

# Case Study

# Yay Yo: Six civilians killed and hidden in toilet pit

REPORT BY MYANMAR WITNESS, 1 April 2022 (Updated: 1 April 2022)

# **Key Event Details:**

- Location of Incident:
  - Yay Yo village, Loikaw: 19.709889, 97.189272
  - Burial Site: 19.6241764, 97.2487802
- Date/Time of Incident:
  - Bodies found in the morning of 27 January, 2022, with the images most likely taken between 1000 and 1200, but no later than 1423
  - The killings most likely occurred on 25 January 2022
- Casualty Figures:
  - Verified 2 men (killed)
  - Alleged 4 minors (killed)
  - Total 6 persons (killed)
- Alleged Perpetrator(s) and/or Involvement: Myanmar Military
- Myanmar Witness Conclusions:
  - Myanmar Witness has analysed corroborating information and witness statements which allege military involvement in the killings; however, the User-generated Content (UGC) available falls short of providing conclusive evidence of attribution.



# **Executive Summary**

This case investigates the discovery of six bodies found in a toilet pit in Yay Yo village, Loikaw on 27 January 2022 following an attack on 25 January 2022. User-generated content (UGC) of the incident provided information which could be geolocated, chronolocated, and analysed to verify the killings. The known operation of the military within this area and during this time leads Myanmar Witness to believe they were involved in the deaths of two men and four boys under the age of 18.

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# Summary

On 25 January 2022, social media posts claimed SAC troops from the 55th and 99th Divisions launched an offensive in Loikaw Township, Kayah State. Ongoing fighting in the area had prompted residents to evacuate. Reports allege the soldiers were called to Yay Yo village near Nanattaw ward and captured six locals – including four minors and two elderly men – who had returned from a refugee camp. It is further claimed that the attackers beat and shot them, then dumped them into the outdoor toilet pit of a house. Upon returning from evacuation on 27 January, a local from the Yay Yo area discovered the bodies in the toilet pit and called the social help community team.

According to <u>Than Lwin Khet News</u>, these six individuals had allegedly returned from the camp due to wanting to be home; however, the military had advised a Dalan (informer) in the village to report any arrivals. Upon receiving the report, soldiers arrived and detained them before beating and shooting them.

Local social help community group "Shwe Nyaung Pin" recovered the bodies and transported them to a burial site to be laid to rest. Members of this group documented the findings and posted images on social media. "The legs and bracelets of the dead bodies were broken, and also there were lacerations on the face and mouth, as well as puncture bullet wounds on the bodies" said the social help community. Four of the six bodies were said to be minors under the age of 18, based on Facebook witness testimony. They have been named in a post as Khu Yujin, Kyaw Kyaw, John Paul and Dale. In addition to the murders, at least one house was ransacked. This is believed to have been the house in the compound with the toilet, although this cannot be confirmed. Locals reported hearing gunshots and spent bullet cases were documented on the ground.

Myanmar Witness has geolocated the imagery of the event to <u>this location</u> [19.709889, 97.189272]. The location of the victims burial site has also been geolocated to <u>19.62419946,97.2488023</u>.



# Methodology

## Limitations

This report is limited by the small sample of available original UGC from which to derive conclusions. Several of the images appear to have been uploaded with the intent to highlight certain aspects of the events, however; they came with no description, increasing the difficulty of the verification process.

The information obtained by Myanmar Witness comes from an area with ongoing conflict so it is assumed that there is a selection bias, due to availability of internet, fear of repercussions for uploading, and unavailability of information from official sources. Myanmar Witness strives to eliminate as much of this bias as possible by using both focussed and broad search terms in multiple languages across social media to reduce the effects of this bias and ensure as much information from a range of sources is collected.

Crucially, no UGC was identified depicting the killings or subsequent concealment of the bodies taking place, it is not known whether such footage may exist, however; an understanding of the actors responsible could only be inferred from the available information and not directly determined.

There were several instances of drawing conclusions from witness statements which had been corroborated in the news or on social media, care has been taken to make this clear as well as to report this information as allegations rather than verifiable fact.

# Hypothesised timeline of the incident

- Bodies found early morning 27 January 2022, between 0700-0800. Local help organisation called and arrived shortly after.
- Local help organisation assists in the excavation of the pit and the recovery of the bodies with images taken around 1000.
- Bodies driven to the burial's location with images taken around 1100 and sent to local media by 1200.
- Image of toilet pit published at 1245.
- Image of burial published 1423.





### Visualisation of the incident

From analysis of the images of the scene (Figure 1), a rough layout was sketched (Figure 2) of the area of interest. The toilet appeared to be in the corner of a fenced-off area with trees and buildings visible in the background.



Figure 1: Extraction of the bodies from the toilet pit, <u>posted</u> on Facebook.

Figure 1 depicts the corner of a fenced-off area with a wall running parallel to, but beyond, the fence (top right, yellow arrow). There is a fenced area with trees in the background as well as two buildings in view (Building A: centre top right, red box, and; Building B: top right corner, yellow circle). Building A appears narrow and, assuming a rough window width (18 pixels) of 1.5m, calculating the pixel width of the building (82 pixels) returns roughly 7-9m for the building's width. Right next to the toilet is a small tree (green circle). The trees in the background have bright green leaves and are not tall, suggesting they are likely young and perhaps a plantation.



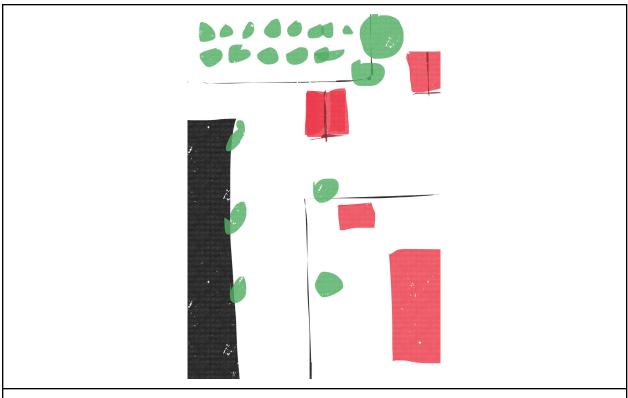


Figure 2: Visualisation sketch of the layout of the area.





# Geolocation of toilet pit images

Using the most recent imagery provided in Google Earth, dated 2022, supplemented with Planet satellite imagery from 25 January 2022 the location was determined to be 19.709889, 97.189272.



Figure 3: The complex where the bodies were found is in the lower centre, with the green-roofed buildings. The toilet is in the top left corner.



Figure 4: Older Google Earth imagery showing the toilet more clearly.





The toilet roof is more visible in the 2019 imagery (Figure 4), which shows the same location, however; one of the buildings (Building A) in the background is not present at this time, nor is the tree plantation seen in satellite imagery below, dated 2022 (Figure 5).

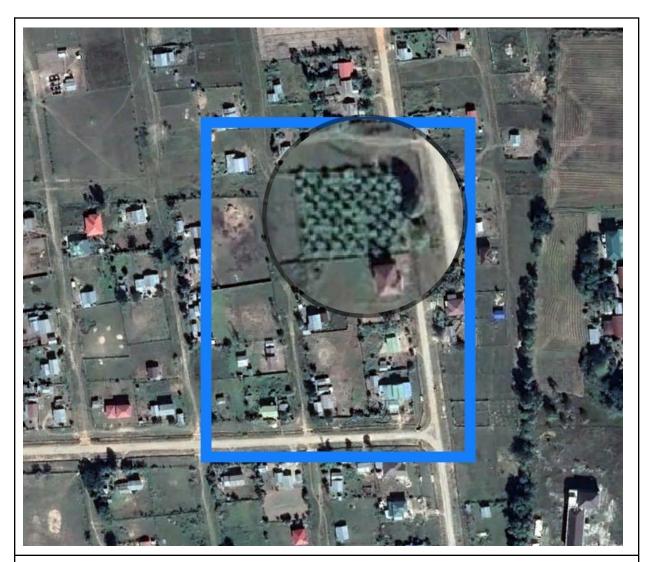


Figure 5: Tree plantation and Building A which only appear in the most recent imagery.





Figure 6: Comparison of possible location to the visualisation. Note the wall on the left did not extend as far as predicted, however; the position of trees and buildings is a close match.



Figure 7: Yellow line indicates rough field of view (FoV) with respect to Figure 1. The left bounds of the FoV may be wider than reality, however the right boundary is accurate, referenced with the bottom right corner of building B touching the edge of the image frame.





Figure 8: Matching FoV with structures visible in Figure 1.

The two buildings seen in Figure 8 match those seen in Figure 1. Building A (red box) can be seen from a slightly different angle in Google Earth satellite imagery (Figure 9) dated 29 December 2020, with a match on wall colour and width of 7.2m – this is consistent with the estimates. Building B (blue box) is visible in the original image with a light, blue-grey roof. This is matched in the satellite imagery. The collection of trees behind Building A are arranged in an organised manner and were not present in August 2021 imagery, which is consistent with the hypothesis that they are a young plantation.

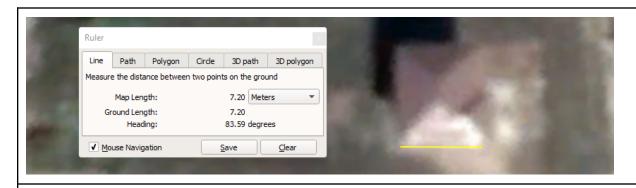


Figure 9: Building A, as seen on Google Earth satellite imagery dated 29/12/2020 with measurements matching crude prediction based on pixel calculation.





Figure 10: Planet imagery dated 25 January 2022. This image has been edited by Myanmar Witness – using QGIS layer property adjustments only – to enhance brightness and contrast. No further manipulation was conducted.

Planet Imagery obtained by Myanmar Witness (Figure 10), dated 25 January 2022, demonstrates the area of interest was consistent with Google imagery during that period. In the top left of the fenced area, there appears to be a small grey shed or structure, this is consistent with the position of the toilet and distance between the toilet and the fence.



# Chronolocation

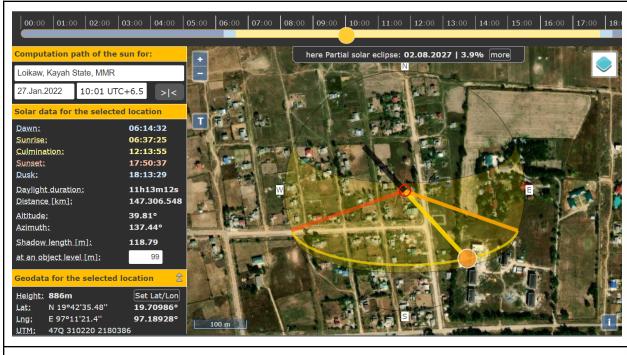


Figure 11: Suncalc analysis of shadows to determine time of image.

Chronolocation was conducted using shadow angles and analysis in <u>Suncalc</u> (Figure 11). Based on the claim that the bodies were found on 27 January 2022, the shadows indicate that Figure 1 was taken between 1000 and 1015 local time (UTC+6.5).





Figure 12: Screenshot of <u>Facebook post</u> reporting the incident shows the images were posted at 12:47 (UTC 06:17) on 27 January 2022.

A reasonable time window was established for the events by determining the period between the images being taken and being posted online. Figure 1 was initially shared on Facebook at 12.47 (UTC 06:17) (Figure 12). A second post was posted at 14.23 (07.53 UTC) depicting the events as well as the burial of the bodies – meaning these images can't have been taken after that time. This gives just under three hours of time window between the bodies getting published at the toilet pit and the images of the burial being posted.



# **Toilet Pit**

Warning: Graphic Images depicting dead bodies with injury in this section (some have been pixelated)

#### **Bodies**

Images of the bodies extracted from the toilet show injuries and blood.



Figure 13: View inside the toilet pit where the bodies were found. Note the foot visible in the right image.





Figure 14: Extraction of bodies from the toilet pit. The rope appears to be the same rope as seen in Figure 20.





#### Figure 15: Extracted bodies displaying injuries.

## Green Rope

Images of the scene show the bodies were bound with light green rope (Figure 16) before being dumped in the toilet pit. This rope matches rope photographed at the house and may have been found by the SAC on-site and used for the crime. A portion of the rope is seen tied to a railing (Figure 16) which may indicate its original location or it may indicate the victims were bound to the railing at some stage of the incident.







Figure 16: Green rope at the scene





Figure 17: Images of the bodies recovered from the pit showing the green rope tied around the ankles of the victims.





#### **Bullet cases**

In addition, the attackers left 'KA PA SA' bullet cases around the incident area. Using pixel-ratio measurements, they were deemed likely to be 7.62mm NATO rounds – commonly chambered in the BA-63, BA-64, and MA-12 rifles – rather than 5.56mm NATO rounds typical of most weapons issued to the military. The majority of these were spent, with dents indicating contact with the ejection port.



Figure 18: Pixel-ratio analysis indicates a rough specification of the cartridge size that exceeds that of 5.56 NATO rounds which would be typical of a modern SAC loadout. The calculation was based on standard playing card dimensions, where 111 pixels = 64mm; 1 pixel = 0.5766mm; therefore Cartridge length = 56.5mm and Cartridge shell width = 7.5mm. Minimum error is +/- minimum resolution, or +/- 0.5766mm though due to perspective, will be greater.







Figure 19: Left: <u>BA-63</u>. Centre: <u>BA-64</u>, Right: <u>MA-12</u>. These are the most likely weapons responsible for the cases left on scene, all chambering 7.62mm NATO rounds. The BA-63 and BA-64 are commonly equipped by police officers, while the MA-12 is more commonly used with the military.



The BA63 and BA64 are more commonly used by police, though it can't be ruled out that the military use them. The MA-12 is more likely to be used by the military and therefore is more fitting of the claims of military involvement. The piles of spent cartridges have many rounds. The images show more than 50 rounds which would be more than three magazines from the BA 63 or 64, or almost two full magazines from the MA-12. One final consideration is that the spent rounds may have been gathered and consolidated into a single location for documentation.



Figure 19: A cluster of spent cartridges at the scene of the incident.

The rounds appear to be photographed next to their original factory packaging. Translation of the text on the packaging shows the contents were "Manufactured in defence equipment factories" and that they were Ka Pa Sa (നാരം) bullets produced for the SAC.





Figure 20: Close-up of the packaging shows the text "Manufactured in defence equipment factories"





## Geolocation of the burial site

The geolocation of the burial site was based on two <u>images</u> identified across social media, with the location being <u>19.6241764</u>, <u>97.2487802</u>.

Figures 28, 29, and 30 represent the key initial analysis of the images. Key observations included recently disturbed soil, a distinct horizon, and the orientation of the graves and the image itself.





Figure 21: Images of the burial site where the bodies appear to have been buried. Note the distinct horizon (highlighted in Figures 29 and 30).



Figure 22: Zoomed in horizon of Figure 28 to highlight the identifiable geographical features.





Figure 23: The key horizon features highlighted for terrain analysis and analysis of shadows.

The rough orientation of the image can be determined via shadow calculation. At 1423 local time, which is the latest the photo could have possibly been taken on that day, the shadows were pointing North East. At 1130 – which would require instant travel from the toilet to the burial site – the sun was pointing a few degrees West of North.





Figure 24: Rough orientation of image based on shadows angle in the time window. The Camera is likely looking North-West-West with graves appearing to be orientated just off the East-West axis.





Figure 25: Location of the volunteers moving the body to be buried (green box, exact position undetermined) and the location of the van on the road (red box).

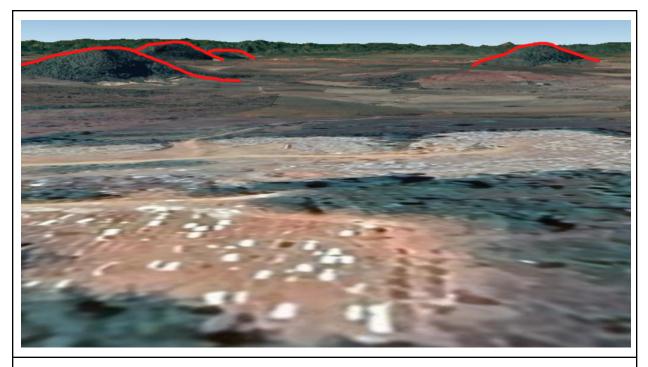


Figure 26: A 3D horizon match in Google Earth of the location.





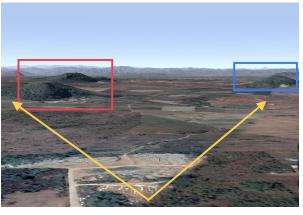


Figure 27: Match of horizon.

# Chronolocation of the burial site

Chronolocation of the burial site image could be further confirmed with an accurate location. It must have occurred prior to 14.23. <u>SunCalc analysis</u> suggests the most likely time window was between 1045 and 1130.

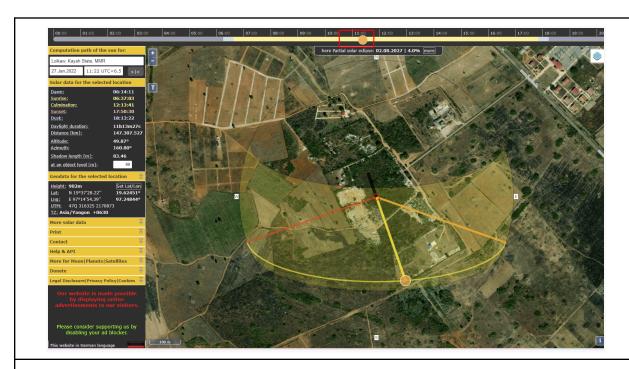


Figure 28: Chronolocation based on the location and the shadow angles determines the image was taken in a rough window of 1045-1130.



## Conclusion

The graphic and violent nature of this attack, coupled with the egregious disposal of six dead bodies, makes it a horrific act against the community. The testimony, images, and context suggest possible military involvement in the murders. This attack appears to be against civilians who had already fled the conflict area and were returning to their homes. While they were all male, four were minors and two were elderly, suggesting they were not active combatants and may have been killed extrajudicially for their presence in the town. Since these killings, the conflict in the area has continued with known military involvement, including airstrikes against civilian properties.

Myanmar Witness appeals for any additional information on these events.