EMERGENCY ALERT

RSF Preparing Large-Scale Suicide Drone Fleet for Launch in Nyala

29 September 2025

Yale SCHOOL OF PUBLIC HEALTH

Humanitarian Research Lab

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The Faculty Director of the Humanitarian Research Lab (HRL) at the Yale School of Public Health is Dr. Kaveh Khoshnood. The analysis and production of this report was overseen by HRL Executive Director Nathaniel Raymond and Caitlin Howarth. Analysis and report production was conducted by the Humanitarian Research Lab's Conflict Analytics team.

Citation | Raymond, Nathaniel A. and Caitlin Howarth, et al. "RSF Preparing Large-Scale Suicide Drone Fleet for Launch in Nyala," 29 September 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. Available at https://medicine.yale.edu/lab/khoshnood/publications/reports

I. Key Findings

RSF has been observed preparing a large-scale drone attack from Nyala as of 08:47 UTC/10:47 CAT today, Monday 29 September 2025. The Yale School of Public Health's Humanitarian Research Lab has identified at least 43 UAVs (drones) near Rapid Support Forces (RSF)-controlled Nyala airport in satellite imagery collected on 29 September 2025, not visible in previous satellite imagery collected on 26 September 2025. The UAVs remain present in satellite imagery on 08:49:50 UTC/10:49:50 CAT on 29 September 2025.

At least 23 UAVs visible in imagery today are consistent with the Shahed-style deltawing UAVs previously identified in satellite imagery on 6 May 2025. The remaining 20 UAVs have dimensions of approximately 1.5 meters by 2 meters. No UAVs are present in satellite imagery from 26 September 2025. Yale HRL also identifies 36 launchers visible in satellite imagery on 29 September 2025. This represents an increase of 20 launchers since 26 September 2025, when a total of 16 launchers were documented.

23 Shahed-Style Long-Range Delta-Wing UAVs

The 23 delta-wing UAVs north of RSF-controlled Nyala airport have approximate dimensions of 2.5 meter wingspan and approximately 2.8-3 meters nose-to-tail, which should be considered approximate due to resolution of available imagery and size of the objects. The delta-wing UAVs are consistent with the dimension and types of the 13 UAVs observed in the same location outside Nyala on 6 May 2025.¹

These delta-wing UAVs have operational parameters consistent with Shahed-136-style loitering munitions, including the Sunflower-200 (Cobtec) and the ZT-180 (Xi'an Bingo Intelligent Aviation Technology).² Shahed-style UAVs typically have an operational range between 1500-2500km: the Sunflower-200 has a reported operational range of 2000-2500 kilometers and the ZT-180 has a reported operational range of 1800 kilometers.³ Shahed-type UAVs are often referred to as "loitering munitions," "suicide drones," or "kamikaze drones" as they are not intended for reuse and are often destroyed either by colliding with a target or crashing after dropping a 20-50kg munition.⁴ Some Shahed-style loitering munitions are equipped with photo and video capabilities.⁵

An unnamed RSF intelligence officer told *Sky News* in a report published on 26 September 2025 that the United Arab Emirates is RSF's primary backer and stated that "[m] any of the planes landing at Nyala [in South Darfur] are said to bring weapons from the UAE and partially through the Amdjarras airport in Chad." A July 2025 report claimed that the UAE's ADASI (Abu Dhabi Autonomous Systems Investments) subsidiary EDGE Group signed an agreement to license production of the Sunflower-200 from China's Cobtec in 2024. *Der Spiegel* reported that China's Xi'an Bingo Intelligent Aviation Technology was in negotiations with Russia's military to mass produce ZT-180 UAVs (loitering munitions); Xi'an Bingo Intelligent Aviation Technology has denied any commercial contact with Russia. A complete list of proliferators for either the Sunflower-200 or the ZT-180 is not currently known.

20 UAVs near Launchers

Yale HRL also identifies 20 UAVs with approximate dimensions of 1.5 meters width by 2 meters length. These measurements are approximate due to resolution of available imagery and size of the objects. The majority of these 20 UAVs appear next to launchers. Yale HRL does not make additional assessments of these UAVs at this time based on the resolution of imagery and continues to investigate.

II. Human Security Analysis

The presence of this combination of UAVs in the position observed should be considered a sign of imminent attack. These UAVs represent a clear and present danger to civilians, critical infrastructure, and humanitarian aid access.

RSF's potential target or targets of this impending UAV attack are not known. The long-range delta-wing UAVs are estimated to have a range of between 1500-2000 kilometers, therefore the entirety of Sudan is assessed within range of the long-range delta-wing UAVs in Nyala.

No UAVs have been documented at this position near Nyala except on 6 May 2025; Yale HRL first reported the presence of delta-wing UAVs at this location on 12 September 2025. This 6 May instance corresponds to RSF's UAV attacks on Port Sudan between 3 and 7 May 2025 by RSF-deployed drones, approximately 1600 kilometers from Nyala. At least 16 launch platforms near Nyala Airport have been present in all available satellite imagery through at least 26 September 2025 and an additional 20 platforms were added between 26-29 September 2025. RSF has engaged in frequent suicide drone attacks targeting sites from El-Fasher to Port Sudan from 3 May 2025 to present. Recently, an RSF drone attacked a mosque in El-Fasher, killing more than 75 people.

III. Methodology

Yale HRL utilizes data fusion methodologies of open source and remote sensing data analysis. Yale HRL produced this report through the cross-corroboration of open source data, including social media, local news reporting, multimedia, and other reports, and remote sensing data, including satellite imagery and thermal sensor data. Researchers analyzed open source data across social media, news reports, and other publicly available sources to identify, chrono- and geolocate, and verify incidents. Analysts assess the credibility and reliability of open source data based on a source's level of detail, past credibility, and the corroboration of other independent sources. Remote sensing and satellite imagery analysis relies on multi-temporal change detection, which involves the comparison of two or more satellite images of the same area captured at different times to detect differences in coloration, visual properties, and presence, absence, or positional change of objects across the images.

Limitations

There are significant limitations to the data fusion methodology. The information environment in Sudan does not have the breadth of data available in other locations and there is likely a significant reporting bias for those who provide open source reporting. The tools and techniques present significant challenges to assess activities such as extrajudicial detention, conflict-related sexual violence (CRSV), and conflict-related casualties, particularly in environments with limited data. Satellite imagery analysis is limited by available imagery over time and space. Available nadir angles of satellite imagery can produce challenges to assess structural damage, until multiple angles and ground-level photographic and video materials emerge to help inform the analysis. Image resolution level can also limit the analyst's ability to perceive the full extent of damage present.

¹Raymond, Nathaniel A. and Caitlin Howarth et al. "HUMAN SECURITY ALERT Confirmed: 19 September Strike on Al-Safiya Mosque." 22 September 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. https://edin.tradoc.army.mil/Search/WEG/shahed%20136;;

Wikipedia Editors, "HESA Shahed 136" *Wikipedia*, 24 August 2025: https://en.wikipedia.org/wiki/HESA Shahed 136, archived at https://archive.ph/y5TkQ

Sunflower-200:

Hambling, David. "Is China's Kamikaze Drone Clone Headed To Russia?" Forbes. 11 September 2023. https://www.forbes.com/sites/davidhambling/2023/09/11/is-chinas-kamikaze-drone-clone-headed-to-russia/, archived at https://web.archive.org/web/20250822183718/https://www.forbes.com/sites/davidhambling/2023/09/11/is-chinas-kamikaze-drone-clone-headed-to-russia/;

Pasandideh, Shahryar "China's NORINCO Displays Expanding Array Of Uncrewed Aircraft, Draws Attention To Chinese Strike Drone Technology" *SPAS Consulting*. 29 July 2025 https://www.spasconsulting.com/p/chinas-norinco-displays-expanding, archived at https://perma.cc/ZBN8-GXPP

ZT-180: "China Reportedly Negotiating with Russia To Supply Kamikaze Drones" *Der Spiegel* 23 February 2023, https://www.spiegel.de/international/world/the-war-in-ukraine-china-is-reportedly-negotiating-with-russia-to-supply-kamikaze-drones-a-13909157-4740-4f84-830e-fb3c69bc1dff, archived at

https://web.archive.org/web/20250902015740/https://www.spiegel.de/international/world/the-war-in-ukraine-china-is-reportedly-negotiating-with-russia-to-supply-kamikaze-drones-a-13909157-4740-4f84-830e-fb3c69bc1dff

³ Ibid.

⁴ Shahed-136: U.S. Army OE Data Integration Network (ODIN) "Shahed-136 Iranian Loitering Munition Unmanned Aerial Vehicle (UAV)" Odin, 13 November 2025, https://odin.tradoc.army.mil/Search/WEG/shahed%20136;

Wikipedia Editors, "HESA Shahed 136" Wikipedia, 24 August 2025: https://en.wikipedia.org/wiki/HESA_Shahed_136, archived at https://archive.ph/y5TkQ

Sunflower-200:

Hambling, David. "Is China's Kamikaze Drone Clone Headed To Russia?" Forbes. 11 September 2023. https://www.forbes.com/sites/davidhambling/2023/09/11/is-chinas-kamikaze-drone-clone-headed-to-russia/, archived at https://web.archive.org/web/20250822183718/https://www.forbes.com/sites/davidhambling/2023/09/11/is-chinas-kamikaze-drone-clone-headed-to-russia/;

Pasandideh, Shahryar "China's NORINCO Displays Expanding Array Of Uncrewed Aircraft, Draws Attention To Chinese Strike Drone Technology" *SPAS Consulting*. 29 July 2025 https://www.spasconsulting.com/p/chinas-norinco-displays-expanding, archived at https://perma.cc/ZBN8-GXPP

ZT-180: "China Reportedly Negotiating with Russia To Supply Kamikaze Drones" *Der Spiegel* 23 February 2023, https://www.spiegel.de/international/world/the-war-in-ukraine-china-is-reportedly-negotiating-with-russia-to-supply-kamikaze-drones-a-13909157-4740-4f84-830e-fb3c69bc1dff, archived at

https://web.archive.org/web/20250902015740/https://www.spiegel.de/international/world/the-war-in-ukraine-china-is-reportedly-negotiating-with-russia-to-supply-kamikaze-drones-a-13909157-4740-4f84-830e-fb3c69bc1dff

⁶ Elbagir, Yousra "UAE is 'main backer' behind Sudan war, intelligence officer tells Sky News," Sky News. 26 September 2025. https://news.sky.com/story/uae-is-main-backer-behind-rsf-militia-in-sudan-intelligence-officer-claims-in-secret-interview-13437966.

⁷ "UAE: Update on EDGE's Sunflower 200 UAV project" *Tactical Report* 15 July 2025 https://www.tacticalreport.com/daily/63680-uae-update-on-edges-sunflower-200-uav-project, archived at

https://web.archive.org/web/20250814054505/https://www.tacticalreport.com/daily/63680-uae-update-on-edges-sunflower-200-uav-project;

Parakala, Akshara, Amit Kalra "UMEX 2024: Cobtec Sunflower 200 UAV to enter into service with UAE" *Janes* 25 January 2025 https://archive.ph/7Rb9N.

⁸ "China Reportedly Negotiating with Russia To Supply Kamikaze Drones"; Farooqi, Zauqi

9 Ibid.

¹⁰ Raymond, Nathaniel A. and Caitlin Howarth, et al. "13 Long-Range Suicide Drones and Launch Platforms near Nyala Airport, May 2025," 12 September 2025. Humanitarian

⁵ Ibid.

Research Lab at Yale School of Public Health: New Haven. https://files-profile.medicine.yale.edu/documents/e7d9ff93-bca7-41dc-ad94-54eeb4086b67

¹¹ Raymond, Nathaniel A. and Caitlin Howarth et al. "HUMAN SECURITY ALERT Confirmed: 19 September Strike on Al-Safiya Mosque." 22 September 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. https://files-profile.medicine.yale.edu/documents/c1cfae6c-7c55-4bb6-8b81-2b224a97a8e4



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