Serious Questions about the Integrity of the UN Report

AN ANALYSIS

By Subrata Ghoshroy
Research Affiliate
Program in Science, Technology, and Society
Massachusetts Institute of Technology
Cambridge, Massachusetts, USA
Ghoshroy@mit.edu

Abstract:
News reports of an alleged chemical weapons attack by Syrian government forces in the suburbs of Damascus in the early morning hours of August 21 spreaded like wildfire. As reports were coming in, the US, French, and the British governments began to claim that there was a massacre. U.S. Government claimed that exactly 1429 people had died including 426 children. In the ensuing days and weeks the media repeatedly showed video images of ghastly scenes of dead and dying. Most of these videos were posted on the Internet and their authenticity could not be verified. Yet, those governments pronounced that the Syrian military was responsible for the massacre. As the U.S. and France prepared to carry out a military strike against Syria to punish President Assad, a UN team of chemical weapons experts were allowed after a few days to visit the sites in the Damascus suburbs called Ghouta where the attacks reportedly took place. The UN team visited Ghouta on August 27 and again on August 29. The UN Secretary General Ban Ki Moon, who called it a war crime, released their report on September 16, 2013. The report’s basic conclusions were that sarin gas was used in a large-scale attack in Ghouta on August 21 and that surface to surface rockets were used to deliver the nerve agent. In making their determination about the rockets, the inspectors examined rocket parts and other ordnance. In my analysis, I examined the UN report carefully, especially its Appendix 5, which describes in some detail, with photographs and drawings, the two types of rockets they found in Ghouta. Prior to the publication of the UN report, two other significant reports were made public. One was reported in the New York Times and the other a report by the Human Rights Watch. Both these reports presented details of a warhead that could have carried between 50 and 60 liters of sarin – an amount that could explain the high casualty figure above quoted by the US government. The UN report, which was issued some time after these reports, repeated their conclusions. From my careful study and analysis of all these reports, I found that the UN report included diagrams and photographs that were in the said reports without referencing them. There was striking agreement between estimated and measured dimensions of the large warhead, which was merely a concept described in the New York Times article. It took center stage in the UN report. I describe in detail how I arrived at my conclusion. I believe there was communication between the UN team and the analysts outside, which prejudiced...
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the report. The US Secretary of State John Kerry dismissed the UN inspectors as irrelevant because they would not bring to light any new information that the US did not already know. He was right. The purpose of my analysis is not to prove or disprove anything. The sole purpose is to raise questions about the integrity of the UN team’s report. Decisions on war and peace depend on it.

Detailed Analysis of the Published Reports

Alleged Chemical Attack in Ghouta on August 21, 2013

News reports of an alleged chemical weapons attack by Syrian government forces in the suburbs of Damascus in the early morning hours of August 21 spreaded like wildfire. Social media exploded with Twitter feeds, Facebook posts, and YouTube video uploads. As reports were coming in, the US, French, and the British governments were starting to claim that there was a massacre. The most stunning of these claims was an assertion by John Kerry, the US Secretary of State that 1429 people died apparently from nerve gas inhalation of which 426 were children. Ghastly videos circulated with all mainstream TV channels showing the videos of victims. There was strangeness in the certainty of such a precise number in the chaos that would ensue after a poison gas attack. Noam Chomsky remarked during a lecture at MIT on September 10, 2013 that it reminded him of similarly precise body counts that Pentagon used to issue after encounters with the Viet Cong. They were largely made up, he said.

Internet Videos and “Independent” Media Experts

While the authenticity of these videos could not be verified, it was impossible to raise such an impertinent question in the midst of the media onslaught accompanied by commentary from “independent” experts. Several of them were veterans of the UN inspection team before the invasion of Iraq. For example, Charles Duelfer, the Deputy Head of the UN team and later Chief of the CIA’s Iraq Survey Group after the fall of Saddam Hussein, was a regular. A veteran of the US Government programs in space and nuclear weapons, he was the top CIA officer directing the investigation of Saddam’s regime and its WMD programs, his website says.

Another was David Kaye, who was the Chief UN inspector for Iraq, who is now at the Potomac Institute – a beltway think tank funded mainly by the Pentagon. A third was Raymond Zilinskas, a former inspector with expertise on chemical and biological weapons, who is now at the Monterey Institute of International Studies in California. He once spoke enthusiastically about the evidence presented at the UN Security Council by Gen. Colin Powell about WMD in Iraq, which was discredited later as false.

These experts were seemingly speaking in unison that there was overwhelming evidence showing that Syrian government forces were behind the chemical weapons attack. Neither the US government, nor its allies like Britain and France could wait for the report of the UN inspection team, which was in Damascus at the time. They pronounced their judgment based on information supplied by their own
intelligence agencies and also relied on so-called “open source” information. They condemned President Assad for not allowing the inspectors immediate access to the alleged sites and pointed to his guilt in the alleged atrocity. A common refrain was why would he not allow immediate access if he had nothing to hide.

**The UN Inspectors’ Report: of questionable integrity**

However, a few days later, when the UN inspectors were able to travel to the sites, the tone of the US government changed. Secretary of State Kerry remarked at a press conference that the UN team was “irrelevant” since they would not bring to light any more information than what the US already knew. Ironically, the UN team’s report proved John Kerry’s point and here is why.

From my research and analysis, I have come to the conclusion that the UN report as well as human rights organizations like the Human Rights Watch were influenced by bloggers and analysts closely tied to the US and its allies to prove that the Syrian government was responsible for the chemical attacks. Consequently, they produced reports that are of questionable quality and not above reproach. This is especially true about the UN team’s comments about the rockets being the delivery vehicles for the nerve agent.

The UN team had the mandate to determine if chemical weapons were used in the alleged attack on August 21, but not who was responsible for it. In order to carry out its mandate, the team relied on laboratory reports of analysis of collected blood, urine, soil and other environmental samples. It also analyzed samples from rocket parts, munitions, etc. In addition, it conducted a limited number of interviews with survivors and doctors. It finished its work on September 13 and Ban Ki Moon, the UN Secretary General, released the report on Monday, September 16 calling it a “war crime.”

The report said the following in the Letter of Transmittal:

> On the basis of the evidence obtained during our investigation of the Ghouta incident, the conclusion is that chemical weapons have been used in the ongoing conflict between the parties in the Syrian Arab Republic, also against civilians, including children, on a relatively large scale. In particular, the environmental, chemical and medical samples, we have collected, provide clear and convincing evidence that surface-to-surface rockets containing the nerve agent sarin were used in Ein Tarma, Moaadamiyah and Zamalka in the Ghouta area of Damascus. This result leaves us with the deepest concern.

Although the news of the discovery of sarin gas was by then an anticlimax, what was surprising was the UN team’s assertion that it found “clear and convincing” evidence that “surface to surface rockets” containing sarin were used. This was clearly going beyond the original mandate. The report also described certain details of the rockets along with the direction in which they were found to have penetrated the ground at the points of impact. There were a few pieces of evidence that would be crucial at the least to point the finger, if not outright implicate the Syrian government. One of
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them was the bearing of the tail end of the rocket protruding from the ground. From this data, the rocket’s firing point could be estimated. A second piece was the size of the payload that could be carried by the rocket, including other details that would reveal that the payload indeed was something other than high explosive. A third piece was markings on some rocket parts which could tell where they were made.

The Role of a Blogger named Elliot Higgins

The so-called “independent” experts had already gone on overdrive giving numerous TV and radio interviews and sending Twitter messages soon after the reports of the alleged attack surfaced. Their analysis and commentary were primarily based on video that appeared on the Internet on sites like You Tube, which were supposedly uploaded by eyewitnesses. There are certain bloggers who specialize in watching the social media on particular topics, compiling such information, and then making them available with their own commentary on their own websites called blog spots in web parlance.

The BBC says that the bloggers have been providing important analysis to governments and human rights groups based on their exhaustive monitoring of social media. Elliot Higgins, known online as Brown Moses, is one of a number of specialist bloggers from around the world who have been analyzing the use of chemical weapons in Syria. It appears that Elliot Higgins was the source of much of the video information about the alleged attack on August 21.

His website has literally hundreds of video clips from different times and places that are spliced together. For instance, while reviewing a file called “Syrian Government Chemical Attacks,” I found myself watching items from events that took place in January 2013 in Adra. Photographs of rocket in this video are similar, if not the same, as in the video uploaded on August 22 following the events in Ghouta. It might be reasonable to argue that multiple instances of chemical weapon use prove the brutality of President Assad. However, from an evidentiary point of view (I am mindful of it having worked at GAO for nearly ten years as a senior analyst), interspersing photographs from different incidents would be misleading at best.

New York Times Story on September 4

On September 4, well before the publication of the UN inspection team report, the New York Times published a major story written by its science writer William J. Broad (http://www.nytimes.com/2013/09/05/world/middleeast/rockets-in-syrian-attack-carried-large-payload-of-gas-experts-say.html?_r=0). It was based on what the paper characterized as a new study by “leading weapons experts.” The new study reportedly solved the apparent disconnect between the reported large casualty figures and the known small payload capability of rockets in question. The article alluded to “some weapons experts” who had earlier estimated toxic payloads of one or two liters, which could not explain the casualty figures. Times did not name or quote any of these experts, nor explain how they had arrived at their conclusion. The new study claimed that its analysis showed the rockets could carry

Subrata Ghoshroy Massachusetts Inst. of Technology, USA
a much larger payload of gas – about 50 liters. This made the casualty figure of 1429 plausible, the study indicated.

One of the two authors of the study is Professor Theodore Postol of MIT. He is known worldwide as a critic of the U.S. missile defense program. The other is Richard Lloyd, an engineer with long experience in the defense business, who describes himself as a warhead specialist. He spent nearly twenty years working for Raytheon and now works for Tesla Laboratory, Inc. located in the Arlington, Virginia near the Pentagon – another “beltway” contractor. It is a technology company largely funded by the Pentagon and claims as one of its clients the Defense Intelligence Agency (DIA). The New York Times made available Richard Lloyd’s analysis, which consisted of seventy Power Point slides, mostly snapshots from videos, which he most likely presented to someone in the “building” as the Pentagon is fondly called in the business. He is also a former UN weapon inspector. So, knows the business and people in it well. The article featured a drawing reproduced below of the rocket with “estimated dimensions” an artist’s impression of the nerve agent cloud rising after a rocket impact.

**Rockets With Deadly Chemicals**

Weapons experts believe this is the design of the rockets used in a suspected chemical attack last month in Syria, based on videos and photographs posted online. [Related Article »](#)
In a report called *Attacks on Ghouta* published on September 10, 2013, the Human Rights Watch (HRW) credited Elliot Higgins as the source of a collage of photographs of rocket parts related to Ghouta that were included in a figure bearing the title “Diagram of 330 mm chemical rocket variant.” It also included a scaled drawing of the rocket based on what it called “field measurements” without saying who made the measurements. One of the video clips from Higgins showed two men wearing gas masks, who looked like UN inspectors, making measurements with a regular measuring tape, which is also visible in four out of the six photographs in the HRW diagram shown later. It would be difficult to make precise measurements with such a tape. Also the exercise appeared rather cursory. However, the drawing shows precise dimensions including those of the internal parts of the rocket not visible from outside. It would be quite a feat to produce such a drawing without either actually examining a disassembled rocket, or X-raying it.

The UN Report describes two types of ordnance found at the sites they visited. At one of the sites they found an ordnance which had markings in Cyrillic and the number 179. This fact was already producing buzz on the Internet with experts knowledgeable in Russian weapons pointing out that only Syrian government could have possessed such weapons.

**Analysis of Igor Sutyagin from the U.K. Royal United Services Institute (RUSI)**

One such expert is Dr. Igor Sutyagin of the U.K. Royal United Services Institute (RUSI). It advertises itself as an independent think tank, but it is obvious from its website that it is pretty close to the British government. Dr. Sutyagin made a presentation on September 9 entitled “Assessing Chemical Weapons Use in Syria.” (http://www.rusi.org/analysis/videos/ref:V522D9DF12E360/#.Uj2i2ScWSM)

He cuts an impressive figure with his Russian accent, and a wonkish style. He said that the UN inspectors had found an ordnance that could carry a chemical payload. After showing its similarity with the Russian M14 rocket and describing certain details, he homed in on the number “179”, which the UN report also highlighted as discussed later. He said it is a code for a plant in Novosibirsk, Russia that builds non-standard rockets. There are two points that are interesting in this context.

First, he gave credit to the blogger Brown Moses for having made accurate measurements on this rocket from the videos. It was a bit strange because Moses, a.k.a. Elliot Higgins, has reputedly no technical qualification and is based in the U.K. Why Sutyagin thought Moses could make such measurements is not obvious. Also which video was he referring to? Were they from the inspection team? The second point is that one can find very close resemblance between the photographs in the RUSI video presentation and those appearing in the UN report. In fact, there are red circles on the highlighted areas in both documents giving the impression that they are the same photographs.
The RUSI event was more than a week after the site visit of the UN inspectors, and a week before the publication of the UN report. Could it be possible that Dr. Sutyagin had access to the UN inspector’s photos and the Brown Moses reference was only a ruse to throw off the viewer? In return, perhaps he provided some tips to the inspectors about the no. “179” and certain other things, which made it into the report thus compromising its integrity. Whatever the motivation, the UN team should clarify how its information got out, as it seems it did.

**Detailed Comparison of the UN and other Reports**

Diagram in the UN Report (p/18) of the ordnance found in Ghouta

The UN report did not mention the ordnance’s similarity with the Russian M-14 munitions for obvious reasons, a point repeatedly stressed by Dr. Sutyagin in his presentation. However, it highlighted all other points he made about the non-standard characteristics of this particular rocket such as the circular nozzles as seen below in the relevant section of the UN report reproduced below.
The ordnance identified had the following characteristics:

Color: light gray painting

Markings:
1. Black numbers on the outside: 97-179
2. Engravings on the bottom ring of the engine: I H III 425 - 67 179 K

Dimensions:
Length ~ 630 mm
Width ~ 140 mm

The engine had 10 jet nozzles ordered in a circle at the end of the rocket with a metal electrical contact plate in the middle.

The HRW report also made the same points about these munitions with strong hints about their Russian origin again citing unnamed independent sources, but again highlighting the same points made by Dr. Sutyagin. Coincidentally, Sutyagin said that “American sources” confirm his analysis hinting at a collaborative effort.

The second rocket that the inspectors found was the one that Richard Lloyd described in his study reported in the New York Times. Here, the report gives considerable importance to the measurement of bearings of the rocket ends and hints at the direction of their origin as “northwest” - a strong hint at the culpability of the Syrian military, whose base was in that direction. This despite scanty data from only two out of four sites, and its own expression of concern that “potential evidence was being moved and probably manipulated.” Whoever reads such fine print anyway?

50-60 Liter Warhead Design
However, the most significant point the UN report made was the confirmation in the report of Lloyd's concept of a large annular-shaped warhead with crucial measurements that validated so to speak what was reported by the Times and then repeated by HRW and others. The strange coincidence is that the Times article, the Sutyagin analysis, and the HRW report all were published after the field measurements by the inspectors, but before the publication of the UN report.

Here are copies of drawings in the Times report (bottom) and the UN report. The similarities are striking.

Below is a drawing of the fired ordnance, the body has been divided into two parts.

Source: U.N. Report (P.19) Notice no dimensions, just the concept as Lloyd outlined.
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![Diagram from UN Report](image1)

Below is the diagram from the UN Report showing the dimensions of the warhead and photographs identifying various parts of the rocket and the warhead. Nearly same photographs also appear in the Lloyd report.

Here is one such snapshot from the Lloyd report:

![Diagram from Lloyd report](image2)

Compare the above with the diagram below from the UN Report (p.21)
Below is a drawing reproduced from the HRW report. There is a lot of similarity among the HRW drawing, the one by Lloyd, and the UN Report above.

Finally, here is the drawing with detail dimensions of the rocket and the warhead from the New York Times article that credited MIT Professor Postol as the source.
Notice, the HRW report said that its dimensions were based on actual field measurements. So are those in the UN report. The Lloyd and Postol provide just estimates gleaned supposedly from random You Tube videos. The table below is a comparison of the three reports.

### A Comparison of warhead dimensions given by Lloyd, HRW, and UNSC Reports

<table>
<thead>
<tr>
<th></th>
<th>How were they determined?</th>
<th>Payload Canister OD (cm)</th>
<th>Payload Canister ID (cm)</th>
<th>Payload Canister Length (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postol/Lloyd</td>
<td>Estimated</td>
<td>35</td>
<td>12.5</td>
<td>65</td>
</tr>
<tr>
<td>Human Rights Watch (HRW)</td>
<td>Actual measurement</td>
<td>35</td>
<td>12.0</td>
<td>65</td>
</tr>
<tr>
<td>UN Report</td>
<td>Actual measurement</td>
<td>36</td>
<td>12.0</td>
<td>70</td>
</tr>
</tbody>
</table>

**Striking Agreement between Estimated and Measured Values: too good to be true?**

As is evident from the above comparison, there is stunning agreement between the measured and the estimated values for the most crucial dimensions of the warhead. Interestingly, there are some differences among the three reports when it comes to certain non-critical dimensions (not shown on the table) such as the length of the rocket motor. For example, Postol/Lloyd estimated the length of the rocket motor or engine as 125 cm whereas the corresponding HRW number is 155 cm and the UN figure is 134 cm.
In science or engineering, differences between estimated and measured values are routine. It would be more so in this case given the imprecise nature of the measuring tape. If any caliper or any other instrument were used, they were not visible in the video. So, the absence of any real difference makes them look suspect. The small difference between the UN data and the other two may be explained by a careful look at the drawings. The UN appears to have included the width of end flanges making their length 5 cm longer. Similarly, the UN measured the outer diameter of the canister, which includes the wall thickness. Hence, the difference in 1 cm for an estimated wall thickness of 5 mm or about 0.2 inch. It is also interesting how the other two studies estimated so accurately from video footage.

The real point is there are differences in measurements in certain non-critical dimensions (perhaps to show that they were independent), but near-exact agreement in others that matter. This dichotomy begs an obvious question. Could they have been manufactured to provide a scientific explanation to fit the casualty figure? Is it too good to be true? Alternatively, could there be one source for them why they are almost identical? Then everybody could sing from the same hymn sheet, which appears to be the case.

**Conclusion**
Two types of munitions were found in Ghouta by the UN team. One was a rocket with 14 cm diameter. The second was a larger rocket with a 36 cm warhead. The UN report did not mention anything about a chemical payload for the smaller rocket. However, it estimated that the larger rocket was capable of delivering 50-60 liters of liquid payload.

It appears that the UN team provided photographs and physical measurements of the smaller rocket to Dr. Igor Sutyagin for analysis. His analysis was then incorporated in the UN report as its own. HRW also incorporated his analysis without crediting him.

It seems a similar process took place with the analysis of the larger rocket and its warhead. Here the outside analysts were Richard Lloyd and Theodore Postol. What was only a concept a few days ago, became the gospel after New York Times published the referenced article with enough scientific jargon and the obligatory mathematical equations and computer simulations to scare the lay reader from questioning the underlying assumptions. HRW did the same once again and claimed its analysis was independent, but the facts show otherwise.

Finally, there is no way to determine the truth behind the alleged chemical weapons attack in Ghouta in the middle of fierce fighting. As expected, there is no independent confirmation of the casualty figure. That has not stopped the US and its allies to claim that it was a crime against humanity. The UN Secretary General Ban Ki Moon has lent his voice to these claims and stopped just short of accusing the Syrian President for these crimes. But, his UN team is not free of blemish. In the past two
decades, the UN has lost a lot of credibility around the world. It is time for some house cleaning. Needless to say, respected NGO’s like the Human Rights Watch need to do the same if they are to be credible in the future.

To restore credibility of the UN process, all results of the UN team’s findings should be made public. During Syria’s chemical arsenal demilitarization it would be essential to verify the UN team’s comments about the munitions that are supposed to be part of inventory. The inspectors are going back to Syria soon. It behooves them to do so.
Chronology of Events

August 21  Alleged chemical weapons attack in Ghouta in the early hours of the morning reported

August 22  Brown Moses blog spot makes available You Tube videos of the attack. The video includes gruesome photographs of dead people, children, first aid workers. It also includes photographs of rocket parts and munitions.

August 27  The first UN inspectors travel to the sites of alleged attack, Videos of the UN inspectors collecting environmental samples and making measurements become available on “Brown-Moses” and other websites soon thereafter

August 29  UN inspectors make a second visit to the affected areas

August 30  U.S. Government publishes an Assessment of the Syrian Government’s Use of Chemical Weapons on August 21, 2013

August 30  Richard Lloyd of Tesla, Inc. makes a presentation on the rocket payload of Syrian warheads based on videos found on the internet (does not credit Brown-Moses blog although many are obviously from there), Makes the following key conclusions:
- Damage to the ground and rocket body inconsistent with large explosive payload
- Chemical payload requires a small explosive to disperse
- Rockets showed chemical filling ports.
- Dead animals nearby without visible injury indicates chemical attack

Sept. 3  Lloyd makes another presentation outlining his concept of the Syrian warhead, which he derived from the videos. He provides drawings of the rocket and the warhead with a fair amount of details, but significantly no dimensions.

Sept. 4  The New York Times publishes an article based on the Lloyd study. The article includes a drawing of the conceptual Syrian rocket and warhead, but this time with dimensions of various parts and the crucial warhead concept, which are then repeated elsewhere and described as independently developed. The drawing also includes an artist’s rendering of a rocket making a shallow penetration with the toxic chemical cloud above the rocket. The Times makes both Lloyd and Postol presentations available on the web.
Sept. 10  The Human Rights Watch releases its report and shows a diagram of the rocket with the exactly same warhead dimensions as Postol/Lloyd, but claiming that theirs was developed from actual field measurements, not photographs, but copying the Lloyd concept in ditto. HRW did not reference the Lloyd study.

Sept. 16  UN Secretary General Ban Ki Moon releases the UN inspectors’ interim report that confirms that sarin was used in a large-scale attack on August 21. The report also stated that it was clear surface-to-surface were used to deliver the gas. It went further and confirmed the concept and dimensions of the warhead described by Lloyd and Postol without, however, referencing the published study just like HRW.