

CSAG INFORMATION PAPER:

The Middle East *Game of Drones*

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1. **Subject.** The Middle East *Game of Drones*.
2. **Purpose.** To identify the new tendencies in technology, proliferation, and commercialization of unmanned aerial vehicles, the strategic ties between actors, the “why and how” of the UAV use in USCENTCOM AOR and the consequences resulting from it, in order to develop proper coping processes/effective countermeasures.
3. **Significant current aspects/ Assessment**
 - a. **China’s recent drone sales.**
 - Among Chinese military UAVs recent sales recipients, we can find: Myanmar, Iraq, GCC countries, Pakistan, Ethiopia, Nigeria, Algeria and... Ukraine! Following its *Army of drones* initiative, UKR contracted a 78 DJI Matrice 300 RTK drones sale, of which the Chinese already delivered 38 last month, with the rest soon to follow.
 - Price makes Chinese drones more accessible compared to their US/Israeli contenders (roughly under 50% prices of some similar capabilities).
 - Algeria and Egypt are among the latest nations to receive China’s CH-5 and Wing Loong drones, after the US restricted its armed drone exports.
 - The CH-5 drone, analogous to the US MQ-9 Reaper, with the ability to stay airborne while carrying six missiles for over 30 hours, comes with a surprisingly low tag price.
 - China’s motivation behind drone exports is both financial and politico-strategic, but also helps to expand the Chinese intel network across the globe.
 - b. **Russia’s needs.**
 - The loss of over 1/3 of their heavy UAV fleet in just 150+ combat days forced Russia to seek external support, with Iran eager to assist.
 - A pre-invasion (2021) comprehensive deal in UAV capabilities transfer between Russia and Iran envisaged hundreds of drone deliveries (Shahed-129, Mohajer-6, Shahed-123, Ababil-3) and training of the Russian drone pilots in Iranian facilities.
 - Russia requested armed drone deliveries from China in late March, after the start of Ukraine invasion, as it foresaw the incoming shortage in this capability.
 - Russian ISR light fleet — Granat 1, Granat 2, Eleron-3, Zala models, Orlan-10, Takhion and Zastava are discreetly doing their part in the fight.
 - Reports of AI-controlled Russian UCAV being used in Ukraine have also emerged.
 - c. **Iran is picking up the drone race**

- Iran is trying to develop better UAVs versions, for “domestic” use, exports (Ethiopia, Tajikistan, Venezuela and, more recently, Russia.), and in support of the numerous proxy-war entities tied to IRGC Al Qods.
 - Capturing the US-made RQ-170 Sentinel stealth aircraft enabled Iran to reverse-engineer it into their own Sa’egheh (piston engine) and later into the Shahed 171 (161,181,191) Simorgh multi-role jet-propelled advanced UCAV.
- Even without reaching the level of sophistication of US and Israeli-made drones, Iran declared in July 2022 that it is ready to supply advanced drones and other military equipment to “friendly nations,” according to a report by Tasnim News Agency.
- That same month Iran announced the plan to build five new military UAV units and unveiled powerful underground bases, able to launch advanced missiles and 60 UAVs at a time.

d. **Yemen file: a drone test-ground; Iranian Aircraft Carrier in the Arabian Peninsula.**

- Drones identical to the Iranian-designed ones were downed in the area.
- In this way, Iran is expanding its influence abroad, is continuously improving by testing new technology against various AD systems and is inflicting physical and financial damage to those trying to counter the Houthis.
- The western inertia and the inefficiently enforced UN embargos are a sure recipe for the continuation of Iran-backed Houthis drone manufacturing.
- The Yemeni conflict is bound to perpetuate, dragging down with it the well-being of a 30 mil. population, the energy of the West and the security of the neighboring countries.

e. **Nagorno-Karabakh, a potential drone-on-drone war**

- Shockingly enough, Armenia, a Christian country, is discreetly backed by the radical Muslim Shiite-Iran, in their long struggle against (also Shiite) Azerbaijan.
- The reasons behind this relationship are ranging from the trade ties with Armenia, to Iran’s Azeri Turks (estimated at ~ 25 mil.), the wish to monitor and control Turkish influence in the region and up to the Iran relationship with Russia, who is an almost open ally of Armenia.
- Although presently a direct involvement of Iran in Azeri-Armenian conflict is unlikely, there is a growing chance to see more Iranian support for the Armenian side in the future, with the TB2 and Shahed-129 meeting over the fields of Nagorno-Karabakh.

4. **Recommendations**

Summary: In this Game of Drones, China, in the medium term, may be the partner of choice for many countries in the Middle East. This is due to the competitive prices of Chinese drones and their desire to sell their very recent models, combined with the difficult sustainability of other high end and expensive drones in a high intensity conflict (War in Ukraine) and the use of swarm tactics. There is a risk that the expensive US offerings, including equipment, support, and training, may no longer be suitable for the market.

USCENTCOM should:

- Identify the immediate needs of allied and partner countries in the region in the delivery of effects by drones (what is the appetite of these countries?).
- Once the needs have been identified, campaign to adapt supply to demand by revising the packages to reduce prices.
- Make regional partners aware of the risk of data exploitation by China when they acquire drones of Chinese design and the difficulties of integrating them into US systems within the framework of

partnerships or TFs such as TF 59. In the same way, raise awareness among partners procuring Iranian-designed drones.

- Promote the creation of a C-UAS Centre of Excellence which would, among other things, be responsible for: considering the WMD threat and countering swarm / loitering tactics.
- Conduct a study to identify the constraints linked to Western ethics concerning the offensive use of "intelligent" drones.
- With its regional partners and allies, strengthen control of the embargo in Yemen and support the coalition, if necessary, to destroy identified drone production sites.
- In coordination with USEUCOM, explore Iranian-Armenian relationships including the prospects of UCAV proliferation in the region.

For more data on UAV/UCAV systems, see Annex 1.

Annex 1 to CSAG Information Paper "Game of Drones," August 24, 2022

Annex 1 - Drone profiles

Purpose. To present the appearance and main characteristics of UAVs/UCAVs currently used/developed by China.

- a. *DJI Matrice 300 RTK.*



Release date: 5/7/2020

Used by: China, Armenia, Ukraine

Characteristics: 4.5h endurance, 7000 ft. service ceiling, 1 kg payload, ISR purpose

Price: \$10,500-19,000

- b. *Wing Loong II*



Release date: 09/2015

Used by: China, Pakistan, UAE, Egypt

Characteristics: 1,100 kg, 20 h endurance, 2,500 mi range, 16,000 ft. service ceiling, 200 kg air-to-surface ammo

Price: \$1-2 million

c. CH-4



Release date: 08/2015

Used by: China, Jordan, Iraq, Egypt, UAE, Libya

Characteristics: 40h endurance, 435 km/h top speed, 345 kg payload+optical devices+radar

Price: \$2-4 million

d. CH-5 (similar to US Reaper)



Release date: 07/19/2020 (demo flight 2017)

Used by: China, Pakistan, KSA, UAE, Iraq, Algeria, Egypt, Serbia, Myanmar

Characteristics: 120h endurance, up to 20,000 km range, 220 km/h, 1,000 kg payload, 36,000 ft. service ceiling

Price: \$4-7 million

e. CH-6



Release date: 09/29/2021

Used by: China

Characteristics: endurance 18h (strike variant) or 21h (ISR variant), top speed 700 km/h, 45,000 ft. ceiling, 450 kg payload

Price: \$6-8 million

f. CH-7 (similar to US X-47B)



Release date: in development (estimated to be operational in late 2022)

Used by: China

Characteristics: 15h endurance, 2,000 km range, top speed 920 km/h, 36,000 ft. ceiling, **stealth** combat drone, **stand-off** purpose

Price: (?)

g. FH-97 (EW, similar to US Valkyrie XQ-58A)



Release date: 2019

Used by: China

Characteristics: "loyal wingman" type drone, endurance >24h, stealth, long-range, capable of electronic warfare, reconnaissance and early warning, can perform long-range detection outside the defense area or carry out tactical feints and saturation attacks in coordination with manned aircraft.

