran developing "dome defense" against drones.
Source: Fars News Agency, https://media.farsnews.com/Uploaded/Files/Images/1398/07/11/13980711000731_Test_PhotoN.jpg, CC BY 4.0

air defense which purport to jam GPS and scramble electronics. As often the case with Iranian military announcements, it is unclear whether the reality of capabilities matches the military's rhetoric.

The acknowledgement of penetrations of restricted airspace in central Tehran, however, is significant given that Tehran is approximately 350 miles from the Iraqi border and 370 miles to the Azerbaijani border. The Alburz mountain range—many of whose peaks top 9,000 feet and one double that—make drone infiltration from the Caspian Sea unlikely. In all probability, then, Iranian cities' vulnerability to small drones suggests that Iranians themselves and perhaps domestic opposition groups have begun utilizing drones inside Iran. **End OE Watch Commentary (Rubin)**

> ''*The best way to deal with enemy drones may be to disrupt their processes electronically.*''

Source: "Dastyabi Iran beh Pedafand Gonabadi (Iran's Access to Dome Defense)," *Fars News Agency*, 5 October 2019. https://www.farsnews.com/news/13980711000828

Iran's Access to Dome Defense

Today, there are a number of different types of commercial drones—helicopters, quadcopters, quadrotors, and multi-rotors among others—that have different applications. In recent years, both around the world and in Iran, drones have proliferated with a wide variety of applications for mapping, imaging, recreation, etc. They have been widely available across classes and despite their application, pose many threats.

In [Persian month] Dey [January 21-February 20], 2016, a 'Helishot' drone flew over restricted airspace in central Tehran, trigger an air defense response and low-altitude cannon fire.

Among the threats from unmanned aerial vehicles due to high-quality imagining is espionage, and mapping of restricted sites, and military and industrial centers. Also, in recent years with the development of Sunni extremist terrorism in West Asia, terrorist groups such as Jebhat al-Nusra and the Islamic State have used drones with explosives to carry out kamikaze attack.

Considering the threats that small UAVs could pose in restricted areas, the Army Ground Forces' Self-Sufficiency Research and Jihad Organization has designed a response and is developing a comprehensive system to deal with the new micro-threats is on the agenda of the armed forces. Commercial drones and microprocessors have radio guidance systems, and some can also be routed or returned to the first point of flight by the Global Positioning System (GPS), so the best way to deal with these types of microprocessors can be to disrupt the process electronically. Commercial drones and microprocessors have radio guidance systems, and some of these can be routed or returned to the first point of flight by GPS. The best way to deal with these may be to disrupt their processes electronically.