

Child severely injured in artillery strike - M'dat Village, Mindat Township

REPORT BY MYANMAR WITNESS, 26 September 2022

Key Event Details:

- Location of Incident: M'dat village [21.314288, 93.914820]
- Date/Time of Incident: 23 May 2022
- Alleged Perpetrator(s) and/or Involvement: Light Infantry Battalion 274
- Myanmar Witness Conclusions:
 - Myanmar Witness (MW) was not able to fully verify the footage of the injured child as being taken in M'dat village. However, MW was able to identify a possible location in M'dat village consistent with footage of where a heavily wounded child was taken for initial medical care, as well as footage consistent with Mindat hospital, where the child could have been taken for secondary medical care after the incident.
 - There was no verifiable footage of the attack itself, meaning it was not possible for Myanmar Witness to independently verify how the child's wounds were incurred. However, Myanmar Witness has geolocated images alleged to be of the child's home; bloodstains are present on and around the structure and the images are timestamped.
 - Footage of ammunition reportedly found in M'dat village after the attack are consistent with locally produced 120mm mortar rounds known to be used by the Myanmar military. Myanmar Witness verified the presence of a military base within firing range of the village and identified a mortar present at the base, although it was not possible to verify whether it was a model capable of firing the particular rounds alleged.
 - While a lack of available footage of the strike itself has made verification and attribution
 of the exact incident difficult to achieve, this provides a good case-study of how opensource techniques can be applied and some of their limitations
 - This incident is one of many monitored and analysed by Myanmar Witness documenting alleged indiscriminate attacks in civilian areas since the coup.



Executive Summary

According to local <u>news media</u>, a 10-year-old boy and his mother were seriously injured in an incident of artillery shelling, with the boy losing a limb. The incident reportedly took place at around 0800 on 23 May 2022 in M'dat (မဒပ်) village, Mindat Township (မင်းတပ်မြို့နယ်), Chin State (ချင်းပြည်နယ်). According to the sae report, the military base of the 274th Light Infantry Battalion in Mindat Town (မင်းတပ်), Mindat Township (မင်းတပ်မြို့နယ်) was responsible for firing heavy artillery shells at civilian areas that morning. The Chindwin River said that locals were having breakfast when the military attacked a village 10 miles from Mindat Town (မင်းတပ်), Mindat Township (မင်းတပ်မြို့နယ်) with heavy artillery. The child was reportedly in critical condition in the village, where there is not sufficient medical care.. Myanmar Witness collected and analysed open-source footage relating to the incident and made the following conclusions:

Myanmar Witness was not able to fully verify the footage of the injured child as being taken in M'dat village. However, Myanmar Witness were able to identify possible locations in M'dat village and Mindat Township which are consistent with footage of where a heavily wounded child was taken for medical care.

There was no verifiable footage of the attack itself to verify how the child's wounds were incurred, but Myanmar Witness was able to verify the location at which the child was allegedly hit, with bloodstains and damage to walls to evidence the attack.

Footage of ammunition reportedly found in M'dat village after the attack are consistent with locally produced 120mm mortar rounds known to be used by the Myanmar military. Myanmar Witness verified the presence of a military base within firing range of the village and identified a mortar present at the base, although it was not possible to verify whether it was a model capable of firing these particular rounds.

While a lack of available footage of the strike itself has made verification and attribution of the exact incident difficult for Myanmar Witness to achieve, this provides a good case-study of how open-source techniques can be applied and some of their limitations

[Warning: Graphic] has been inserted ahead of links to sources which show graphic and distressing images of injured or dead persons.



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Background and Context

Myanmar Witness has been monitoring military movements in Chin State since Autumn 2021. On 13 May 2022, the <u>Chinland Defence Force (CDF)</u>, reported that a convoy of more than 70 military council vehicles transporting weapons and troops arrived at the 274 Light Infantry Battalion military base, located to the east in Mindat Township. The images attached to the post are not related to the events being described and are old photos.

On 15 May 2022, a drone image of the 274 Light Infantry Brigade military base was uploaded by media outlet <u>Channel Taunggyi</u>, showing a number of military vehicles present at the base. Myanmar Witness geolocated these images to 21.373507, 93.935312, corresponding with the location of the base (Figure 1). There were a number of text reports of military vehicles (<u>Witness Daily</u>, <u>CDF-Mindat</u>) moving around the area between the 15 and 20 May 2022.



Figure 1: Military convoy stationed at the LIB 274 base uploaded on 15 May 2022.

According to <u>CDF Mindat</u>, they (CDF Mindat) launched an attack on the Mindat Fire Station, (located at 21.378580, 93.990719), on the evening of 22 May 2022 at around 2200. It is alleged in this post that two military soldiers died during the clash. This could have been the precursor to the artillery strike, which according to the <u>Chindwin Post</u> started the next day (23 May) at 0800 and resulted in serious injuries to a woman and child in M'dat village. The post was submitted 1344 local time on 23 May. Myanmar Witness has sought to collect and verify available footage relating to the incident.





Methodology

Myanmar Witness follows a methodology of digital preservation and rigorous, replicable analysis. Digital evidence is collected and archived in a secure database and preserved with hashing to confirm the authenticity and prevent tampering.



Myanmar Witness applies a four-tier classification system to describe the extent to which footage relating to a specific incident has been independently verified by Myanmar Witness.

Fully verified: Footage independently geolocated and chronolocated by Myanmar Witness to the reported time and location of the incident.

Verified: Footage geolocated to the relevant location, sources concur on the time and date of the incident

Partially verified: Some footage geolocated to the relevant location, sources concur on the time and date of these incidents. Some footage not possible to geolocate or chronolocate at the present time.

Unverified: Not possible to geolocate or chronolocate footage at the present time.

Geolocation is conducted using a varied array of open source online tools such as Google Earth to match satellite imagery with visual features identified in the footage or images. A high burden of proof is required to match imagery and geolocations are required to be cross-checked and peer-reviewed before they are credited as verified and included in Myanmar Witness reporting. In addition to the open-source reporting, Myanmar Witness was sent footage of the incident by sources on the ground, which it has attempted to verify through this report, using the timestamps of the images provided.

If dealing with unverified information, such as witness testimony or the inclusion of outside reporting, Myanmar Witness has made known that these inclusions are claims and have not been independently verified by Myanmar Witness, but their inclusion may still be relevant to include as context around the investigation. Following ethical standards, Myanmar Witness has obscured identifying information about individuals involved, censored private information and images where appropriate, removed links to private individuals and archived said information securely. Where appropriate, Myanmar Witness has also censored or removed graphic imagery from our reporting.

The information obtained by Myanmar Witness comes from an area of ongoing conflict so it is assumed that there is a selection bias, due to several factors including fear of repercussions for uploading, unavailability of information from official sources and availability, or lack thereof, the internet - which has also restricted the amount of media available to be verified by Myanmar



Witness. Myanmar Witness strives to eliminate as much of this bias as possible by using both focussed and broad search terms in multiple languages across open sources as well as identifying media from multiple sources, such as social media and both pro and anti-regime news media to reduce the effects of this bias and ensure as much information from a range of sources is collected.

In this case, the user-generated content (UGC) identified cannot give an accurate chronolocation to the images of the injured child receiving medical care or the images of damaged roofing provided to Myanmar Witness. These images provide timestamps which allege the roofing photos were taken around half an hour after the images of the injured child but this is not a reliable way of assessing the time in which the images were taken. Hence, Myanmar Witness has been unable to confirm the times associated with the event and has reported these times as claims, not independently verified by Myanmar Witness.





Verification

Geolocating the scene of the incident

[Warning: Graphic]. Images provided to Myanmar Witness purport to show the aftermath of the artillery strike which caused the injury to both the child and their mother (Figure 2). Myanmar Witness has geolocated these images to a structure in M'dat village (coordinates and geolocation withheld for privacy reasons). This structure, in images that provide closer inspection, appears to have bloodstains on the floor, close to the buildings, as well as along the bottom of the wooden walls (Figure 2). There are also associated images of damage to wooden slats but Myanmar Witness cannot verify that they are of the house identified.



Figure 2: (Left) the original photos; (right) Magenta-optimised photos to highlight blood stains close to and on the structure. Myanmar Witness geolocated these and other images to a location in M'dat.





Geolocating imagery of the injured child

[Warning: Graphic] On 23 May 2022 The Chindwin uploaded images of an injured child being assisted by individuals with medical supplies. The child was reported to have lost a leg as a result of being hit by heavy artillery fired from the military base in Mindat. It should be noted that in this post there is a graphic obscured image of the child seemingly missing some of his leg. It's also reported his mother was injured.

It also does not appear as though the village itself has its own hospital and the child was apparently being treated in the village for their injuries (Figure 3). With this information, Myanmar Witness was able to piece together possible geolocation of these images. There is not enough conclusive imagery to confirm the geolocation of this area at this time.



Figure 3a: Image of an injured child being assisted inside a yellow-walled building.



Figure 3b: More images of the injured child, this time demonstrating a clear wall partition over their left shoulder [Cropped by Myanmar Witness; icon inserted by user].



With this information, Myanmar Witness was able to construct a 3D rendering of what the room might look like based on these two images to get a better idea of the kind of structure where the aftermath of this event took place (Figure 4 and 5)

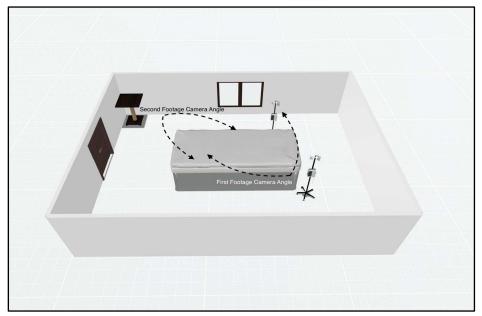


Figure 4: Possible structural 3D model of the room based on details seen in the footage

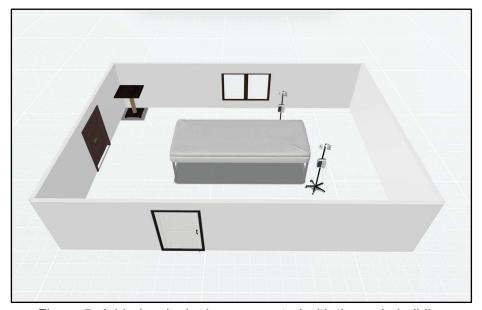


Figure 5: Added a single door connected with the main building

According to the <u>Chindwin Post</u>, medical supplies in these villages were lacking. Since medical supplies, a hospital bed, and the drip stand nearby are all present in the images of the injured child, the building might be a community facility being used as an adhoc medical facility, such as a church or small clinic within the village.





Possible geolocation of injured child (1)

One possible geolocation of these images could be St. Mary Catholic Church, in M'dat village. Myanmar Witness identified images on <u>Google Maps</u> attached to this location that are of note. In the first image, the church wall colour looks very similar to the footage wall colour, being a light yellow on the outside. A second image demonstrates that there is also an extended area behind the stage of the main building (Figure 7). It is important to note this small area has more windows than what is visible in the original images, but that could just be from the side visible.



Figure 6: Google Earth satellite imagery taken in 2018 compared to Planet imagery of St. Mary Catholic Church on 26 May 2022. The Planet image has been edited by Myanmar Witness to enhance the brightness, contrast and exposure. No further manipulation was conducted.



Figure 7: Google Maps attached images of the location.

More footage identified through social media shows the <u>interior of the church</u>, with one video during a service there (link withheld for privacy reasons). In the image, a pastor stands at what appears to be the leftmost side of the church, left of the cross shape with natural light flowing through it visible in the Google Maps images. It is possible to see a door close on the leftmost side, leading to the smaller room identified through the images attached to St Mary's Catholic Church on Google Maps and Google Earth satellite imagery of the location (Figure 8). This could align itself with the smaller, walled off yellow room the injured child was pictured in, with the dimensions of the walls being similarly slim, so as to see the wall partitions in the photo.







Figure 8: The interior of the church is visually similar to the room identified with the injured child, and on the leftmost of the church a door appears to lead to a smaller, slim room attached to the main building.

Possible geolocation of injured child (2)

Images posted by <u>The 74 Media</u> on 24 May 2022 include one supposedly of the same child. It is possible to see some semblance of the same clothing being worn in these images, including a flannel pattern item that is resting under the child's head in earlier photographs as well as the faded t-shirt with short sleeves (Figure 9). It might make sense that the bottom half of the child's clothing was replaced, considering the injuries sustained were to the bottom half of the child's body, specifically his legs - which would have damaged the clothing and could have made it unsuitable to be worn. The injuries sustained - the missing right leg and the injury of the upper left thigh - are covered with bandages in this image.





Figure 9: Comparison of clothing being worn by the child in two images.

Trying to locate the images posted by The 74 Media is slightly more difficult, as the floor is quite nondescript. The post itself implies the child was taken to Mandalay hospital, but after investigating the interior of both Grand Mandalay Hospital and City Hospital Mandalay through publicly available images, the interiors and floor do not quite match the image. While not verifiably evidence against this theory the timestamp of the image, 1106 local time on 23 May 2022, is two and a half hours after the initial timestamps on the photos of the injured child, which would mean the act of travelling to the hospital took a couple of hours. It is not possible to travel to Mandalay Hospital in three hours from M'dat village.

However, the nearest medical facility - Mindat Township hospital located at around 21.371479, 93.963843 - appeared to possess aesthetic similarities to the images uploaded by The 74 Media (Figure 11). This is not enough evidence for Myanmar Witness to confirm this was the facility the child was transported to - as hospitals and clinics in the area are likely to have similar interior designs - but these aesthetic matches are of note regardless.





Figure 10: The distance from St.Mary's Church in M'dat village to Mindat Hospital in Mindat township is around 16.7km (10.38 miles) according to the Google Earth 3D line measurement tool.



Figure 11: Image of the injured child in relation to images of the interior of Mindat hospital identified through social media. The second image has been cropped by Myanmar Witness for clarity and privacy purposes.





Chronolocating the incident

The time of the artillery shelling is claimed to have been at around 0815 local time. Images of the injured child have a timestamp of 0836. Due to the fact that these images cannot be independently chronolocated by Myanmar Witness, this timestamp cannot be verified to be accurate. However the time of the injury is consistent with the reported time that shelling began in the village. Images provided of the destruction to roofing apparently caused by the shelling are also timestamped to around 0859 (Figure 15), and it can be assumed these photos were taken sometime after the end of the attack. Using this information, Myanmar Witness cannot independently verify the exact time the attack took place, but it is likely to have been between 0800-0830 based on these claims and the timestamp on collected images.



Figure 12: Images of a damaged roof taken by Kee Tam Kee related to the alleged artillery attack in M'dat village, Mindat. Timestamped 0859 local time.

Identifying potential weaponry used

Myanmar Witness analysed footage of ammunition reportedly found at the scene of the attack to see if this was consistent with military involvement.

<u>Ĥkl Mindat</u> posted an image of a destroyed shell that allegedly hit the village on the day of the reported attack (Figure 13).







Figure 13: Images provided to Myanmar Witness alleged to be the remnants of the ammunition fired towards M'dat village by the military.

With the help of reference images Myanmar Witness has compared these images, noting how the threaded tailfin, slanted fins and overall size of the pictured munitions matches with an 120mm locally-produced mortar round (Figure 14).







Figure 14: Two images uploaded to social media alleged to be from the incident [highlighted in green] compared to reference images of 120mm mortar rounds.

An undated official document titled "List of Equipment of the Myanmar Army" obtained and translated by Myanmar Witness shows that the Myanmar military officially employs at least three different types of 120mm mortar rounds (Figure 15).

No	Type of Bullet	Length f Bullet (mm)	Weigh t of a bullet (kg)	Muzzle velocity (meter/ sec)	Quant ity of gunp owder	Maximu m range of the gun (m)	Deadl y Dista nce (m)	PS Type of box	PS Box Dimensions (mm)	PS Weight of a box full of ammuniti on (kg)	PS Numbers of bullet in the box
5	BA-97, 120 MM mortar bomb	581	12.7	306	8	6250	15	Plywood	692*307*210	36	2
6	120 MM, mortar bomb (long distance)	699	14.6	398	9	8500	15	Plywood	893*307*210	36	2
7	120 MM, mortar bomb (MK-II)	780	15.12	390	12	10000	20	Plywood	921*347*230	45	2

Figure 15: Undated official document titled "List of Equipment of the Myanmar Army" demonstrating the military in possession of three types of 120mm mortar rounds. [Translation by Myanmar Witness].

On the premises of the military base of the 274 Light Infantry Brigade [21.373507, 93.935312] on drone images posted on 15 May 2022 it is possible to spot a mortar (Figure 16). Given the significant distance and limited dimension of the mortar, at this point Myanmar Witness is not able to identify its exact model and type.







Figure 16: Image of the military convoy in the LIB 274 military base with objects' firing positions highlighted with two white circles.



Figure 17: Planet satellite imagery of the LIB 274 military base on 26 May 2022; it appears that the howitzer and mortar round were still in position post-incident. This image has been edited by Myanmar Witness to enhance the brightness, contrast and exposure. No further manipulation was conducted.



The second artillery piece visible on the premises of the firing ground is a Soviet-made D-30 122mm howitzer in its "folded", towed configuration (Figure 18). This indicates that this piece of artillery has been recently moved in its actual position, or is about to be moved elsewhere. Howitzers, however, fire shells that do not look like the one found on the scene of the incident and analysed above.



Figure 18: D-30 122mm howitzer compared to a reference image from <u>Myanmar Defence Weapons</u> page.





Conclusion

Open source analysis conducted by Myanmar Witness was able to identify two possible locations in which the child could have been being medically treated for their injuries in M'dat village. These coordinates were identified through the comparative analysis of the UGC associated with the incident alongside satellite imagery, google map images and social media posts of the location. Along with this, Myanmar Witness was provided images of the child's home where it is alleged that the child was injured. This area was geolocated and additional images highlighting blood stains on the structure and the ground close by indicate that the injury was acquired here.

Myanmar Witness was able to verify the location of the Light Infantry Battalion 274 base in Mindat, identify a possible artillery piece capable of firing the 120mm mortar rounds reported to have been found in M'dat following the incident and confirm that the village was in firing distance for these mortar rounds. However, attribution is difficult without verified UGC to confirm the munitions were found in M'dat, their origin or the exact location of the child when injured. Regardless, this incident is one of many monitored and analysed by Myanmar Witness documenting alleged indiscriminate attacks in civilian areas in Myanmar. This event is especially of note due to the injury, and loss of a limb, of a minor as a result of this attack.