

## UAV Technologies Proliferating in Yemen and Saudi Arabia

By Lucas Winter  
OE Watch Commentary

Unmanned aerial vehicle (UAV) and counter-UAV technologies appear poised to continue proliferating and evolving in Yemen and Saudi Arabia. The accompanying articles shed light on their use in this corner of the Arabian Peninsula. In a span of four days in late May, Yemeni military sources claimed Houthi-led military forces in Yemen used “locally made” surface-to-air missiles to shoot down three UAVs belonging to the Saudi military. The three UAVs were a [Vestel Karayel](#) surveillance drone, a CAIG [Wing Loong II](#) UCAV, and a CASC [Rainbow CH-4](#) UCAV. The claims appear credible, although the only evidence presented were wreckage videos. Yemeni forces did not specify how the drones were shot down beyond speaking vaguely of domestically manufactured systems. Yemeni forces possess Russian/Soviet air-to-air missiles that they inherited from the Yemeni military stockpiles and modified to function as surface-to-air missiles. They also operate Iranian air defense missiles smuggled into Yemen, most notably the “358” loitering air defense missile.

Saudi Arabia is seeking to produce UAVs and other advanced military equipment domestically and has signed co-production agreements with the makers of Turkish Karayels and Chinese CH-4s. Saudi Arabia has also recently entered into a joint venture with the China Electronics Technology Group to develop



**Wing Loong II side view, Dubai Air Show 2017**

Source: Photo by Mztourist via Wikimedia Commons, [https://commons.wikimedia.org/wiki/File:Wing\\_Loong\\_II\\_side\\_view.jpg](https://commons.wikimedia.org/wiki/File:Wing_Loong_II_side_view.jpg)  
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drones and counter-drone systems. The latest incidents add to a growing list of over two dozen UAVs that Saudi Arabia has lost on the Yemeni battlefield, including over a dozen CH-4s and a handful of Karayels. According to the accompanying excerpt from the Turkish daily Hurriyet, Saudi Arabia is thought to be in the process of purchasing Turkish Bayraktar TB-2 UAVs, perhaps in response to the underperformance of these other platforms.

**The plane belonged to the Saudi Air Force and was violating the armistice and carrying out hostile acts in the airspace of the capital, Sana’a...**

**Source:** @army21ye (Yemeni military spokesman Twitter account), 21 May 2022. <https://twitter.com/army21ye/status/1527936740874498049>

*By God's grace, this morning our air defenses were able to shoot down an armed spy plane, of the Turkish-made Karayel type, belonging to the Saudi Air Force. The plane was violating the armistice and carrying out hostile missions in the airspace of the Hiran region of Hajjah governorate. It was targeted by a homemade surface-to-air missile, which has not been made public yet.*

**Source:** @army21ye (Yemeni military spokesman Twitter account), 23 May 2022. <https://twitter.com/army21ye/status/1528799226255253510>

*Moments ago, our air defenses were able, thanks to God, to shoot down a Chinese-made armed CH4 spy plane using a locally made surface-to-air missile. The plane belonged to the Saudi Air Force and was violating the armistice and carrying out hostile acts in the airspace of the capital, Sana'a.*

## Continued: UAV Technologies Proliferating in Yemen and Saudi Arabia

**Source:** @army21ye (Yemeni military spokesman Twitter account), 24 May 2022, <https://twitter.com/army21ye/status/1529119242221649922>

*The armed spy plane shot down by our air defenses at dawn today on the border front was a Chinese-made Wing Loong 2. It was targeted while violating the armistice and carrying out hostile actions in the skies of the Kitaf Directorate, along the border.*

**Source:** "Saudi Arabia to buy Bayraktar drones: Report," *Hurriyet* (Turkish daily), 23 May 2022. <https://www.hurriyetdailynews.com/saudi-arabia-to-buy-bayraktar-drones-report-174012>

*"The Saudi Arabian Military Industries (SAMI) has expressed interest in Turkish drones and is ready for talks with the producing company, Baykar," Lebanon-based Tactical Report wrote on May 22.*

The U.S. Army Training and Doctrine Command's World Wide Equipment guide was developed to support the U.S. Army training and doctrine, including the Opposing Force (OPFOR) portrayal in training simulations (constructive, virtual, live, and gaming).

The equipment in this WEG represents military systems, variants, and upgrades that U.S. forces may encounter now and in the foreseeable future. The authors continually analyze real-world developments, capabilities, and trends to guarantee that the OPFOR remains relevant.

[HTTPS://ODIN.TRADOC.ARMY.MIL/WEG](https://odin.tradoc.army.mil/weg)

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Equipment highlighted in *OE Watch* articles are hyperlinked to the Worldwide Equipment Guide (WEG).

