



Remnants of a barrel bomb dropped by Syrian regime forces' helicopters on Kansafra village, Idlib - December 1, 2019

In Nine Years, the Syrian Regime Has Dropped Nearly 82,000 Barrel Bombs, Killing 11,087 Civilians, Including 1,821 Children

Security Council Resolution 2139 Must Be Implemented and Perpetrators of Indiscriminate Bombardment, Destruction and Forced Displacement Must Be Held Accountable

Thursday 15 April 2021

The Syrian Network for Human Rights (SNHR), founded in June 2011, is a non-governmental, independent group that is considered a primary source for the OHCHR on all death toll-related analyses in Syria.

Content

I. Barrel Bombs Are a Primitive, Barbaric Weapon and Their Use Is a Disgrace Even Among the World's Weakest Armies.....	3
II. Methodology.....	4
III. Barrel Bombs Industry.....	5
IV. The Adoption of Security Council Resolution 2139 of 2014 Calling for Ceasing the Use of Barrel Bombs, with the Syrian Regime Violating This Resolution Hundreds of Times.....	9
V. The Reality of Using Barrel Bombs, According to the Syrian Network for Human Rights Database.....	10
VI. The Syrian Regime's Direct Responsibility for Using Barrel Bombs and the Names of Individuals Who We Believe Are Involved in Committing Egregious Violations.....	16
VII. The Most Notable Incidents of Using Barrel Bombs.....	19
VIII. Conclusions and Recommendations.....	26

I. Barrel Bombs Are a Primitive, Barbaric Weapon and Their Use Is a Disgrace Even Among the World's Weakest Armies:

The Syrian regime has used a vast range of weapons over the past nine years in its efforts to crush the popular uprising that turned into an internal armed conflict in July 2012¹; Russia also repeatedly announces that it has 'tested' its latest weapons in Syria, using the country as an experimental laboratory and Syrian civilians as crash test dummies, and using victims' terrible suffering as a marketing device to promote Russian arms companies.

The Syrian regime has gradually introduced newer and ever more terrible weapons in the past decade, and we believe that what particularly distinguishes the Syrian regime's brutality over its peers is its use of two weapons:

The first: Chemical weapons.

The second: Barrel bombs.

Through a [large number of reports](#), we have addressed [both types of weapon](#); in this report, we provide the latest data from the Syrian Network for Human Rights (SNHR) about the Syrian regime's use of barrel bombs, by which we mean specifically their use in the Syrian context, with these weapons showing the truly barbaric mindset of the Syrian regime; SNHR uses the term 'barrel bombs' to refer collectively to all locally manufactured containers filled with explosive materials.

The Syrian regime has extensively used this weapon for several reasons:

One: The absence of any deterrent response by the UN Security Council and the international community to its use of such a primitive and barbaric weapon.

Two: Barrel bombs are crude, low-cost, homemade devices, simple to manufacture, with a highly destructive capacity, equivalent to about seven mortar shells per barrel bomb.

Three: The Syrian regime's indifference to the indiscriminate effects of this weapon, and its failure to distinguish between civilians or combatants, since this barbaric weapon is often dropped from helicopters, depending on the principle of freefall and thus untargeted means its use amounts to a war crime. We can state that every single barrel bomb dropped on residential areas is a war crime, due to the impossibility of any barrel bomb being specifically directed at a military target or controlled.

Four: The Syrian regime does not care about the reputation of the army institution, but rather uses it as a tool in maintaining power, because the use of such a primitive and barbaric weapon constitutes an international disgrace even for the weakest army in the world.

¹ ICRC, Operational Update, Syria: ICRC and Syrian Arab Red Crescent maintain aid effort amid increased fighting, 17 July 2012, <https://www.icrc.org/en/doc/resources/documents/update/2012/syria-update-2012-07-17.htm>.



Fadel Abdul Ghany, Director of the Syrian Network for Human Rights, says:

“We no longer hear even condemnations of the Syrian regime’s use of barrel bombs against civilians, with this strategy based on repeating bombardment hundreds or thousands of times until condemnation or documentation becomes futile, and the Syrian community reaches a stage of despair and surrender. The Security Council bears the responsibility for implementing its own resolution, which it has failed to do since the resolution was adopted in February 2014, and the failure is still continuing to date.”

II. Methodology:

This report details the record of the Syrian regime’s use of barrel bombs since the first use of this weapon documented by SNHR in July 2012 up until April 2021 and the deaths and attacks on vital civilian facilities resulting from this use. The report also outlines incidents that occurred after the publication of [the previous extensive report](#) that we issued in 2017.

The Syrian Network for Human Rights team monitors and documents the use of barrel bombs within the context of documenting incidents in which violations occur; through our continuous work for more than nine years, we have built up an extensive database documenting all these violations, and we publish regular news reports about bombardment using barrel bombs, especially when these cause casualties and material loss. We have allocated [a monthly report](#) and issued several [extensive reports](#) regarding the use of this weapon specifically.

Through use of SNHR’s extensive database, we can catalogue the victims according to the governorate where they were killed, and also by the governorate from which they originally came. This report catalogues the death toll of victims according to the governorate in which they were killed, rather than by the governorate they originally came from. This method is used in order to identify the extent of the human losses caused by the use of barrel bombs dropped by the Syrian regime’s air force in each of the Syrian governorates.

Through field researchers working for us, we have obtained direct testimonies from survivors, relatives of victims, aid workers and media activists, none of which are cited from any open sources, with this report providing seven of these testimonies. We explained the purpose of these interviews beforehand to the eyewitnesses, who gave us permission to use the information they provided in this report without us offering or providing them with any incentives. Also, SNHR endeavors always to spare the eyewitnesses the agony of remembering the violations as much as possible, as well as providing assurances that we will conceal the identity of any witness who prefers to use an alias. All of this is in accordance with our internal protocols, which we have worked under for years, and we always strive to develop these to keep pace with the best levels of psychological care for victims.

SNHR also analyzed videos and photographs that were posted online, or submitted by local activists via e-mail, Skype, or social media platforms. Videos posted by activists show, amongst other things, sites of attacks, bodies of the victims and the injured, and the extent of the significant destruction as a result of these attacks.

Furthermore, we retain copies of all the videos and photographs included in this report in a confidential electronic database, as well as keeping hard disk backup copies. We do not claim, however, that we have documented all cases, given the severe prohibitions, restrictions and persecution by Syrian regime forces and some other armed groups. Readers are welcome to find out more about SNHR's [methodology](#).

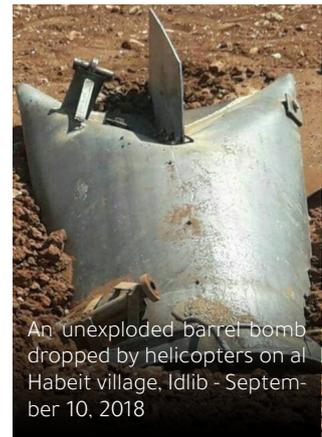
The information contained in this report only represents the bare minimum of incidents which we have been able to document, and of the severity and magnitude of the violations that occurred. Also, it doesn't include any analysis of the profound social, economic, and psychological ramifications.

III. Barrel Bombs Industry:

The barrel bomb manufacturing process is divided into three stages:

1

Manufacture of the outer casing of the barrel bomb, which mainly involves blacksmithing work to construct the outer shell of the barrel bomb.



An unexploded barrel bomb dropped by helicopters on al Hbeit village, Idlib - September 10, 2018

2

Filling the barrels with explosive materials; this stage involves filling the metal outer casing manufactured in Stage One with explosive materials, consisting mainly of ammonium nitrate.



Material packed into a barrel bomb that failed to explode, which was dropped by helicopters on Kansafra village, Idlib - December 3, 2019

3

Installing a detonator on each barrel bomb: this stage is carried out at military airbases from which the planes or helicopters take off to carry out their attacks.

The materials used to fill the barrel bomb are manufactured using one of the following two methods:

1

The first method: This is based on mixing 50 kg of ammonium nitrate, known as ammonium fertilizer, whose chemical symbol is NH_4NO_3 , mixed with 15 kg of TNT explosive, to which two liters of diesel fuel² is added to accelerate the combustion process, in addition to half a kilogram of pure sulfur powder, known as 'sulfur flour', to prevent moisture, along with half a kilogram of aluminum powder to increase the pressure capacity inside the barrel.

2

The second method: This is based on mixing 33 kg of ammonium fertilizer with 20 kg of sugar, then melting the mixture over a fire until it assumes a doughy consistency; after drying and crushing this 'dough', half a kilogram of sulfur flour material and half a kilogram of aluminum powder are added to the dough. In both methods, small jagged metal objects, such as screws, nails and shrapnel, are added to the explosive materials, bursting outwards when the barrel bombs explode and further intensifying the extent of the human and material damage inflicted. The Syrian Network for Human Rights has documented hundreds of incidents in which the Syrian regime used unfamiliar objects to fill these lethal bombs, the most prominent of which are:

On December 30, 2017, Syrian regime forces' helicopters dropped barrel bombs containing [iron ball](#) bearings on Talmennes town in the eastern suburbs of Idlib governorate.

On September 10, 2018, the Syrian regime used barrels filled with anti-tank mines in an attack on al Habeit village in the southern suburbs of Idlib. The media activist, Abdul Razzaq Sbeih³, confirmed that a helicopter belonging to the Syrian regime took off from the al Mujanzarat Military School near Hama city and dropped four barrel bombs on al Habeit village at around noon on Monday, September 10: "The barrel bombs fell in the vicinity of al Habeit village - two of them exploded and caused great damage to the houses surrounding the impact site, while the other two did not explode. I saw anti-tank mines and pieces of metal inside them, in addition to the explosive material and a long fuse."



² A flammable liquid petroleum product with a light viscosity, which is used as a fuel for domestic and industrial heating and in operating vehicles and machines.

³ We spoke with him via Facebook on September 10, 2018

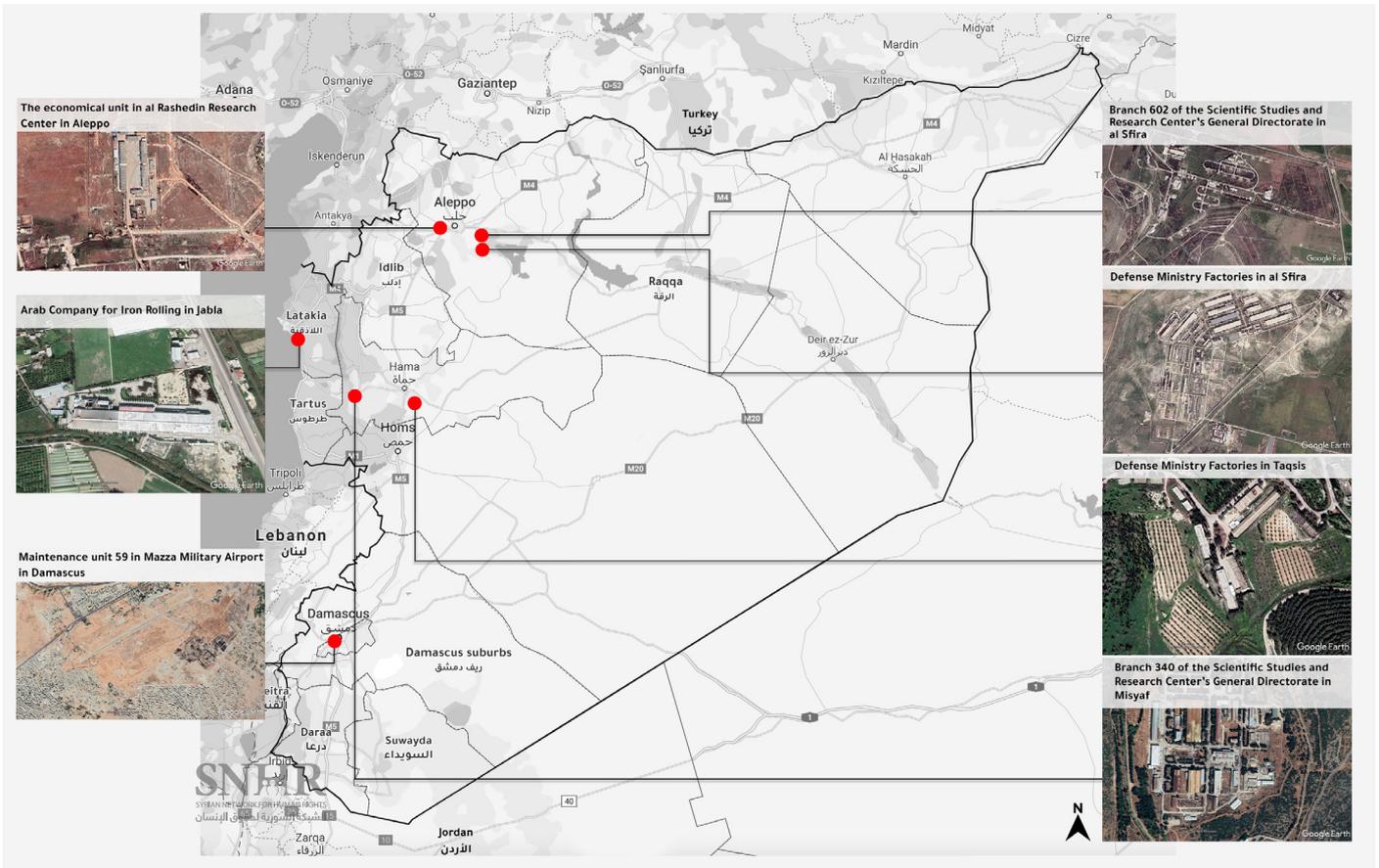
On August 20, 2019, Syrian regime forces' helicopters dropped a number of barrel bombs on Jarjanaz town in the eastern suburbs of Idlib governorate; one of the barrel bombs contained explosive hoses.

On December 3, 2019, at around 13:45, Syrian regime forces' helicopters dropped a number of barrel bombs on the southwestern outskirts of Kansafra village in Jabal al Zaweya area in the southern suburbs of Idlib governorate. The barrel bombs fell on farmland without exploding, with one of them found to contain a missile incubator of a fixed-wing warplane.



We have documented the Syrian regime forces' use of barrel bombs containing poison gases in 93 attacks, with this action categorized as a violation of the Chemical Weapons Convention ratified by the Syrian government in September 2013, which provides for the prohibition and destruction of poison gases, as well as being a violation of all relevant Security Council resolutions, in particular 2118, 2209 and 2235. We have also recorded incendiary substances that we believe to be napalm added to some barrel bombs in four attacks, which caused large fires after the attacks.

The following is a map prepared by the SNHR team showing the sites of the most prominent facilities where barrel bombs are manufactured in Syria:



1. [Defense Ministry Factories in Taqsis town](#) in the southern suburbs of Hama governorate, where the outer casings of barrel bombs are manufactured.
2. [Defense Ministry Factories in al Sfira area](#) in the southeastern suburbs of Aleppo governorate, where the outer casings of barrel bombs are manufactured.
3. [The Fourth Section's Branch 602](#) of the Scientific Studies and Research Center's General Directorate⁴ in al Sfira area in the southeastern suburbs of Aleppo governorate, where barrel bombs are filled.
4. [The Fourth Section's Branch 340](#) of the Scientific Studies and Research Center's General Directorate in north of Misyaf area in the northern suburbs of Hama, where barrel bombs are filled.
5. [Arab Company for Iron Rolling](#), formerly owned by Ayman Jaber, in Jabla city in Tartus governorate, where the outer casings of barrel bombs are manufactured, and the barrel bombs filled.
6. [Maintenance unit 59 in Mazza Military Airport](#), near Damascus city.
7. [The economical unit in al Rashedin Research Center](#), west of Aleppo city, where the outer casings of barrel bombs are manufactured and the barrel bombs are filled.

⁴ It belongs to the Syrian regime government's Ministry of Defense

Barrel bombs (without detonators) are assembled at the Hama Military Airbase and al Nayrab Military Airbase in Aleppo governorate, with these stocks then used to supply most of the regime's airbases with these bombs to carry out their attacks.

IV. The Adoption of Security Council Resolution 2139 of 2014 Calling for Ceasing the Use of Barrel Bombs, with the Syrian Regime Violating This Resolution Hundreds of Times:

It took the UN Security Council about a year-and-a-half after the Syrian regime first began using barrel bombs, to adopt [Resolution No. 2139 on February 22, 2014](#), which condemned the use of barrel bombs, mentioning them by name: "... immediately cease all attacks against civilians, as well as the indiscriminate employment of weapons in populated areas, including shelling and aerial bombardment, such as the use of barrel bombs." Despite this resolution, however, we have noticed an ongoing total indifference by the Syrian regime; although this resolution expressed its intent "to take further steps in the case of non-compliance with this resolution"⁵, the Security Council did not take any additional steps and failed to implement the resolution it issued. In the month following the adoption of the resolution, that is, in March 2014, we documented that the Syrian regime's air force dropped at least 1,207 barrel bombs, an average of 39 barrel bombs per day, which is further clear evidence that the Syrian regime is fully confident that it will not be subjected to any punishment or accountability process.

Rather than express any contrition, the Syrian regime has simply consistently denied using such weapons, despite the overwhelming evidence to the contrary. On February 10, 2015, the [BBC broadcasted](#) an interview with the President of the Syrian regime, Bashar al Assad, in which he denied using barrel bombs.

Amnesty International issued a report on May 5, 2015 entitled '[Death everywhere: War crimes and human rights abuses in Aleppo](#)'. The report showed the massive extent of the destruction caused by barrel bombs stuffed with explosives and metal shrapnel, which Syrian regime forces dropped on schools, hospitals, mosques and crowded markets. The report called on all parties to the conflict in Syria "to end the use of imprecise explosive weapons such as barrel bombs or mortars in populated areas."

On June 5, 2015, a number of UN Security Council members expressed their concern in a [press release](#) about indiscriminate attacks, including those using barrel bombs, which had already been used extensively in Aleppo governorate and other areas throughout Syria.

[In a letter](#) to the UN Security Council issued on June 18, 2015, 71 countries led by Belgium, the Netherlands and Luxembourg, called on the Syrian regime to end its systematic use of barrel bombs.

⁵ UNSC Res 2139 (22 February 2014) UN Doc S/RES/2139, Para. 17. [https://undocs.org/en/S/RES/2139\(2014\)](https://undocs.org/en/S/RES/2139(2014))

On December 7, 2016, France, Germany, Canada, the United States, Italy and the United Kingdom [issued a statement](#) regarding the situation in Aleppo, in which they condemned the actions of the Syrian regime and its foreign backers, especially Russia, and strongly condemned the use of barrel bombs and chemical weapons.

Since 2016, we have not heard much condemnation of the Syrian regime’s use of barrel bombs, although it is still using them up to the current date.

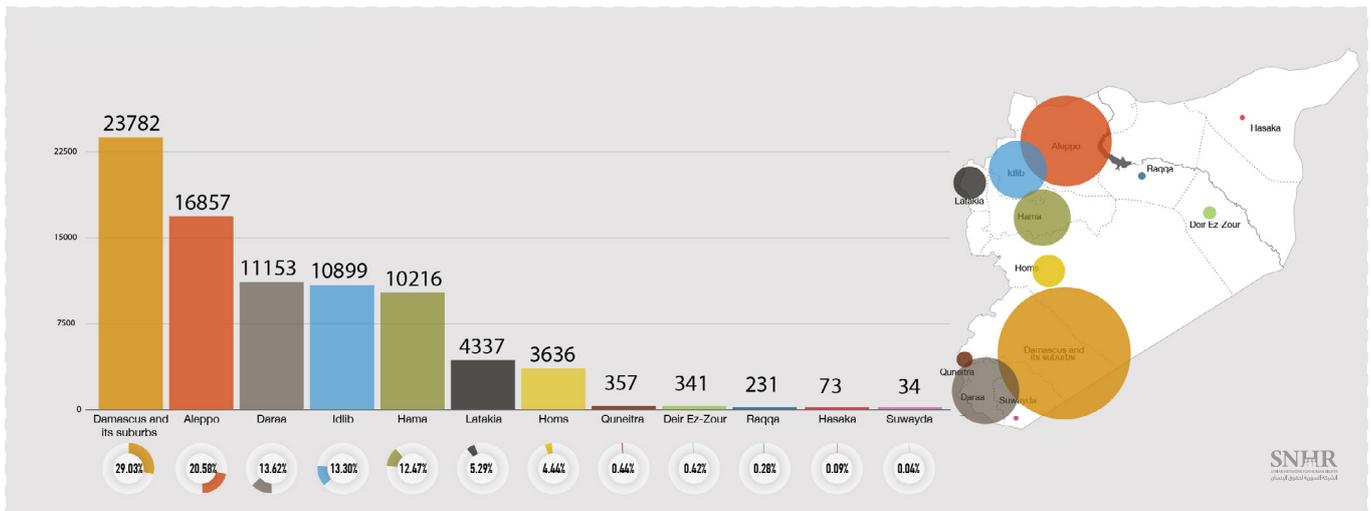
V. The Reality of Using Barrel Bombs, According to the Syrian Network for Human Rights Database:

A. The Record of Barrel Bombs:

The Syrian Network for Human Rights has documented nearly 81,916 barrel bombs dropped by the Syrian regime’s helicopters and fixed-wing warplanes from July 2012 up until April 2021, distributed as follows:

- Before the adoption of Security Council Resolution No. 2139 on February 22, 2014: 21,013 barrel bombs.
- After the adoption of Security Council Resolution No. 2139 on February 22, 2014: 60,903 barrel bombs.

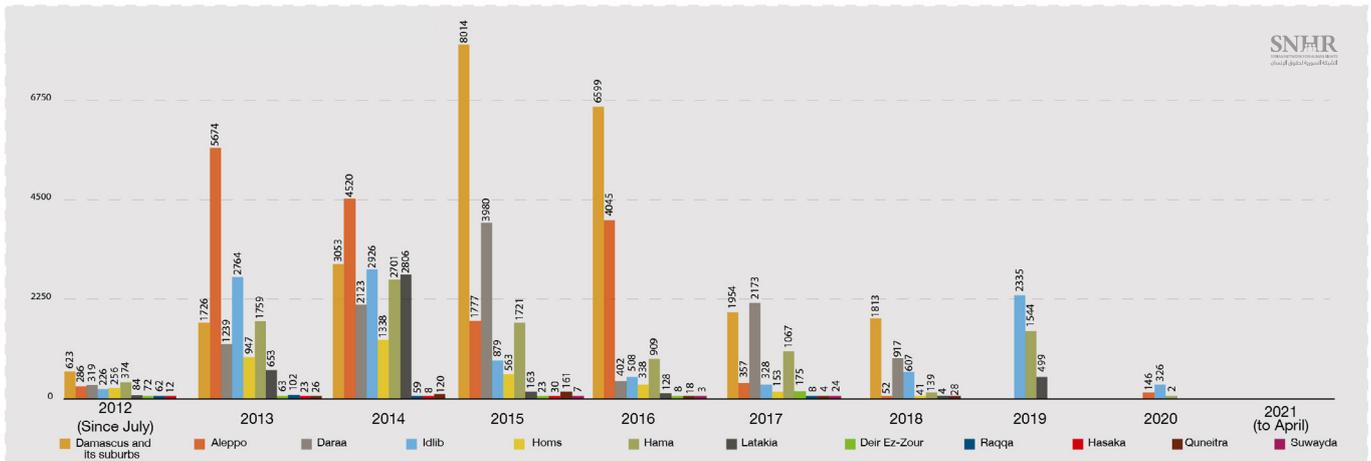
The record of barrel bombs dropped by the Syrian regime was distributed across governorates as follows:



The record of barrel bombs was also distributed by years as follows:



The following chart shows the distribution of the record of barrel bombs by year across the Syrian governorates, as follows:



The statistics above show that the governorates of Damascus and Damascus Suburbs saw the highest number of barrel bombs (approximately 29% of the total record), followed by Aleppo governorate (approximately 21%), then Daraa (approximately 14%) and Idlib (approximately 13%).

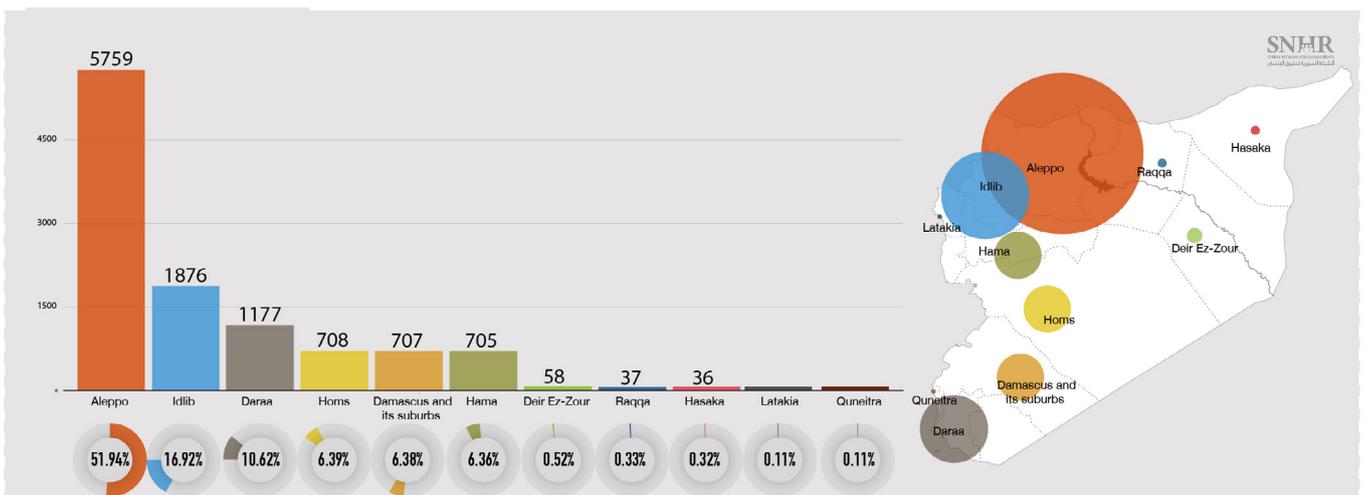
Moreover, the year which saw the highest number of barrel bombs dropped by the Syrian regime was 2014, followed by 2015 then 2013, with these three years seeing the Syrian regime Air Force dropping at least 51,948 barrel bombs in total, meaning 64% of the total record of barrel bombs.

In terms of the distribution of barrel bombs across the governorates by year, specifically in the governorates that saw the highest number of barrel bombs, the governorates of Damascus and Damascus Suburbs saw the highest levels in 2015 with 8,014 barrel bombs, then in 2016 with 6,599 barrel bombs, while in Aleppo, which ranked second, 2013 saw the highest number with 5,674 barrel bombs, followed by 2014 with 4,520 barrel bombs, while the highest number of barrel bombs in Daraa governorate was in 2015 which saw 3,980 barrel bombs used, and the highest record in Idlib was in 2014 with 2,926 barrel bombs.

B. The Death Toll of Victims Killed by the Use of Barrel Bomb:

We documented the deaths of 11,087 civilians, including 1,821 children and 1,780 women (adult female), as a result of the Syrian regime’s use of barrel bombs from July 2012 up until April 2021.

The death toll of victims killed by barrel bombs was distributed across governorates as follows:



The death toll among children and women constitutes approximately 33% of the total death toll of civilian victims who were killed as a result of the Syrian regime’s use of barrel bombs, which is a very high percentage and confirms that the attacks targeted civilians.

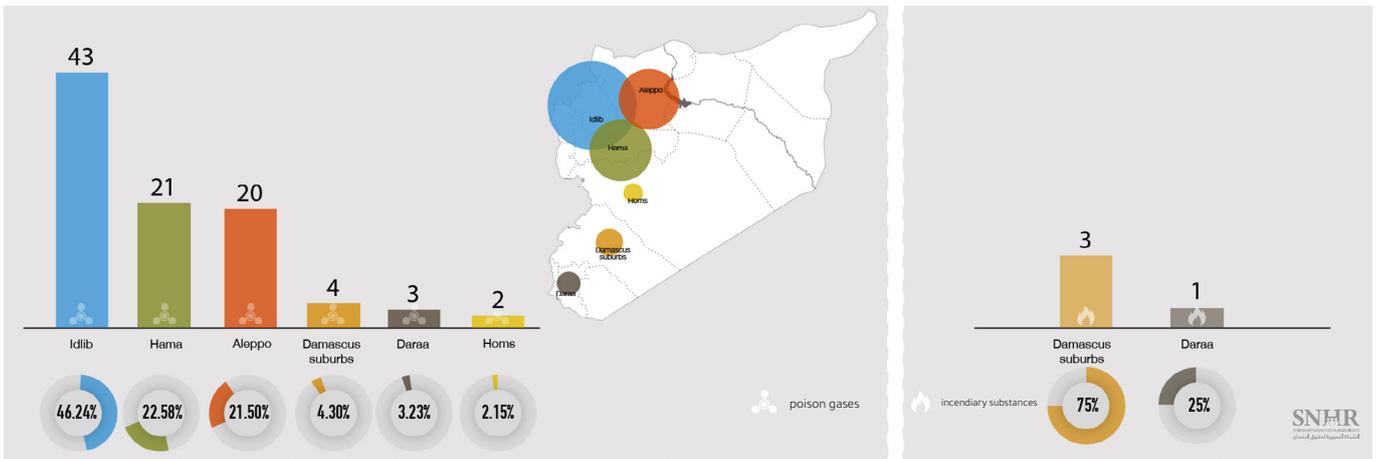
The above-mentioned death tolls indicate that the largest death toll was in Aleppo governorate (approximately 52% of the total death toll), then Idlib (approximately 17%) and Daraa (approximately 11%). As for the distribution of the civilian death toll by years, the SNHR database indicates that the highest death toll was in 2014 and then in 2015, with the civilian death toll in these two years being approximately 69% of the total death toll.

The highest death toll in Aleppo governorate was in 2014 with 2,923 civilians, then in 2013 with 1,084 civilians, while Idlib governorate, which ranked second among all governorates, the largest death toll was in 2013 with 701 civilians, then in 2015 with 657 civilians, while as for Daraa governorate, the highest death toll of civilians was in 2015 with 584 civilians, then in 2014 with 438 civilians.

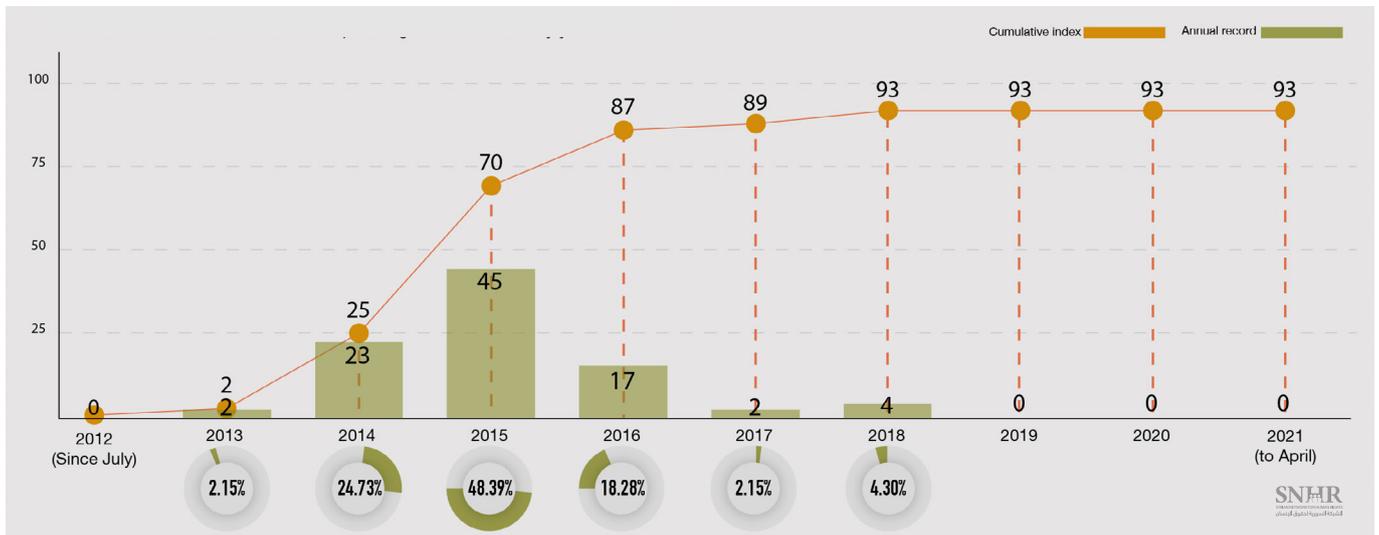
C. The Record of Barrel Bombs Used as a Chemical Weapon and an Incendiary Weapon:

The Syrian Network for Human Rights has documented at least 93 attacks using barrel bombs filled with poison gases and four attacks using barrel bombs containing incendiary substances from July 2012 up until April 2021.

The record of the attacks was distributed across governorates as follows:



The record of attacks using barrel bombs filled with poison gases was distributed by year as follows:



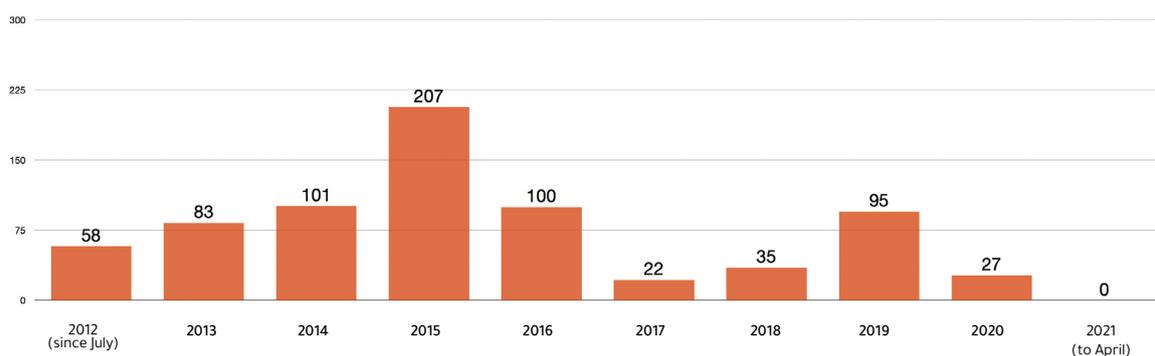
The use of indiscriminate weapons such as barrel bombs in chemical or incendiary attacks indicates deliberate infliction of the greatest harm to civilians in clear violation of all international resolutions issued in this regard. The Syrian Network for Human Rights has documented the largest record of chemical attacks using barrel bombs in Idlib governorate with 43 attacks (approximately 47% of the total record of attacks), then Hama governorate with 21 attacks (approximately 23%), followed by Aleppo with 20 attacks (approximately 22%).

As for the distribution of chemical attacks using barrel bombs by year, the highest record was in 2015, followed by 2014 then 2016.

D. The Record of Attacks on Vital Civilian Facilities:

According to the Syrian Network for Human Rights database, barrel bombs were used in at least 728 attacks on vital civilian facilities, including 104 attacks on medical facilities, 188 on schools, 205 on mosques and 57 on markets.

These incidents were distributed by year as follows:



The largest record of attacks on vital civilian facilities was in 2015, which amounted to approximately 29% of the total record of attacks, followed by 2014 then 2016, amounting to approximately 14% of the total record in each year.

E. Displacement and Forced Displacement Due to the Use of Barrel Bombs:

The heavy use of barrel bombs by the Syrian regime has been aimed at very deliberately causing the greatest possible destruction and terror among civilians; many residents told us about the state of shock and fear that prevails in the entire neighborhood after a barrel bomb being dropped and the huge and terrifying explosion that emanates from it, as well as the psychological impact of the destruction of their homes in which they grew up or which they inherited from their parents, while many barrel bombs were dropped on vital facilities such as schools, bakeries, medical facilities and markets.

The brutal bombardment using barrel bombs, the destruction of homes and the state of terror that they cause, and the destruction and damage of vital facilities, have forced hundreds of thousands of Syrians to be displaced from their areas, fleeing to safety for themselves and their families, with the areas to which they have been displaced also often subjected to bombing again, leading many to be displaced again. The vast majority of the displaced persons have been displaced more than once.

The goal of the Syrian regime is brutal revenge, not only uprooting people from their homes, but rather making them pay the most terrible price possible in retaliation for their demand for political change; this basic fact is missed by many researchers when they ask about the regime's goal in bombing civilian neighborhoods to such a terrible extent and intensity. It is SNHR's contention that the destruction of cities and towns is a deliberate strategy pursued in order to push the people towards displacement, despair and surrender, with the resulting severe suffering being entirely deliberately inflicted, and having the most devastating effect on the already homeless and displaced who are usually already the poorest and most marginalized members of society, due to the loss of their homes, their possessions and whatever businesses and shops they once had.

[The latest estimates by the United Nations High Commissioner for Refugees \(UNHCR\)](#) issued on March 15, 2021, indicate that approximately 13.3 million Syrians are now IDPs or refugees, distributed as follows:

- Approximately 6.7 million internally displaced persons, some of whom were displaced more than once.
- Approximately 6.6 million refugees, including 5.5 million in neighboring countries.

Amongst these are 220,000 people who have been displaced as a result of forced displacement agreements concluded by Syrian regime forces with factions of the Armed Opposition in several areas of Syria, numbering 15 agreements in total to date, according to the Syrian Network for Human Rights database.

Through our work at the Syrian Network for Human Rights on the issue of forced displacement, we have noted that approximately 70%, i.e. 9.5 million of the forcibly displaced persons, have been forced to leave their homes as a result of aerial bombardment launched mainly by the Syrian-Russian alliance forces, in which barrel bombs have played a central role due to their widespread use, indiscriminate nature and significant destructive impact.

VI. The Syrian Regime's Direct Responsibility for Using Barrel Bombs and the Names of Individuals Who We Believe Are Involved in Committing Egregious Violations:

The Syrian regime is very centralized, and undertakings involving huge military operations cannot be carried out without the knowledge and approval of the regime's head, Bashar al Assad, who is at the same time the Commander-in-Chief of Syria's Army and the Armed Forces. Indeed, it is not even possible to carry out operations far smaller than this without his knowledge and approval. International Humanitarian Law takes into account the hierarchical nature of the armed forces and the discipline imposed by leaders and holds commanders criminally responsible on the personal level, not only for the actions and breaches they have personally committed but also for the actions committed by their subordinates. According to an authoritative study of customary international humanitarian law carried out by the International Committee of the Red Cross, **the responsibility of leaders developed into the following customary rules:**

- Commanders and other superiors are criminally responsible for war crimes committed pursuant to their orders⁶.
- Commanders and other superiors are criminally responsible for war crimes committed by their subordinates if they knew, or had reason to know, that the subordinates were about to commit or were committing such crimes and did not take all necessary and reasonable measures in their power to prevent their commission, or if such crimes had been committed, to punish the persons responsible⁷.
- Commanders must ensure that members of the armed forces under their command are aware of their obligations under international humanitarian law⁸.

The Rome Statute of the International Criminal Court strengthens these elements of responsibility and extends them to include crimes against humanity committed in peacetime or war, and war crimes, whether committed in an international or internal armed conflict⁹. The law holds military commanders as well as other superiors, including civilians, responsible for this¹⁰.

We believe that all these requirements are fulfilled in the case of the Syrian regime and in the relationship of the head of the regime and its leaders and the strict, hierarchical and centralized chain of command, meaning that the head of the Syrian regime and the higher-ranking leaders are all directly involved in the use of barrel bombs and in the resulting deaths, destruction and displacement.

⁶ ICRC, customary international humanitarian law, Rule 152. https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule152

⁷ ICRC, customary international humanitarian law, Rule 153. https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule153

⁸ ICRC, Additional Protocol (I) to the Geneva Conventions of 1977, Article 87-2. <https://ihl-databases.icrc.org/ihl/INTRO/470>

⁹ The Rome Statute of the International Criminal Court, Article 25. <https://www.icc-cpi.int/nr/rdonlyres/add16852-ae9-4757-abe7-9cdc7cf02886/283503/romestatuteng1.pdf>

¹⁰ The Rome Statute of the International Criminal Court, Article 28. <https://www.icc-cpi.int/nr/rdonlyres/add16852-ae9-4757-abe7-9cdc7cf02886/283503/romestatuteng1.pdf>

Names and positions of the most prominent leaders of the Syrian regime implicated in using barrel bombs:

Hundreds of leaders of the Syrian regime's security services, army and other state institutions have been implicated in the violations that have been committed against the Syrian people and the Syrian state since 2011 to date, with SNHR maintaining a database that includes detailed reports on thousands of individuals involved in committing violations of international humanitarian law and human rights law in Syria, their positions and the most prominent violations they committed that we have documented, and working to update this database continuously whenever new details emerge. We have talked about many of these figures in [reports](#) and other materials we've issued over the past ten years.

With regard to the use of barrel bombs, the Commander-in-Chief of the Army and the Armed Forces, his deputy, the Director of the Air Force, the Air Intelligence Department, the commanders of military airbases and the squadron directors, in addition to the directors of scientific research units, bear the greatest responsibility for using this weapon; here, we provide the names of some of the most prominent of these commanders and leadership figures who we believe are implicated in the crime of using barrel bombs:



Bashar al Assad
President of the Republic and
Commander-in-Chief of the
Army and Armed Forces



Ali Abdullah Ayoub
President of the Republic and
Commander-in-Chief of the
Army and Armed Forces



Jamil al Hassan
President of the Republic and
Commander-in-Chief of the
Army and Armed Forces



Ghassan Ismail
Deputy Director of the Air Force
Intelligence Directorate



Kifah Melhem
Head of the Military Intelligence
Division



Muhammad Mahalla
former Head of the Military
Intelligence Division



Hassan al Ali

Commander of the Air Force



Ahmad Balloul

Commander of the Air Force



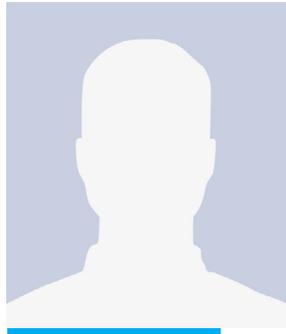
Muhammad Bilal

Officer of Weapons Development
in the Air Force



Ghassan Bilal

Director of the Fourth Division's
security department



Ali Wannous

responsible for coordinating
chemical weapons air attacks in
the Military Division's Unit 450



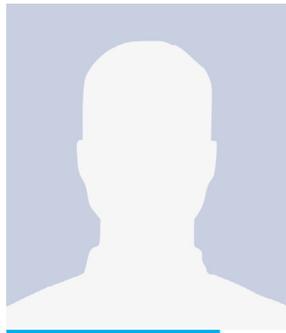
Badi M'alla

Commander of the Hmeimim
Military Airbase



**Muhammad Yousef al
Hasouri**

Commander of Deir Ez-Zour
Military Airbase



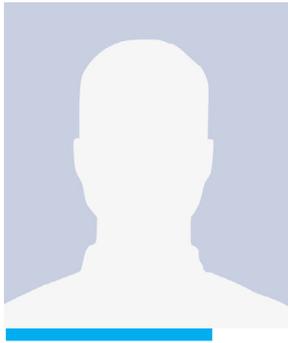
Ghassan Abbas

responsible for communication
between scientific research, the
Air Force Intelligence Direc-
torate and the Military Intelligence
Division, works for the Military
Intelligence Division's Unit 450



Yassin Ahmad Dhahi

Head of al Mazza Branch with
the Air Force Intelligence Direc-
torate



Nasser Muhammad

responsible for the manufacturing department at the Economic Unit of the al Rashideen Research Center in Aleppo city



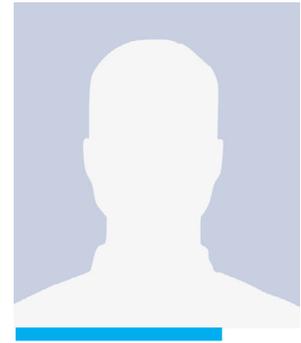
Abdul Qader al Jagal

official at the Ministry of Defense's Factories in al Sfeira area, Aleppo



Nizar Bdour

responsible for the Industrialization Department at the 602th Center for Scientific Research in al Sfeira area, Aleppo



Ali Suleiman

responsible for the Industrialization Department at the 340th Center for Scientific Research in Misyaf area, Hama

VII. The Most Notable Incidents of Using Barrel Bombs:

On Monday, January 8, 2018, Syrian regime forces' helicopters dropped a number of barrel bombs on Tal al Sheikh Mansour area near the public road that leads to Abu al Thuhour town, east of Saraqeb city, in the eastern suburbs of Idlib governorate. The barrel bombs hit a car that was transporting IDPs from the villages of the eastern suburbs of Idlib governorate, resulting in the deaths of two civilians. The area was under the joint control of factions of the Armed Opposition and Hay'at Tahrir al Sham at the time of the incident.

On Thursday, February 1, 2018, at around 10:30, Syrian regime forces' helicopters dropped a barrel bomb on [Jazraya](#) village in the southern suburbs of Aleppo governorate, resulting in the deaths of seven civilians, who were mostly from the same family, including three children and two women. The village was under the control of factions of the Armed Opposition at the time of the incident.

On Sunday, February 4, 2018, at around 21:20, Syrian regime forces' helicopters dropped two barrel bombs loaded with a poison gas, targeting civilian houses in al Sharqi neighborhood, Saraqeb city, in the eastern suburbs of Idlib governorate. As a result, eight civilians were injured, suffering from suffocation; as Civil Defense personnel arrived at the site, three of them also suffered from suffocation, and were all transferred to makeshift hospitals. We issued [a report](#) documenting the incident. [On April 12, 2021](#), the Organization for the Prohibition of Chemical Weapons' (OPCW) Investigation and Identification Team (IIT) issued its [second report](#), in which it confirmed the responsibility of the Syrian regime for this chemical attack.



Remnants of barrel bombs, which allegedly contained poison gas, dropped by Syrian regime forces' helicopters on Saraqeb city - February 4, 2018

Motea Jalal¹¹, a local media worker, headed for the medical point where the injured were treated: “The observatory announced that helicopters took off at around 21:20. The injured were taken to a medical point approximately 8 km away from Saraqeb, as they had to go to a distant medical point after Kafranbel and Ma’aret al Nu’man hospitals were bombed.” Motea asked us to refrain from revealing the exact location where the injured were treated out of fear it might be bombed in the same way as the other medical facilities that were targeted by Syrian-Russian alliance forces.

Motea added: “I saw Civil Defense personnel spraying the injured with water to get rid of the chlorine’s effects. Then, the medical team performed first-aid by giving them atropine injections and oxygen masks. I also saw three of the injured suffering from symptoms such as nausea, vomiting, severe breathing difficulties, and red eyes while the rest of the injured were more stabilized. The injured were all civilians, and three of them were Civil Defense personnel who were injured after they arrived at the barrel bombs’ site.”

On Monday, March 19, 2018, Syrian regime forces’ helicopters dropped a barrel bomb on [al Mahmoud Mosque](#) in the center of Douma city, the Eastern Ghouta, in the eastern Damascus Suburbs governorate, [which resulted in the deaths of seven civilians](#), including one child and two women, in addition to causing massive destruction to the mosque building and significant material damage to its furniture. We note that the mosque hall was turned into a shelter by the residents to take shelter in, in light of the vicious military offensive in the Eastern Ghouta at the time. The city was under the control of factions of the Armed Opposition at the time of the incident.



On Saturday, April 7, 2018, at around 21:00, Syrian regime forces’ helicopters dropped a number of barrel bombs loaded with a poison gas near al Shuhada Square in the Nu’man area of Douma city in the Eastern Ghouta in eastern Damascus Suburbs governorate, [which resulted in the deaths by suffocation of 41 civilians, including 12 children and 15 women](#), while [about 550 others](#) suffered from asphyxia. The city was under the control of factions of the Armed Opposition at the time of the incident. SNHR issued [a report](#) on the incident.

¹¹ We spoke with him via WhatsApp on February 5, 2018

Ahmad al Islam¹², a Civil Defense volunteer, took part in aiding the injured. He told us, “It was around 20:30 when I was with an ambulance surveying the sites that had been bombed. There were helicopters flying overhead, and rocket launchers were targeting most of the city’s areas. When we got near the city center, I smelt a strong odor that I couldn’t identify, so I asked the driver to close the windows. We proceeded to al Shuhada Square and I saw people running in panic while shouting ‘Chemicals...’ I saw three dead bodies laid on the ground in front of a bunker. There was no blood on any of them.” Ahmad added that he was able to identify the strong scent of chlorine when they got near the location, saying that the smell was overwhelming, “I took some steps downwards, and the sight of the massacre started becoming clearer. There were dead bodies of children tossed around, with foam covering their mouths. I couldn’t last more than three second, as my nose started running and my eyes tearing up, and I lost my balance. My friend pulled me out quickly, and we went to the medical point where I received first-aid. I washed my face with water and had a spray session.”

A visual guide shows the impact site of a cylinder loaded with poison gas dropped by Syrian regime forces’ helicopters on Douma city, Damascus Suburbs - April 7, 2018



¹² We spoke with him via WhatsApp on April 12, 2018

On Tuesday, July 17, 2018, Syrian regime forces' helicopters dropped a number of barrel bombs near a school that was being used to house IDPs - from al Harra city, in the northwestern suburbs of Daraa governorate - in [Ein al Tina](#) village, in the southern suburbs of Quneitra governorate. [As a result, nine civilians were killed instantly, including five children](#) and two women. The village was under the control of factions of the Armed Opposition at the time of the incident.



Victims of a massacre killed by a barrel bomb attack by Syrian regime forces in Ein al Tina village, Quneitra - July 17, 2018

The SNHR spoke with Mouaz al Asaad¹³, a photographer in Ein al Tina town, who was woken on the morning of July 17, 2018 by the explosion near his home, after which he heard the voices of the people screaming “**Massacre! People were killed!**”. He told us, “**It was between 8:30 and 9:00. I went directly to the site, which is about five minutes on foot from my home, where the bombing was carried out with barrel bombs on Ein al Tina High School, which is located on a main street in the center of the village, and which was housing about 400 IDPs from al Harra city and Aqraba village in the northern suburbs of Daraa, and from villages and farms in the surrounding area. I saw the destruction and devastation that befell the place and a crater ranging from one to two meters deep in the main street caused by one of the barrel bombs. There were a number of martyrs, among them women, on the ground in front of the school door and inside one of the destroyed shops in front of it, while about 20 injured were taken to hospital, with some of them having lost limbs. I heard that some of the injured children and women who have been hospitalized had died.**”

Mouaz also told us that he spoke with the families at the scene about what they had seen before his arrival, adding, “**The helicopter dropped four barrel bombs on the site. All those who were killed and injured were standing in front of the school door on the main street in which there are shops, and the people at that moment were watching the bombing that targeted Tal al Harra area, about four kilometers from there.**” Mouaz noted that the targeted area was devoid of any military presence of the factions of the Armed Opposition or others, adding that Ein al Tina is a small village that is considered to be the entranceway to Quneitra for the Daraa governorate.

On Saturday, September 8, 2018, Syrian regime forces' helicopters dropped two barrel bombs in front of the entrance of the Nabd al Hayat Hospital (formerly called Sham Surgical Hospital), which is built underground and supported by the Syria Relief & Development (SRD) humanitarian organization, in the south of [Hass](#) village, in the southern suburbs of Idlib governorate, [which caused severe material damage](#) to the [hospital building](#) and [equipment](#), while [the hospital's power generators](#) were



Damage caused by two barrel bombs dropped by the Syrian regime air force near Nabd al Hayat Hospital in Hass village, Idlib - September 8, 2018

¹³ We spoke with him via WhatsApp in July 2018

[burned](#). SNHR notes that the hospital is part of the de-confliction mechanism approved by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). The village was under the control of factions of the Armed Opposition at the time of the incident.

On Sunday, May 5, 2019, Syrian regime forces' helicopters dropped a number of barrel bombs on [Ureinba](#) village in the southern suburbs of Idlib governorate, resulting in the deaths of five civilians, including a woman and two female children, most of whom were from the same family. The village was under the joint control of factions of the Armed Opposition and Hay'at Tahrir al Sham at the time of the incident.

The SNHR spoke with Ibrahim al Darwish¹⁴, a media activist from Ureinba village, who told us that on the evening of May 5, 2019, while he was monitoring helicopters in the airspace over the region, a helicopter dropped two barrel bombs on the village: "I observed the fall of the barrel bombs at a location near my aunt's house. As soon as the helicopter left the area, I went to the site, which was severely destroyed, where I found my aunt had lost a hand and foot and was dead, and my cousin was martyred along with his daughter; the barrel bomb split his head in half and severed his hands. At the site, a second son of my aunt was severely injured, and I also saw a one-and-a-half-year-old girl who had a leg blown off. I carried her and called the ambulance via the walkie-talkie; my cousin was taken in a civilian car to Ma'aret al Nu'man National Hospital, while the Civil Defense arrived and took me with the child to the hospital, where she died after entering the operation room and then the young man died, as the record of the massacre became five martyrs. The scene was very traumatizing. I still suffer psychologically from flashbacks of the bloody images and the scenes of the bombing of the region by the helicopters that were taking off from Hama Military airbase, which used to bomb the towns in Idlib suburbs continuously."

On Wednesday, May 8, 2019, Syrian regime forces' helicopters dropped a number of barrel bombs on [Heesh](#) town in the southern suburbs of Idlib governorate, resulting in the deaths of three civilians from one family of IDPs from Helfaya city in the northwestern suburbs of Hama governorate, including one female child. The town was under the control of factions of the Armed Opposition at the time of the incident.

The SNHR spoke with Tahsin Ali al Hussein¹⁵, a Civil Defense journalist at the Heesh Center, who had monitored the Syrian regime's helicopters dropping two barrel bombs on Heesh town on May 8, 2019, with the advent of the sunset call to prayer. He told us: "**I saw the first barrel bomb falling from helicopters with my eyes on the eastern side of Heesh town near the Aleppo-Damascus highway; it was large and black in color, and it fell in a spinning way. Before reaching the ground about 50 meters, it turned to the vertical position and we began to hear the sound of the barrel bomb's roar dramatically, then the helicopter started circling in the area. A few minutes later, another attack with one barrel bomb was also carried out on the same area - its strong roar was heard, and then a powerful explosion.**"

¹⁴ We spoke with him via WhatsApp on March 17, 2021

¹⁵ We spoke with him via WhatsApp on March 17, 2021

Tahsin told us that the Civil Defense teams had recovered three victims and treated a number of the wounded immediately after the first attack. He added: **“We went to the site that was full of shrapnel. The first barrel bomb fell on the roof of a four-story building below which were shops, while the second barrel bomb fell behind the building, in an open area of bare ground. The building was almost completely destroyed, and the second barrel bomb caused a three-meter wide crater that was a few meters deep, while large fragments caused massive damage to the agricultural land.”**

On Friday, July 5, 2019, at around 21:00, two Syrian regime forces' helicopters dropped a number of barrel bombs on three sites in Mhambel town in the western suburbs of Idlib governorate, [which resulted in the deaths of 13 civilians](#), including [seven children](#), three women and an unborn baby, and injured 20 others. The civilian death toll was distributed across the three sites as follows:

The first site: Some barrel bombs fell on [a complex of residential buildings about 200 meters](#) from the [Martyr Mohammad Saleh Abdul Aal Primary School](#) on the western outskirts of the town, perpetrating a massacre of seven civilians from one family, including four children (three males and one female) and two women, who were inside the lobby of a house.

The second site: [Residential buildings](#) located in front of the Martyr Mohammad Saleh Abdul Aal Primary School, resulting in the deaths of three civilians, including two children.



Destruction to the Agricultural Extension building in Mhambel town in Idlib caused by a Syrian air attack using barrel bombs - July 5, 2019

The third site: [Residential buildings](#) located near the Agricultural Extension building in the northern outskirts of the town, resulting in the deaths of three civilians who were IDPs from Damascus Suburbs governorate, namely a pregnant woman, her child and her unborn baby. Mhambel town was under the joint control of factions of the Armed Opposition and Hay'at Tahrir al Sham at the time of the incident.

Hassan al Ali¹⁶, the director of the Civil Defense Center in Mhambel town, told the SNHR: **“At around 9:00 pm on July 5, the observatories announced that helicopters had taken off from Hama Military airport, specifying that their destination was Idlib's western suburbs. When the helicopters arrived in the airspace over the town, they began to drop their load of barrel bombs respectively, and when they finished the airstrikes, our teams headed to the places where the barrel bombs had fallen, where we retrieved about 14 martyrs and aided 14 others, some of whom were displaced from other governorates and live in the town.”**

¹⁶ We spoke with him via WhatsApp on July 6, 2019

On Monday, August 5, 2019, Syrian regime forces' helicopters dropped a number of barrel bombs on Morek town in the northern suburbs of Hama governorate. One of the barrel bombs fell on a house, resulting in [the deaths](#) of four civilians, [most of whom](#) were members of the same family. We note that the victims had earlier returned from their previous places of displacement to their hometown after the ceasefire agreement announced by the Russian regime took effect on August 2, 2019. Morek town was under the joint control of factions of the Armed Opposition and Hay'at Tahrir al Sham at the time of the incident.

On Thursday, November 14, 2019, Syrian regime forces' helicopters dropped at least four barrel bombs on a district, known as al Halya area, south of Kafranbel city in the southern suburbs of Idlib governorate. The Syrian Network for Human Rights obtained exclusive videos documenting the incident. We note that the area was under the joint control of factions of the Armed Opposition and Hay'at Tahrir al Sham at the time of the incident.



On Sunday, December 15, 2019, at around 09:30, Syrian regime forces' helicopters dropped a number of barrel bombs on a house in Ma'ar Shoreen village in the eastern suburbs of Idlib governorate, resulting in [the death of a child](#), and the injury of several other civilians, in addition to causing great destruction to the house, which is next door to the Abu Ratib bakery. [The bombardment set fire to the bakery and caused significant material damage to its building and equipment](#). The village was under the joint control of factions of the Armed Opposition and Hay'at Tahrir al Sham at the time of the incident.



On Monday, December 30, 2019, at around 12:10, Syrian regime forces' helicopters dropped three barrel bombs on a two-story residential [building](#), known as al Dyab Laundry building, in the western outskirts of Ma'aret al Numan city, which is located in the southern suburbs of Idlib governorate. At the time of the bombing, a Civil Defense service vehicle was parked outside the building, whilst the Civil Defense personnel were inside it helping an IDP family to transfer some of their belongings from their home as a result of earlier heavy bombardment by Syrian-Russian alliance forces on and around the city. The attack

resulted in the deaths of a child, Muhammad Fateh Arafat, and of Muhammad al Shaar, a member of the Civil Defense, [in addition to causing severe material damage to the Civil Defense service vehicle](#), and [severe destruction to the building](#). Ma'aret al Numan city was under the joint control of factions of the Armed Opposition and Hay'at Tahrir al Sham at the time of the incident.

On Wednesday, January 15, 2020, Syrian regime forces' helicopters dropped a number of barrel bombs on Kfarrouma village in the southern suburbs of Idlib governorate, causing material damage to public and private properties. We note that the village was already empty of most of its residents due to their displacement as a result of continuous attacks by Syrian-Russian alliance forces on the region since April 26, 2019, which, in the days immediately before the attack, had focused on Ma'aret al Numan and its environs. Kfarrouma village was under the joint control of factions of the Armed Opposition and Hay'at Tahrir al Sham at the time of the incident.



Video showing the moments of the Syrian regime helicopter dropping a barrel bomb until it reaches the ground and explodes, in Kfarrouma village, Idlib - January 15, 2020

VIII. Conclusions and Recommendations

1. The Syrian government has, beyond any doubt, violated Security Council Resolutions 2139 and 2254, and used barrel bombs in a systematic, widespread manner. Also, the Syrian government, through the crime of willful killing, has violated Article 7 of the Rome Statute in a systematic and widespread manner which constitutes crimes against humanity.
2. SNHR can confirm that barrel bomb attacks are an indiscriminate form of bombardment that targets defenseless civilians and causes massive collateral damage involving deaths, injuries, or significant damages to civilian objects.
3. Syrian regime forces have violated the rules of international human rights law that guarantee the right to life. In addition, these violations were committed during a non-international armed conflict, meaning that they amount to war crimes, with all elements for this classification being fulfilled.
4. Through the use of barrel bombs filled with poison gases, the Syrian regime has violated the rules of customary international humanitarian law which prohibits the use of chemical weapons regardless of the circumstances. Secondly, the Syrian regime has, beyond any doubt, violated the Chemical Weapons Convention (CWC) which the Syrian government acceded to in September 2013, with the Convention providing for the prohibition and destruction of poison gases. Thirdly, the Syrian regime has violated all relevant Security Council Resolutions - particularly 2118 of 2013, 2209 of 2015, and 2235 of 2015. In addition, the use of chemical weapons constitutes a war crime according to ICC's Rome Statute.

5. Syrian regime forces have used barrel bombs loaded with incendiary substances against populated residential neighborhoods without taking any measures to reduce the damages to civilians and civilian buildings and facilities.
6. None of the factors involved in the deployment of barrel bombs, whether the systematic, widespread, repeated nature of the bombardment, the excessive level of force used, the indiscriminate nature of the bombing or the coordinated approach of the attacks, would be possible without high-level orders and without such attacks comprising a part of state policy.
7. The destruction of cities, towns and villages, vital facilities and shops, displacing these communities' populations, and leaving the vast majority of the people without the ability to work or any means of earning money, with the number of internally displaced persons (IDPs) now estimated to stand at approximately 6.7 million Syrian citizens, while a further 6.6 million Syrian citizens have been externally displaced. Both the destruction and displacement, for which the Syrian regime and its allies are considered directly responsible, are among the most important causes of the collapse of the Syrian economy, with the impact of economic sanctions being negligible compared to the displacement of nearly 13.3 million Syrian citizens and the destruction of millions of buildings.

Recommendations:

UN Security Council

- Impose an arms embargo on the Syrian government, and prosecute all those who provide it with money and weapons, more especially given the risk of these weapons being used in gross human rights crimes and violations.
- The Syrian case should be referred to the International Criminal Court and all those who are responsible for crimes there should be held accountable, while the UNSC states' veto power should be withheld when crimes against humanity and war crimes are committed.
- Establish peace and security, implement the principle of the Responsibility to Protect civilians in order to save Syrians' lives, heritage and cultural artefacts from destruction, pillage and vandalism, and urgently intervene to protect civilians from the danger of barrel bombs.
- Issue a binding resolution that prevents and punishes the crime of forced displacement, compels the cessation of forced displacement, and explicitly provides for the right of forcibly displaced people to return safely to their homes, and receive reparation for what they have suffered, that is through a political transition process that guarantees dignity and stability in accordance with a strict timetable not to exceed six months.

International community

- In light of the split within the Security Council and its utter incapability, action should be taken at the national and regional levels to form alliances to support the Syrian people that can protect them from the daily killings, and to lift the siege and increase support for relief efforts for the forcibly displaced.

- Expand applying the principle of universal jurisdiction over crimes against humanity and war crimes before national courts, and prosecute all persons involved.
- Support the political transition process and put pressure to compel the parties to implement the political transition within a time period of no more than six months so that millions of displaced people can safely return to their homes and settle there without harm.
- The SNHR has repeatedly called for the implementation of the 'Responsibility to Protect' principle in dozens of studies and reports and as a member of the International Coalition for the Responsibility to Protect (ICRtoP) after exhausting all political channels from the Arab League's plan, and after Mr. Kofi Annan's plan proved fruitless, along with the Cessation of Hostilities statements and Astana agreements that followed. Therefore, steps should be taken under Chapter VII of the Charter of the United Nations, while the norm of the 'Responsibility to Protect', which was established by the United Nations General Assembly, should be implemented. The Security Council is still hindering the protection of civilians in Syria.
- Renew pressure on the Security Council to refer the case in Syria to the International Criminal Court.
- Work on fulfilling justice and achieving accountability in Syria through the United Nations General Assembly and the Human Rights Council and to activate the principle of universal jurisdiction.

OHCHR

- Assist in the building of a central housing and real estate database in Syria, with the aim of achieving reparations, implementing voluntary repatriation programs and ensuring restitution of housing, land and real estate in accordance with the UN Principles on Housing and Property Restitution for Refugees and Displaced Persons - Pinheiro Principles.

Independent International Commission of Inquiry (COI)

- Focus on the Syrian regime's use of barrel bombs and the consequences thereof in terms of destruction and displacement, and condemn these widespread practices.

The Russian government

- Stop supporting the Syrian regime, which is implicated in crimes against humanity and widespread war crimes, and seriously engage in a political transition process that guarantees security and stability and ends the conflict.
- Put pressure on the Syrian regime's military forces to end their barbaric practices through dropping barrel bombs that depend on the freefall principle on residential neighborhoods.

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