Drones Over Sudan: Foreign Powers in Sudan's Civil War

Kathryn Tyson

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Several key foreign actors, including Iran, Russia, and the United Arab Emirates (UAE), have contributed to the civil war in Sudan for over a year by sending drones to the opposing sides. Iran has sent drones to support the Sudanese Armed Forces (SAF) in hope of securing an Iranian Red Sea naval base in exchange.¹ Russia initially used the preexisting relationship between the Kremlin-funded Wagner Group and the Rapid Support Forces (RSF) to provide drones and other weapons to the RSF in early 2023.² Russia switched sides in spring 2024 and promised military aid to the SAF in exchange for its commitment to implement a stalled 2017 agreement that promised Russia a small Red Sea naval base.³ Iran and Russia's intervention directly threatens US policy interests in Sudan by attempting to gain access to Sudan's coast to project naval power into the Red Sea. The UAE has backed the RSF to protect its economic and political influence in Sudan and the Red Sea through its ties with the RSF leader.⁴ Sudan's warring sides have used foreign drones to gain a military advantage on the battlefield and improve their negotiating positions for a ceasefire.

Figure 1. Areas of Control



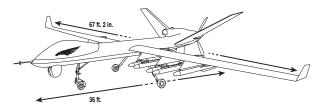
Source: Sudan War Monitor.

Sudan's generally flat geography is conducive to drone strikes and surveillance because there is limited cover. The SAF, the RSF, and their foreign backers have used drones with ranges between 30 km and 4,000 km in roles that vary from combat to intelligence, surveillance, and reconnaissance.⁵ Sudan is about 780 miles (1,250 km) from north to south and 860 miles (1,390 km) from east to west, meaning long-range drones like the Chinese-made Wing Loong II drone deployed by the UAE or the Egyptian-donated and Turkish-made Bayraktar TB2 drone can fly across the country in support of RSF and SAF operations.⁶ Commercially manufactured quadcopter drones with smaller ranges have also been used to attack targets in urban areas like Khartoum, Sudan's capital.⁷

Sudan continues to be a secondary theater for Iran and Russia, but the fall of the Bashar al Assad regime in Syria and Sudan's natural resources will draw future engagement from both countries. Iran and Russia are pursuing their respective priority missions in the Middle East and Ukraine and will likely continue to devote most of their resources to these campaigns. However, Iran and Russia remain interested in Sudan because of its strategic location on the Red Sea and its abundant natural resources, particularly gold.⁸ Russia may increase the small but already growing role of Port Sudan in Russia's logistic network and strategic power projection objectives following the Assad regime's collapse.⁹ It is unclear how the fall of Assad's forces in Syria and the resulting threats to Iran's positions in that country might affect their willingness or ability to support the warring parties in Sudan.

The following list documents the variety and basic capabilities of the foreign drones used in Sudan. It is not an exhaustive list, but it aims to inform the discussion about what kinds of capabilities these systems can give Sudan's warring sides.

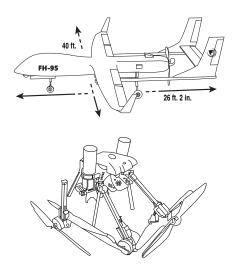
Rapid Support Forces (RSF) Inventory



Wing Loong II

Country of origin: China; operated by the UAE¹⁰ Role: Multi-role but has been used for only intelligence, surveillance, and reconnaissance (ISR) activities in Sudan¹¹ Range: 2,485 miles (4,000 km)¹² Payload capacity: 400 kg¹³ Cost: \$1 to \$2 million¹⁴ Munitions: Laser-guided missiles; laser-guided bombs; antipersonnel bombs¹⁵ First deployment: The UAE has flown missions using the Wing Loong II in support of the RSF since at least |uly 2024.¹⁶

Rapid Support Forces (RSF) Inventory (continued from the previous page)



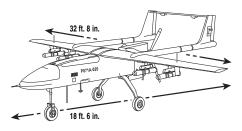
FH-95 (Feihong)

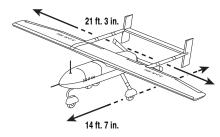
Country of origin: China; likely deployed by the UAE based on location¹⁷ Role: Multi-role¹⁸ Range: 155 miles (250 km)¹⁹ Payload capacity: 200–250 kg²⁰ Cost: Uknown Munitions: Laser-guided bombs and anti-radiation missiles²¹ First deployment: Yale University's Humanitarian Research Lab first observed three FH-95 drones at the RSF-controlled Nyala Airport between December 2024 and January 2025.²²

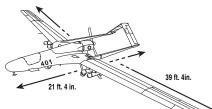
Unknown Quadcopter Drone

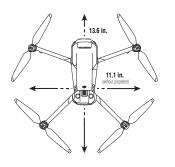
Country of origin: Unknown, possibly Russia²³ Role: Multi-role, primarily used for surveillance²⁴ Range: Unknown Payload capacity: Unknown Cost: Unknown Munitions: Unknown First deployment: Unknown

Sudanese Armed Forces (SAF) Inventory









Read the full report at

https://www.criticalthreats.org/analysis/drones-oversudan-foreign-powers-in-sudans-civil-war

Mohajer-6

Country of origin: Iran Role: Multi-role²⁵ Range: 124–1,240 miles (200–2,000 km)²⁶ Payload capacity: 40 kg²⁷ Cost: Unknown Munitions: Precision-guided bombs; guided anti-tank missiles²⁸ First deployment: The US State Department reported several potential Iranian military cargo shipments from Iran to Port Sudan between December 2023 and July 2024.²⁹

Zajil-3 (locally manufactured Iranian Ababil-3 drone)

Country of origin: Iranian design Role: Multi-role³⁰ Range: 62–155 miles (100–250 km)³¹ Payload capacity: 45 kg³² Cost: Unknown; Designed for "Iow-cost."³³ Lebanese Hezbollah acquired Ababil drones for \$5,000, according to Western media in 2024.³⁴ Munitions: Precision-guided bombs; guided anti-tank missiles³⁵ First deployment: The SAF first used the Zajil-3 in the civil war in January 2024.³⁶

Bayraktar TB2

Country of origin: Turkey; deployed by Egypt³⁷ Role: Multi-role³⁸ Range: Up to 2,485 miles (Up to 4,000 km)³⁹ Payload capacity: 150 kg⁴⁰ Cost: \$2 to \$5 million⁴¹ Munitions: Four laser-guided munitions⁴² First deployment: Egypt first delivered the Turkish-made drones to Sudan in September 2023.⁴³

DJI MAVIC 3

Country of origin: China, reportedly deployed by Ukraine⁴⁴ Role: Commercial, quadcopter multi-role drone Range: 18 miles (30 km)⁴⁵ Payload capacity: Unknown Cost: Approximately \$2,000 to \$5,000⁴⁶ Munitions: One to two grenades⁴⁷ First deployment: Ukrainian forces in Sudan used drones to strike RSF targets in Khartoum in September 2023, according to a Ukrainian military source familiar with the operation.⁴⁸

Contact Information

Kathryn Tyson

Africa Analyst, Critical Threats Project kathryn.tyson@aei.org

Christopher Paludi

Program Associate, Critical Threats Project christopher.paludi@aei.org

Notes

1. https://www.reuters.com/world/middle-east/are-iranian-drones-turning-tide-sudans-civil-war-2024-04-10/

2. https://sudanwarmonitor.com/p/us-sanctions-companies-supplying; https://jamestown.org/program/russia-switches-sides-in-sudan-war/; https://home. treasury.gov/news/press-releases/jy1769; https://www.cnn.com/2023/04/20/africa/wagner-sudan-russia-libya-intl/index.html

3. https://www.criticalthreats.org/analysis/africa-file-special-edition-external-meddling-for-the-red-sea-exacerbates-conflicts-in-the-horn-of-africa#Sudan; https://

jamestown.org/program/russia-switches-sides-in-sudan-war/

4. https://www.criticalthreats.org/analysis/africa-file-special-edition-external-meddling-for-the-red-sea-exacerbates-conflicts-in-the-horn-of-africa#Sudan

5. https://odin.tradoc.army.mil/WEG/Asset/Wing_Loong_ID_Chinese_Medium-Altitude_Long_Endurance_(MALE)_Unmanned_Aerial_Vehicle_(UAV); https://www.cnn.com/2023/09/19/africa/ukraine-military-sudan-wagner-cmd-intl/index.html; https://www.nytimes.com/2024/09/21/world/africa/uae-sudan-civil-war.html

6. https://www.nytimes.com/2024/09/21/world/africa/uae-sudan-civil-war.html; https://www.wsj.com/world/africa/

ignoring-u-s-calls-for-peace-egypt-delivered-drones-to-sudans-military-6f7fdcda

7. https://www.cnn.com/2023/09/19/africa/ukraine-military-sudan-wagner-cmd-intl/index.html

8. https://www.criticalthreats.org/analysis/africa-file-special-edition-external-meddling-for-the-red-sea-exacerbates-conflicts-in-the-horn-of-africa#Sudan

9. https://www.criticalthreats.org/analysis/africa-file-december-12-2024-kremlin-pivot-to-libya-or-sudan-post-syria-turkey-mediates-ethiopia-somalia-deal#Russia

10. https://www.nytimes.com/2024/09/21/world/africa/uae-sudan-civil-war.html

11. https://www.nytimes.com/2024/09/21/world/africa/uae-sudan-civil-war.html

12. https://odin.tradoc.army.mil/WEG/Asset/Wing_Loong_ID_Chinese_Medium-Altitude_Long_Endurance_(MALE)_Unmanned_Aerial_Vehicle_(UAV)

13. https://odin.tradoc.army.mil/WEG/Asset/Wing_Loong_ID_Chinese_Medium-Altitude_Long_Endurance_(MALE)_Unmanned_Aerial_Vehicle_(UAV)

14. https://thediplomat.com/2018/11/strike-capable-wing-loong-ii-drone-enters-service-with-chinas-plaaf/

15. https://odin.tradoc.army.mil/WEG/Asset/Wing_Loong_ID_Chinese_Medium-Altitude_Long_Endurance_(MALE)_Unmanned_Aerial_Vehicle_(UAV)

16. https://www.nytimes.com/2024/09/21/world/africa/uae-sudan-civil-war.html

17. https://armyrecognition.com/news/army-news/army-news-2024/dimdex-2024-china-boosts-drone-leadership-with-new-fh-95-electronic-warfare-uav;

https://files-profile.medicine.yale.edu/documents/73142835-15d7-4b8e-9c18-53bcecf5a184

18. https://files-profile.medicine.yale.edu/documents/73142835-15d7-4b8e-9c18-53bcecf5a184

19. http://www.cndefense.com/uav/FH-95.html

20. https://www.janes.com/osint-insights/defence-news/defence/chinas-electronic-warfare-uav-completes-performance-test; http://www.cndefense.com/uav/FH-95.html

21. https://www.janes.com/osint-insights/defence-news/defence/chinas-electronic-warfare-uav-completes-performance-test

22. https://www.janes.com/osint-insights/defence-news/defence/chinas-electronic-warfare-uav-completes-performance-test

23. https://sudanwarmonitor.com/p/us-sanctions-companies-supplying

24. https://sudanwarmonitor.com/p/us-sanctions-companies-supplying

25. https://www.criticalthreats.org/analysis/irans-drone-inventory-and-potential-sales-to-russia

26. https://www.criticalthreats.org/analysis/irans-drone-inventory-and-potential-sales-to-russia; https://www.bbc.com/news/articles/c2wjz652j1o

27. https://odin.tradoc.army.mil/WEG/Asset/Mohajer-6_Iranian_Unmanned_Aerial_Vehicle_(UAV); https://iranpress.

com/-mohajer-6-uav--powerful-tactical-reconnaissance-and-combat-drone

28. https://www.criticalthreats.org/analysis/irans-drone-inventory-and-potential-sales-to-russia

29. https://www.washingtonpost.com/world/2024/10/15/sudan-war-weapons-uae-iran/; https://www.reuters.com/world/middle-east/

are-iranian-drones-turning-tide-sudans-civil-war-2024-04-10/

30. https://farsi.iranpress.com/iran-i211522-%D9%85%D8%A7%D9%85%D9%88%D8%B1%DB%8C%D8%AA_%D9%87%D8%A7%D8%A7%D8%A7%D9%85%D8%AA%D 9%81%D8%A7%D9%88%D8%AA_%D9%8E%D9%87%D9%BE%D8%A7%D8%AF_%D8%A7%D8%A8%D8%A7%D8%A8%DB%8C%D9%84_3; https://odin.tradoc. army.mil/Search/All/ababil

31. https://iranprimer.usip.org/blog/2024/feb/02/roster-iran%E2%80%99s-drones; https://farsi.iranpress.com/iran-i211522-%D9%85%D8%A7%D9%85%D9%8 8%D8%B1%DB%8C%D8%AA_%D9%87%D8%A7%DB%8C_%D9%85%D8%AA%D9%81%D8%A7%D9%88%D8%AA_%D9%BE%D9%87%D9%BE%D8%A7%D8%AF _%D8%A7%D8%A8%D8%A7%D8%A8%DB%8C%D9%84_3

32. https://iranprimer.usip.org/blog/2024/feb/02/roster-iran%E2%80%99s-drones; https://www.iranintl.com/en/202312039386

33. https://inteloniran.blogspot.com/2017/02/technical-commentary-on-captured.html

34. https://www.wsj.com/world/middle-east/a-rubiks-cube-in-the-sky-israel-struggles-to-defend-against-drones-14062f76

35. https://www.criticalthreats.org/analysis/irans-drone-inventory-and-potential-sales-to-russia

36. https://www.bbc.com/news/articles/c2vvjz652j1o

37. https://www.wsj.com/world/africa/ignoring-u-s-calls-for-peace-egypt-delivered-drones-to-sudans-military-6f7fdcda

38. https://www.wsj.com/world/africa/ignoring-u-s-calls-for-peace-egypt-delivered-drones-to-sudans-military-6f7fdcda

39. https://thedefensepost.com/2024/05/23/turkish-bayraktar-drones-poland/

40. https://thedefensepost.com/2024/05/23/turkish-bayraktar-drones-poland/

41. https://thedefensepost.com/2024/03/13/maldives-bayraktar-tb2-drones-turkey/; https://apnews.com/article/

kuwait-turkey-baykar-drone-bayraktar-dc24b4f801573dcc5fd604a99a4c7123

42. https://thedefensepost.com/2024/05/23/turkish-bayraktar-drones-poland/; https://www.turkishdefencenews.com/

bayraktar-tb2-armed-unmanned-aerial-vehicle/

- 43. https://www.reuters.com/world/africa/egypt-delivered-drones-sudans-military-wsj-2023-10-14/
- 44. https://www.dji.com/company?site=brandsite&from=footer; https://www.cnn.com/2023/09/19/africa/ukraine-military-sudan-wagner-cmd-intl/index.html
- 45. https://www.cnn.com/2023/09/19/africa/ukraine-military-sudan-wagner-cmd-intl/index.html
- 46. https://store.dji.com/product/dji-mavic-3?vid=109821
- 47. https://www.forbes.com/sites/davidhambling/2024/01/16/djis-new-drone-could-change-war-but-its-not-supposed-to-be-a-weapon/
- 48. https://www.cnn.com/2023/09/19/africa/ukraine-military-sudan-wagner-cmd-intl/index.html

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Contact Information

Kathryn Tyson Africa Analyst, Critical Threats Project kathryn.tyson@aei.org

Christopher Paludi

Program Associate, Critical Threats Project christopher.paludi@aei.org