

Advanced UAV Destroyed at RSF-Held Nyala Airport

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Yale SCHOOL OF PUBLIC HEALTH
Humanitarian Research Lab

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I. Key Findings

At least one likely advanced unmanned aerial vehicle (UAV) was destroyed and a structure under construction at Rapid Support Forces (RSF)-held Nyala Airport was damaged between 11-16 June 2025. The Yale School of Public Health's Humanitarian Research Lab (HRL) identifies two munition impacts in close proximity and debris visible in satellite imagery from 21 June 2025. The debris near one of the munition impacts is consistent in appearance and dimension with the wing of the UAVs first visible at Nyala airport on 9 December 2025. These UAVs are believed to be consistent with either CH-95s or FH-95s.¹ Yale HRL has identified as many as 6 advanced unmanned aerial vehicles (UAVs) at Nyala Airport in satellite imagery since 24 April 2025.² Damage likely occurred between 11 and 16 June 2025; damage and debris consistent with the wing of a UAV was not clearly visible in very high resolution satellite imagery until 21 June 2025.

Sudan Tribune and open sources on social media first reported two to five explosions in the vicinity of Nyala airport and alleged SAF air attacks on RSF positions in Nyala on the night of 12/13 June 2025.³ Some sources reported drone strikes or drone attacks.⁴ Damage at the same location on the Nyala Airstrip was visible in lower resolution satellite imagery by 14 June 2025.⁵ RSF posted videos alleging to have shot down a SAF drone following bombardment at Nyala airport.⁶ Some sources alleged that these attacks damaged an aircraft which had recently landed at Nyala; Yale HRL does not corroborate reports of aircraft damage at this time.⁷

II. 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. Sources redacted for protection purposes are available for verification to credible media, research, and accountability actors.

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.

¹ Caitlin N. Howarth, Kaveh Khoshnood, Nathaniel A. Raymond et al. "SPECIAL REPORT: Advanced UAVs Identified at RSF-Controlled Nyala Airport." 26 February 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/73142835-15d7-4b8e-9c18-53bcecf5a184>; <https://www.reuters.com/world/africa/sudans-rsf-operating-drones-darfur-base-pictures-show-2025-02-26/>

² Caitlin N. Howarth, Kaveh Khoshnood, Nathaniel A. Raymond et al. "Six UAVs at RSF-held Nyala Airport." 25 April 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven <https://files-profile.medicine.yale.edu/documents/e3b5ad82-2fc6-4cab-886d-899467caaeae>

³ Sudan Tribune, "مسيرات الجيش تقصف مواقع استراتيجية للدعم السريع في نبالا" *Sudan Tribune*, 13 June 2025 <https://sudantribune.net/article301881/>, archived at <https://archive.ph/zFNS7>; Source HRL_MMC_100 redacted for protection purposes; Sudan Tweet (@Sudan_tweet)

"القوات المسلحة تستهدف مطار نبالا في ولاية جنوب دارفور، وسماع دوي انفجارين حتى الآن" 12 June 2025, https://x.com/Sudan_tweet/status/1933281803466650077 archived at

⁴ HornPulse (@hornpulsemedia) "On June 12th midnight Sudanese Armed Forces reportedly conducted a drone strike" 13 June 2025, <https://x.com/hornpulsemedia/status/1933411066651787480>, archived at <https://archive.ph/OTV6M>.

⁵ Rich Tedd 🇸🇩🇪🇪 (@AfriMEOSINT) "The latest satellite imagery captured today by CopernicusEU reveals a direct hit on the UAVs apron of Nyala Airport in Sudan's South Darfur state..." 14 June 2025 <https://x.com/AfriMEOSINT/status/1933937202104238185>, archived at <https://archive.ph/43DIV>.

⁶ 13 June 2025 "الجزيرة - السودان" الدعم السريع: قواتنا أسقطت طائرة مسيرة في مدينة نبالا " <https://www.facebook.com/AJA.Sudan/videos/%D8%A7%D9%84%D8%AF%D8%B9%D9%85-%D8%A7%D9%84%D8%B3%D8%B1%D9%8A%D8%B9-%D9%82%D9%88%D8%A7%D8%AA%D9%86%D8%A7-%D8%A3%D8%B3%D9%82%D8%B7%D8%AA-%D8%B7%D8%A7%D8%A6%D8%B1%D8%A9-%D9%85%D8%B3%D9%8A%D8%B1%D8%A9-%D9%81%D9%8A-%D9%85%D8%AF%D9%8A%D9%86%D8%A9-%D9%86%D9%8A%D8%A7%D9%84%D8%A7/1239952477523818/>; archived at <https://archive.ph/8ZO4s>

⁷ Source HRL_MMC_102 redacted for protection purposes.

Nyala Airport

CONFLICT-RELATED DAMAGE OBSERVED BETWEEN 11-21 JUNE 2025



Analysis of satellite imagery collected between 11 and 21 June 2025 over the Nyala airport shows damage from a likely munition impact to hangars under construction on the northern end of the airstrip

Also observed is the burned wreckage of a likely UAV, with part of the wing still visible. The wing width is consistent with that of a FH-95 or CH-95 UAV, six of which have been previously observed at this airstrip.

