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ATTACK ON THE OMAR IBN AL-KHATAB MOSQUE

Authorities' Failure to Take Adequate Precautions



Attack on the Omar Ibn al-Khatab Mosque

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Summary

Just before 7 p.m. on March 16, 2017, US aircraft attacked the Omar Ibn al-Khatib mosque near al-Jinah, a village in Aleppo province in northern Syria, where about 300 people had gathered for religious lectures and the Muslim *Isha'a*, or night prayer. The attack completely destroyed the service section of the mosque and killed at least 38 people.

US military authorities have acknowledged that they carried out the strike, saying that they targeted a meeting of al-Qaeda members. A US military spokesperson said that the US military carried out extensive surveillance before the attack and that they take “extraordinary measures to mitigate the loss of civilian life” in such operations. However, Human Rights Watch research suggests that US authorities failed to take all feasible precautions to avoid or minimize civilian casualties in the attack, a requirement under the laws of war.

While US officials acknowledged that there was a mosque nearby, they claimed that the targeted building was a partially constructed community hall. But information from local residents, photographs, and video footage of the building before and after the attack show that the targeted building was also a mosque. While the mosque did not have a minaret or a dome that would have been visible by aerial surveillance, local residents said that dozens, if not hundreds, of people were gathering in the building at prayer times. Aerial surveillance of the building should have shown this. Local residents also said that the mosque was well known and widely used by people in the area. Any attempt to verify through people with local knowledge what kind of building this was would have likely established that the building was a mosque.

While the US authorities appear to have fundamentally misunderstood the nature of the building they attacked, they also appear to have inadequately understood the pattern of life in the area. A US official said that the attack happened after evening prayer had concluded, implying that civilians had left the area. While it is not clear which prayer the official referred to, US statements about when the attack happened and information from those present at the mosque show that the attack happened at about 6:55 p.m., just 15 minutes before night prayer on that day. The fact that the night time prayer was about to begin is relevant even if US authorities believed that the targeted building was a

community hall since they knew that a mosque was nearby. Information about prayer times is easily accessible online and should have been well known by US authorities.

Local residents also said that it was well known in the area that the religious group in charge of the mosque was holding religious lectures in the targeted building every Thursday between sunset prayer and evening prayer, around the time of the attack. Any attempt to gather pattern of life information about the targeted building from people with local knowledge might also have alerted US authorities to this fact.

Human Rights Watch interviewed by phone 14 people with first-hand knowledge of the attack, including four who were in the mosque at the time of the attack; eight local residents, first responders, and local journalists who arrived at the site shortly after the attack; and two medical personnel who treated people injured in the attack. In carrying out the investigation, Human Rights Watch used some of the research provided by the open source investigative group Bellingcat,¹ which analyzed video footage and photographs from the attack, and Forensic Architecture,² which created models of the mosque and a reconstruction of the attack. However, Human Rights Watch, Bellingcat, and Forensic Architecture conducted separate investigations into the attack.

The people who were in the mosque said that a religious lecture in the service section of the mosque, held every Thursday, had just finished so people were spreading out in the mosque, getting ready for night prayer, when the attack happened. The first wave of attacks struck the service section of the mosque, completely reducing it to rubble. One mosque employee who was in the service section said:

My lower half was buried under the rubble. I couldn't move my head. Someone's legs were beneath me. Half an hour later we started hearing a faint voice, people were calling out, so we shouted back. The civil defense started digging us out, using only their hands. Two hours later they got to us through a hole. There was rubble as high as four meters above us. They stayed there working till the following morning, trying to rescue as many people as possible. I had wounds all over.

¹ See Bellingcat, <https://www.bellingcat.com/>.

² See Forensic Architecture. <http://www.forensic-architecture.org/>.

A second wave of attacks killed and injured people who were trying to flee.

Human Rights Watch has not found evidence to support the allegation that members of al-Qaeda or any other armed group were meeting in the mosque. Local residents said that there were no members of armed groups at the mosque or in the area at the time of the attack. They said that the victims were all civilians and local residents. First responders said the dead and injured wore civilian clothes and that they saw no weapons at the site. US authorities have so far released no information to support their claims.

Even if there were armed group members in the mosque, understanding the nature of the targeted building and the pattern of life around the building would be crucial to assess the risk to civilians and take necessary precautions to minimize civilian casualties. Striking a mosque just before prayer and then attacking people attempting to flee the area without knowing whether they were civilians or combatants may well have been disproportionate and a violation of the laws of war even if there were armed group members in the mosque.

Syria Civil Defense, a search and rescue group operating in opposition-controlled territory, said that they recovered 38 bodies from the site. The group published the names of 28 who were identified by relatives at the site, including five children, saying that 10 bodies were unidentified.

The laws of war strictly prohibit attacks targeting civilians or civilian structures (including mosques unless they were being used for military purposes), indiscriminate attacks that fail to distinguish between military and civilian targets, and disproportionate attacks where the civilian casualties or damage to civilian buildings is excessive to the military advantage gained.

Serious violations of the laws of war can amount to war crimes. These include deliberately targeting civilians or civilian objects (including mosques), knowingly launching indiscriminate or disproportionate attacks resulting in death or injury to civilians, or being criminally reckless in so doing. The US authorities' failure to understand the most fundamental aspects of the target and pattern of life around the target raises the question whether officers were criminally reckless in authorizing the attack.

US authorities have said they will investigate both whether civilians were killed in the attack and whether the building hit was part of a complex belonging to a mosque.

Human Rights Watch calls on US military authorities to conduct an objective and thorough investigation, make public the detailed findings of the investigation, and provide adequate redress to civilian victims or their families. If the authorities find serious violations of the laws of war, they should refer those responsible for appropriate criminal prosecution. The findings should include information on accountability measures taken with explanations, and the redress provided to victims or their families.

Methodology

Human Rights Watch interviewed by phone 14 people with first-hand knowledge of the mosque, the attack, and the victims of the attack. The people interviewed included four people who were at the mosque at the time of the attack; eight first responders, journalists, and local residents who arrived at the scene shortly after the attack; and two medical personnel who treated victims from the attacks.

Human Rights Watch found the witnesses through already existing contacts in the area or by reaching out to people who posted information about the attack on social media. Interviews were conducted in Arabic. Human Rights Watch gave interviewees the option of requesting us to not publish identifying information if they were worried about their security. The report contains identifying information only if the interviewee agreed to publishing such information and if Human Rights Watch did not separately assess that it would put the interviewee at risk.

During the research Human Rights Watch exchanged information with Bellingcat, a group specializing in analyzing information posted online, including videos and photographs. Many of the videos referred to in this report were initially identified and analyzed by Bellingcat.

Human Rights Watch also exchanged information with Forensic Architecture, an organization specializing in building three-dimensional models and reconstructions of events related to human rights violations. Forensic Architecture built a model of the mosque and reconstructed the attack, based upon its investigation.

I. The Mosque

The Omar Ibn al-Khatab mosque is located about 1.5 kilometers southwest of al-Jinah, a village of about 10,000 people in western Aleppo province. Local residents told Human Rights Watch that it originally consisted of a small mosque right next to the road, but that construction started on a large building behind the old mosque in 2013.³ The construction had remained unfinished because of lack of funds, they said.

The March 16 attack completely destroyed the northern part of the newly built structure. During press conferences and in written statements following the attack, US military officials acknowledged that they had carried out the attack, but said that they had not deliberately targeted any mosque, that the target of the attack had been a “partially constructed community hall,” and that a nearby mosque was intact after the attack.⁴ Comments included in an e-mail with an aerial photograph of the site after the attack show that US military officials referred to the original mosque.

But all local residents that Human Rights Watch interviewed said that the new building was also a mosque. “Abu al-Ezz,” a local resident whose family members were killed and injured in the attack, said:

This is a civilian area. It’s a residential area, full of people, homes, houses, and this mosque is next to them. This is a mosque for people, a place for sheikhs, for preachers, a religious center, a place of god. Anybody can stop by to pray.⁵

³ The first signs of construction on this building in historical satellite imagery in Google Earth dates back to March 19, 2014. The previous satellite imagery, from June 10, 2011, show no signs of construction where the building now stands.

⁴ Lisa Ferdinando, “Pentagon Spokesman: Dozens of Terrorists Believed Killed in U.S. Strike in Syria,” US Department of Defense news, March 17, 2017, <https://www.defense.gov/News/Article/Article/1122791/pentagon-spokesman-dozens-of-terrorists-believed-killed-in-us-strike-in-syria> (accessed March 23, 2013); “US denies striking mosque in Syria mid high death toll,” Associated Press, March 17, 2017, <http://bigstory.ap.org/article/1028fdad698f47bda5039ff40f0b9e32/friday-prayers-cancelled-across-north-syria-after-airstrike> (accessed March 23, 2017).

⁵ Human Rights Watch telephone interview with “Abu al-Ezz” (not his real name), March 21, 2017.

Video footage and photographs of the building from before and after the attack, compiled and analyzed by Bellingcat, also show that the building was a mosque.⁶ Based on this footage and information from local residents, Forensic Architecture created a three-dimensional model of the mosque, which consisted of two parts, a northern and southern part, connected by a set of staircases. Footage shows that there were speakers on the roof of the building, used for the call to prayer and a sign at the western entrance of the mosque which says Omar Ibn al-Khatib mosque. A video shared by a mosque employee shows that the sign was there also before the attack.

According to residents and footage, the southern part, which was largely undamaged in the attack, contained a large hall. There are carpets on the floor and at the end of the hall there is a *mihrab*, a semicircular niche in the wall that indicates the direction of the Kaaba in Mecca and hence the direction that Muslims should face when praying. Under the staircase, by the entrance to the prayer hall, there are shelves to put shoes during prayer.

The northern part, which was completely destroyed in the attack, is the service section. The ground floor consisted of a kitchen and eating area, toilets, and a washing room. The second floor of the service section consisted of several rooms that were sometimes used for religious classes for children and the imam's apartment. Some local residents interviewed by Human Rights Watch said that displaced families were staying in the mosque as well.

⁶ Christiaan Triebert, "CONFIRMED: US Responsible for 'Aleppo Mosque Bombing,'" Bellingcat, March 16, 2017, <https://www.bellingcat.com/news/mena/2017/03/16/us-missile-remains-reportedly-recovered-from-site-of-aleppo-mosque-bombing/> (accessed March 27, 2017).

II. The Attack

Human Rights Watch interviewed separately four local residents, including a mosque employee, who were in the mosque at the time of the attack. They gave similar accounts of what happened.

All four witnesses said the attack took place just before or around 7 p.m. Their claim is supported by other sources. A first responder, who was waiting for permission to go to the site and therefore consulted his watch, said that the time of the attack was 6:55 p.m.⁷ A US official also said that the attack took place at about 7 p.m. local time.⁸

According to media reports, Eric Pahon, a spokesperson for the US Department of Defense, said US surveillance of the target area indicated evening prayers had concluded before the attack, implying that civilians had left the area.⁹ While it is not entirely clear which prayer Pahon referred to, he might have referred to the *Maghrib* (sunset) prayer, which had indeed concluded by the time of the attack. On March 16, the sunset prayer in Aleppo started at 5:39 p.m., according to Islamic Finder, an online resource.¹⁰

However, the attack took place only about 15 minutes before the *Isha'a* (night) prayer, which on March 16 was due to start at 7:09 p.m. Because night prayer follows shortly after sunset prayer many people stay in the mosque between the two prayers. “Abu al-Ezz” said: “Usually people move from the prayer hall to the kitchen area after sunset prayer to eat and rest before the night prayer.”¹¹

In addition, local residents, including the mosque employee, told Human Rights Watch that preachers hold a religious lecture in the mosque between sunset and night prayer every Thursday, the day of the attack. On the day of the attack, as they usually do when it

⁷ Human Rights Watch telephone interview with Mohammad Halak, Syria Civil Defense Atarib director, March 20, 2017.

⁸ Lisa Ferdinando, “Pentagon Spokesman: Dozens of Terrorists Believed Killed in U.S. Strike in Syria,” US Department of Defense news, March 17, 2017, <https://www.defense.gov/News/Article/Article/1122791/pentagon-spokesman-dozens-of-terrorists-believed-killed-in-us-strike-in-syria> (accessed March 23, 2013).

⁹ “US denies striking mosque in Syria mid high death toll,” Associated Press, March 17, 2017, <http://bigstory.ap.org/article/1028fdad698f47bda5039ff40f0b9e32/friday-prayers-cancelled-across-north-syria-after-airstrike> (accessed March 23, 2017).

¹⁰ Prayer Times in Aleppo, <https://www.islamicfinder.org/world/syria/170063/aleppo-prayer-times/> (accessed April 4, 2017).

¹¹ Human Rights Watch telephone interview with “Abu al-Ezz,” March 21, 2017.

is cold outside, they used the eating area in the service section for the lecture because the large prayer hall in the southern section was poorly insulated.

All four witnesses said that there were about 300 people in the mosque attending the weekly religious lecture. The lecture had just finished and people were dispersing in the mosque, waiting for the night prayer. The mosque employee said: “Some stayed in the praying hall, others went to get something to eat or to the toilet, or they went into the large praying hall to read the Quran, pray or talk with each other.”¹²

The witnesses said that the first wave of attacks struck the service section of the mosque. “Ahmed” told Human Rights Watch:

Everything happened so quickly, in under one minute. We didn’t hear a plane but, suddenly, we heard something fall. There was a faint sound of something falling, and then an explosion. It seemed like the whole mosque fell on our heads. The first bomb fell right on the mosque, north of the entrance.¹³

“Mahmoud” said: “The first attack filled the place with thick dust and smoke. I put a piece of cloth over my nose and mouth and went outside through the door. It was horrible. I couldn’t see anything but rubble.”¹⁴

A US military spokesperson circulated to journalists an aerial photograph of the building taken shortly after the attack, which shows the entire northern half of the mosque was reduced to rubble. Multiple video clips and photographs, compiled and analyzed by Bellingcat, show the destruction from the ground.¹⁵

Witnesses said that some people who were in the large prayer hall in the southern section ran out of the building after the first attack while some decided to stay. They said that they

¹² Human Rights Watch telephone interview with mosque employee, March 29, 2017.

¹³ Human Rights Watch telephone interview with “Ahmed” (not his real name), March 18, 2017.

¹⁴ Human Rights Watch telephone interview with “Mahmoud” (not his real name), March 20, 2017.

¹⁵ “CONFIRMED: US Responsible for ‘Aleppo Mosque Bombing,’” Bellingcat, <https://www.bellingcat.com/news/mena/2017/03/16/us-missile-remains-reportedly-recovered-from-site-of-aleppo-mosque-bombing/>.

heard other explosions, but not as powerful, shortly after the attack striking the building. “Mahmoud,” who had returned to the mosque, said:

By the time I got back, there was another attack outside. Around four missiles. I was inside, I didn’t see what was hit exactly, but it’s either the street or the mosque itself. People who tried to flee right away and people from surrounding areas who came to the rescue, got hit outside, and torn into pieces. Many died in that strike.¹⁶

First responders, local residents, and journalists who arrived at the site shortly after the attack described a scene of destruction and carnage to Human Rights Watch. Ammar Selmo, the Aleppo director of Syria Civil Defense, said:

As we moved closer we started hearing people screaming, pleading for help. So we ran into the mosque compound. There was widespread destruction. The building was completely ripped to pieces. The explosion was so intense that people were thrown everywhere, wedged between the dirt and the stones. You could barely see them. We could hear screams from under the rubble.¹⁷

A local journalist who arrived at the site about one hour after the attack told Human Rights Watch that Syria Civil Defense had recovered about 35 bodies by then and were about to leave, when they suddenly heard people yelling from underneath the rubble. “We had to call them back so that they could pull the people out,” the journalist said. “It was a terrifying sight that night. I saw things, I swear to God, unimaginable things, flesh on the ground, bones, people’s clothes, everything was on the ground.”¹⁸

¹⁶ Human Rights Watch telephone interview with “Mahmoud,” March 20, 2017.

¹⁷ Human Rights Watch telephone interview with Ammar Selmo, Aleppo director of Syria Civil Defense, March 19, 2017.

¹⁸ Human Rights Watch telephone interview with local journalist, March 17, 2017.

III. The Victims

US military officials said that the target of the attack were members of al-Qaeda in Syria who were meeting in the target building and that the attack had killed dozens of “core al-Qaeda terrorists,” including “likely high-value individuals.”¹⁹ They said that they had conducted extensive surveillance of the area.²⁰ In the immediate aftermath of the attack, a news website also reported that a proselytizing center affiliated with Hayyat Tahrir al-Sham, also referred to as al-Qaeda in Syria, had been attacked, but it later retracted the message, saying that the center was not affiliated with this group.²¹

Human Rights Watch has not found evidence to support the allegations that the mosque was a meeting place for members of al-Qaeda in Syria or other armed groups. On the contrary, the witnesses who were at the mosque during the attack said that there were no members of armed groups there. “Mahmoud” said: “Some were old in their 70s and 80s, some young in their 20s, children. I know most of them, they’re from the village. There weren’t any people affiliated with armed groups there, nothing of that sort.”²²

“Ahmed” gave a similar account: “This is a mosque. It was a time for prayers. Who do you think was there? People who come to pray. Older people, clerics, children. Children were inside. We were all civilians, there weren’t even people there from the Free Syrian Army.”²³

A local resident living about 500 meters from the mosque said: “There are no armed Islamist groups here, no al-Qaeda at all. The mosque is for civilians to pray, not for al-Qaeda meetings. Even in the village, there are no headquarters for armed groups.”²⁴

¹⁹ Lisa Ferdinando, “Pentagon Spokesman: Dozens of Terrorists Believed Killed in U.S. Strike in Syria,” US Department of Defense news, March 17, 2017, <https://www.defense.gov/News/Article/Article/1122791/pentagon-spokesman-dozens-of-terrorists-believed-killed-in-us-strike-in-syria> (accessed March 23, 2017).

²⁰ Ibid.

²¹ Tweets from Step News Agency, March 16, 2017, https://twitter.com/Step_Agency/status/842464879273467908 and https://twitter.com/Step_Agency/status/842464978720423936 (accessed April 4, 2017).

²² Human Rights Watch telephone interview with “Mahmoud,” March 20, 2017.

²³ Human Rights Watch telephone interview with “Ahmed,” March 28, 2017.

²⁴ Human Rights Watch interview with local resident, March 17, 2017.

Local residents and a mosque employee said that the mosque and the religious center were run by Ahbab al-Daw'at w al-Tabligh, a global Sunni Islamic proselytizing movement that says it is apolitical and rejects violence. "Abu al-Ezz" said of the preachers:

They are a hundred percent civilian. We call them "the beloved." They don't preach jihad or war. They preach only god and Islam. They rotate between different villages. There are 10-15 from our village. 10-15 from another village and so on. These people they practice *itikaf* [the practice of staying in a mosque for a certain number of days, devoting oneself to worship and staying away from worldly affairs]. They're just spreading the word of god.²⁵

Other local residents, including those who were present at the time of the attack, gave similar descriptions of the group and its preachers.

First responders and journalists who arrived at the site shortly after the attack also said that there were no signs that an armed group had been meeting there. Ammar Selmo, the director of Syria Civil Defense in Aleppo, told Human Rights Watch:

The injured were wearing normal, non-military clothing. People from the area came, asking about their relatives who were in the mosque so we knew they were civilians from the village. When we were doing the rescue, I didn't see any armed forces come from the area. In these areas there are no fighters; there are no bases there. They are in other places. Here there are only civilians...²⁶

Mohammad Halak, the Atarib Syria Civil Defense director, said: "We didn't find any weapons, none of the people we carried out of the rubble had weapons. Nothing indicated that they belonged to armed groups, nothing on them, and nothing in the surroundings. There are no [armed groups] headquarters in the place."²⁷

²⁵ Human Rights Watch telephone interview with "Abu al-Ezz," March 21, 2017.

²⁶ Human Rights Watch telephone interview with Ammar Selmo, director of Syria Civil Defense in Aleppo, March 19, 2017.

²⁷ Human Rights Watch telephone interview with Mohammad Halak, March 20, 2017.

Human Rights Watch searched online for each of the names of the dead and reviewed Facebook pages for those that could be found, but was not able to find any indication that any of the killed victims belonged to an armed group. For one of the injured, the profile picture of a Facebook user with an identical name shows a black flag referring to the organization Jabhat al-Nusra, which is sometimes referred to as al-Qaeda in Syria, but the name is common and Human Rights Watch has not been able to confirm whether the account belongs to the person who was injured.

Several local residents said that the Free Syrian Army was in general control of the area around al-Jinah, but that armed groups were not present in the village.

Reports vary as to how many people were killed in the attack. Syria Civil Defense said that its members had recovered 38 dead bodies at the site. The organization published the names of 28 of them, whom relatives had identified.²⁸ Ten bodies were unidentified. The 38 included five children.²⁹ The dead also included the imam of the mosque and his wife. The imam's wife was in the family's apartment on the second floor at the time of the attack, while the imam was in the winter prayer hall, according to first responders and the mosque employee Human Rights Watch interviewed. In interviews with local residents and medical personnel Human Rights Watch independently confirmed eight of the names on the list.

Other sources reported a higher death toll. The Syrian Observatory for Human Rights reported on March 17 that the death toll from the attack had risen to 49.³⁰ A local resident told Human Rights Watch on March 18 that the attack had killed more than 50 people.³¹

The attack also injured dozens of people. Syria Civil Defense published the names of 27 people who were injured.³²

²⁸ "Syria Civil Defense," Facebook post, March 19, 2017, <https://www.facebook.com/SCDaleppo/posts/1288438101235845> (accessed March 27, 2017).

²⁹ Human Rights Watch telephone interview with Mohammad Halak, Atarib director of Syria Civil Defense, March 23, 2017.

³⁰ "Pentagon denies striking mosque in Syria, says it killed al Qaeda militants," Reuters, March 17, 2017, <http://www.reuters.com/article/us-mideast-crisis-syria-usa-idUSKBN16O26S> (accessed April 4, 2017).

³¹ Human Rights Watch telephone interview with "Ahmed," March 18, 2017.

³² "Syria Civil Defense," Facebook post, March 19, 2017, <https://www.facebook.com/SCDaleppo/posts/1288438101235845> (accessed March 27, 2017).

People were killed both in the first wave of attacks, which partially destroyed the mosque, and in the second wave, which appeared to target people trying to flee according to witnesses. Mohammad Halak, the Syria Civil Defense in Atarib, the closest town, told Human Rights Watch that they saw between 20 and 30 people lying on the ground near the road to the west of the old mosque when they arrived. “They had been inside the mosque when the attack happened and had tried to flee so we found them lying close together. Some were wounded, some were already dead,” he said. Halak said that they managed to pull about ten people out from the rubble alive, but that they found about eight dead bodies under the rubble.³³

³³ Human Rights Watch telephone interview with Mohammad Halak, Atarib director Syria Civil Defense, March 27, 2017.

IV. The Weapons

US military officials have said that manned and unmanned aircraft carried out the March 16 attack near al-Jinah.³⁴ Photographs of weapon remnants found at the site, information from witnesses, and the destruction caused by the attack indicate that US forces used at least two types of munitions in the attack: air-dropped GPS-guided bombs and Hellfire missiles.

Photographs that a local resident took at the site and shared with Human Rights Watch show remnants from at least one Joint Direct Attack Munition (JDAM), a guidance kit that converts unguided bombs into all-weather, precision-guided munitions. Computerized tail fin kits with GPS are added onto warheads weighing 500, 1,000, and 2,000 pounds. One photograph depicts a fin actuator control unit produced by the Woodward HRT company of Santa Clarita, California, which lists the item as one of their products for the JDAM bomb program. Another photograph shows a type of control fin not previously seen publicly, but the remnant is suggestive of the type of control fin used for a version of a JDAM bomb with extended range.

The attack might have included the use of more than one JDAM bomb. While not conclusive, both the US aerial photograph and photographs of the site appear to show two large craters. Some witnesses said that the first wave of attacks had included two munitions. A US military spokesperson also said that the attack left two large craters.³⁵

An article in the Washington Post cited an unnamed military official as saying that the attack included a 500-pound guided bomb.³⁶ The destruction of a significant part of a large building, is consistent with the use of 500-pound bombs.

³⁴ Lisa Ferdinando, "Pentagon Spokesman: Dozens of Terrorists Believed Killed in U.S. Strike in Syria," US Department of Defense news, March 17, 2017, <https://www.defense.gov/News/Article/Article/1122791/pentagon-spokesman-dozens-of-terrorists-believed-killed-in-us-strike-in-syria> (accessed March 23, 2017).

³⁵ Michael R. Gordon and Hwaida Saad, "US military denies reports it bombed mosque in Syria," *New York Times*, March 16, 2017, https://www.nytimes.com/2017/03/16/world/middleeast/us-military-denies-reports-it-bombed-mosque-in-syria.html?_r=0 (accessed March 27, 2017).

³⁶ Louisa Loveluck, Thomas Gibbons-Neff, Missy Ryan, "Mounting claims of civilian deaths after US targets al-Qaeda in Syria," *Washington Post*, March 17, 2017, https://www.washingtonpost.com/world/mounting-claims-of-civilian-deaths-after-us-targets-al-qaeda-in-syria/2017/03/17/350d5838-0aeg-11e7-8884-96e6a6713f4b_story.html (accessed March 27, 2017).

Photographs and video footage of the impact sites, as well as the US aerial photograph, suggest that the guided bomb used delayed action fuzing. Delayed action fuzing allows the munition to penetrate the structure and detonate inside it. This technique collapses the targeted structure into itself and limits the amount of blast and fragmentation damage to neighboring objects. For example, the vehicles parked near the structure showed signs of thermal damage (damaged exterior paint) from the bomb blast but did not show fragmentation or blast damage (for example the windshields were intact).

Photographs of remnants found at the site also show remnants of the stabilization fins for a Hellfire missile, a US short-range, air-to-ground laser-guided missile that can be fired by either aircraft or unmanned drones. The Hellfire missile comes in different models, but it was not possible to identify from the remnants, as they appear in the photographs, which particular model was used in the attack.

While the JDAM bombs likely used to destroy the northern section of the building typically contain 89 kilograms of explosives, a Hellfire missile contains 8 kilograms. Witnesses said that the explosions in the second wave of attacks were smaller and therefore consistent with the use of Hellfire missiles.

Photographs also show remnants of a lithium thermal battery manufactured by the EaglePicher Technologies of Joplin, Missouri. This type of battery is used in both Hellfire missiles and JDAM bombs.

Photographs of people killed and injured in the attack depict wounds that are consistent with the fragmentation and blast effects caused by air-delivered explosive weapons. Several of the wounded show signs and wound patterns consistent with the over-pressure created by the detonation of a munition like a 500-pound bomb.

ATTACK ON THE OMAR IBN AL-KHATAB MOSQUE

Authorities' Failure to Take Adequate Precautions

Just before 7 p.m. on March 16, 2017, US aircraft attacked the Omar Ibn al-Khatlab Mosque near al-Jinah, a village in Aleppo province, where about 300 people had gathered for religious services. The attack in northern Syria decimated a section of the mosque and killed at least 38 people. US forces appear to have failed to take necessary precautions to avoid civilian casualties.

Attack on the Omar Ibn al-Khatlab Mosque: US Authorities' Failure to Take Adequate Precautions is based on phone interviews with 14 people with first-hand knowledge of the attack, including four who were in the mosque at the time of the attack. Human Rights Watch also reviewed photographs, video footage, and satellite imagery of the area.

Statements by US military authorities after the attack indicate they failed to understand that the targeted building was a mosque, that prayer was about to begin, and that a religious lecture was taking place at the time. A proper analysis of the target and its use would likely have established at least some of these elements.

US military authorities claim they targeted a meeting of Al-Qaeda members in a partially constructed community hall. Human Rights Watch has not found evidence to support this claim.

Human Rights Watch calls on US military authorities to conduct an objective and thorough investigation, make public its findings, and provide adequate redress to civilian victims or their families. If serious violations of the laws of war are found, authorities should refer those responsible for appropriate criminal prosecution.



An aerial photograph released by the US Department of Defense after a March 16, 2017 US airstrike in al-Jinah, Syria, showing damage to part of a mosque.

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