

The Douma incident of 7 April 2018: what do we
know about the OPCW investigation?
Presentation to round table meeting of the
Harvard Sussex Program on chemical and
biological weapons, 6 March 2020

Paul McKeigue

Irregularities in the reports of the Fact-Finding Mechanism

- ▶ No epidemiological assessment of this mass casualty incident
- ▶ Withholding of quantitative results of chemical analyses, missing results on controls
- ▶ Unexplained delay in initiating engineering ballistics studies that were inadequately reported
- ▶ Evidence of staging in images uploaded by opposition-linked media – for instance misattribution of the cylinder at Location 4 to Location 2 – was ignored
- ▶ Blending of witness interviews, exclusion of testimony that hospital scene had been staged
- ▶ Conduct of the investigation: absence of Team Leader, interim report provided only lab results, unexplained delay during summer of 2018, reports unsigned.

Epidemiology of chlorine release incidents

- ▶ Case fatality rate in chlorine release incidents is typically less than 1:10; most victims manage to escape even if they later succumb.
- ▶ Largest recent incident was rail crash in Graniteville, S Carolina (2005): 55 tons of liquid chlorine released, 554 non-fatal casualties sought hospital treatment, 9 fatalities.
- ▶ To be effective as a weapon, chlorine has to be released on an industrial scale as at Ypres in April 1915 (168 tons)
 - ▶ Low toxicity and requirement for containment in a high-pressure cylinder makes it unlikely that chlorine would be used as a weapon delivered from the air.
 - ▶ Discharge of chlorine from a cylinder on balcony would not have been enough to kill victims on the spot in an apartment three floors below.

Chemical analyses: quantitative results withheld, results on control samples missing

- ▶ Lack of concordance between labs suggested that chlorinated organic compounds were present only at trace levels, close to the lower limit of detection.
 - ▶ trace levels of these compounds are ubiquitous where industrial products are present.
- ▶ Final Report stated:
many chlorinated organic derivatives exist in the natural background. For that reason it was important to gather control samples, wherever feasible, at locations not expected to have been exposed to chlorine gas.
- ▶ Table A9.3 lists 61 specimens collected (excluding blanks), of which two are described as control samples. Table A5.1 lists results for 33 specimens, but not the control samples.

Delay in initiating engineering / ballistics studies, inadequate reporting

- ▶ No explanation for why engineering opinions were sought six months after Douma deployment inspections, when inspection of the sites and cylinders was no longer possible.
- ▶ Three engineering/ballistics consultations are mentioned in the final report: but figures show barely legible screenshots from what appears to be a single study using finite element software (LS-DYNA?).
 - ▶ Simulations assume implausibly low drop heights for a helicopter over defended territory.
 - ▶ Figures 10 and A7.6 show cylinder at Location 4 without harness or valve.
 - ▶ Figure 12 shows the cylinder at Location 4 bouncing off the floor at 2 m/s: would not have allowed it to reach bed more than 3 metres away.

What did we know by April 2019?

- ▶ A close reading of the published FFM reports by anyone with a science background would have detected these irregularities.
- ▶ Russian delegation's proposal for "all without exception" members of the FFM team to give a briefing was voted down by the OPCW Executive Council on 14 March 2019
 - ▶ reported in a gloating tweet from Netherlands delegation
- ▶ Email in April 2019 from Inspector B to Director of Policy and Strategy, and her reply:
PS, A very interesting and insightful article has just been published by a group of UK academics on the Douma report.
Yes I have seen the analysis by the UK academics. Unfortunately, this is a discussion that is difficult to pursue out in the open, knowing that it is already being played by parties who are decidedly not bona fide supporters of the CWC.

New information about misconduct in the Douma investigation since April 2019

- ▶ Attempt in June 2018 to substitute a secretly-prepared modified report for the original interim report
- ▶ Suppression of quantitative results on environmental samples
- ▶ Suppression of inconsistencies in witness testimony
- ▶ Removal of section on epidemiology
- ▶ Suppression of consultation with medical toxicologists in June 2018
- ▶ Suppression of Henderson's Engineering Assessment
- ▶ Unreviewed report by unknown authors presented as "the Report of the Fact-Finding Mechanism".

Attempt to substitute a modified report for the original interim report

- ▶ **Modified report** was prepared in secret, but intercepted just before intended release.

Original report:

*Although the cylinders might have been the sources of the suspected chemical release, **there is insufficient evidence** to affirm this.*

Modified report:

*The team **has sufficient evidence** at this time to determine that chlorine, or another reactive chlorine-containing chemical, was likely released from cylinders.*

- ▶ Published interim report with only lab results was the result of a **stand-off** between the Team Leader Sami Barrek and the other inspectors led by Inspector B.

Doubts about alleged aerial delivery of cylinders in interim report

Original report:

*The FFM team is **unable to provide satisfactory explanations** for the relatively moderate damage to the **cylinders allegedly dropped from an unknown height**, compared to the destruction caused to the rebar-reinforced concrete roofs. In the case of Location 4, **how the cylinder ended up on the bed**, given the point at which it allegedly penetrated the room, remains unclear. The team considers that further studies by specialists in metallurgy and structural engineering or mechanics are required to provide an authoritative assessment of the team's observations.*

Modified report:

*The team considers that further analysis would need to be conducted by suitable experts, possibly in metallurgy and structural or mechanical engineering, to provide an assessment of **the trajectory of the cylinder**, in addition to the damage caused to the bed, the roof and the cylinder itself.*

Suppression of quantitative lab results

- ▶ Quantitative results were withheld from the inspectors who had deployed to Damascus.
- ▶ Modified report falsely asserted that “high levels of various chlorinated organic derivatives” were present in organic samples.
 - ▶ Chlorinated organic compounds were present mostly at levels of only a few parts per billion
 - ▶ After protests, inspectors were assured that quantitative results would be included in the interim report – but they weren't.

Suppression of inconsistencies in the eyewitness testimony

- ▶ Original report separated eyewitness accounts obtained in Damascus from those obtained in Turkey (from White Helmets), and noted inconsistencies between the statements of witnesses in Turkey:
- ▶ Of seven witnesses who reported the distribution of bodies at Location 2:
 - ▶ two reported bodies in basement only
 - ▶ one reported bodies at ground level and above only,
 - ▶ four reported bodies both in basement and above ground level
- ▶ Uploaded images had shown no bodies in the basement.
- ▶ Final report blended eyewitness accounts from different sources, with no assessment of consistency.

Images of victims: foam in airways, progression of yellow-brown skin discoloration



Suppression of the consultation with medical experts in June 2018

Panel convened at Bundeswehr Research Institute for Protective Technologies (WIS) on 6 June 2018. The “chief expert” argued that:

1. Pulmonary edema is a delayed effect of agents such as chlorine which cause acute inhalation injury. If victims of exposure to such an agent had had lived long enough for their airways to be filled with foamy edema fluid, they would have been able to escape and would not have collapsed “gathered in piles” on the spot.
2. Massive exposure to chlorine can cause laryngospasm leading to immediate asphyxiation, but in this situation there would not be time for foamy pulmonary edema to develop.
3. Cholinesterase inhibitors could have caused instant collapse and also rapid onset of pulmonary edema, but known nerve agents were ruled out by the negative lab tests.

This consultation does not appear in the timeline of the final Report of the Fact-Finding Mission.

Suppression of the engineering assessment

- ▶ Ian Henderson had been **tasked** with the Location and Munition (cylinder) study in the work plan issued by the Team Leader on 26 June 2018.
 - ▶ he was excluded from external consultations held later that year.
 - ▶ Team Leader and the FFM Leader refused to accept Henderson's engineering report on 26 February 2019.
- ▶ Chief of Cabinet attempted to have all copies of the Engineering Assessment destroyed and **ordered** that the log of the Document Registration Archive be altered to erase "all traces, if any, of its delivery/storage/whatever in DRA".

OPCW management's attempts to explain the suppression of the Engineering Assessment

OPCW management have come up with three contradictory explanations of why Ian Henderson's Engineering Assessment was excluded from the Final Report of the FFM:

- ▶ **£1:** the document was “not part of any of the material produced by the FFM”.
- ▶ **£2:** the document was “analysed, it was part of the investigation” but rebutted by the reports of “three external experts commissioned by the FFM”.
- ▶ **£3:** the document “pointed at possible attribution which is outside of the mandate of the FFM” and Henderson was therefore “advised to submit his assessment to the IIT”.

Henderson's statement to the UN Security Council makes clear that his Engineering Assessment was never considered by the FFM: both Team Leader and head of the FFM refused to accept it.

What did the FFM do with the Engineering Assessment?

- ▶ In a [briefing](#) on 28 May 2019 Arias stated that:

*The document produced by this staff member pointed at possible attribution, which is outside of the mandate of the FFM with regard to the formulation of its findings. Therefore, I instructed that, beyond the copy that would exclusively be kept by the FFM, the staff member be advised to submit his assessment to the IIT . . . As is the case with all FFM investigations, the Secretariat encourages serious and professional debates within, so all views, analysis, information and opinions are considered. **This is what the FFM did with the information included in the publicly disclosed document [the Engineering Assessment]; all available information was examined, weighed and deliberated.***

- ▶ In an unscripted panel discussion on 6 June 2019 he stated that:

*This information **[the Engineering Assessment]** was considered and it was analysed, it was part of the investigation and this information has already been given to the Investigation and Identification Team in charge of attributing responsibilities because this information you referred to is more focusing, is more targeted to to establish responsibility than to focus to the facts.*

The OPCW's investigation into "Possible Breaches of Confidentiality"

- ▶ The [Report](#) of the investigation into the leak of the Engineering Assessment, the [briefing](#) from the Director-General, and [press release](#) were used to smear Inspectors A (Henderson) and B with:
 - ▶ unequivocally false statements, for instance that Inspector A "was not a member of the FFM"
 - ▶ misleading statements whose only purpose is to denigrate: for instance that Inspector A "was rehired at a lower grade" without explaining that the P-5 grade had been merged with the P-4 grade.
- ▶ False assertion that "The majority of the FFM's work occurred after Inspector B's separation, and during the last seven months of the FFM's investigation".
 - ▶ Compared with the original interim report prepared in June 2018, the only substantive new material in the Final Report is from the engineering/ballistics reports.

The Investigation and Identification Team (IIT)

- ▶ On 28 June 2019 the IIT **published** a list of incidents on which it would focus:
 1. Al-Tamanah, 12 April 2014
 2. Kafr-Zita, 18 April 2014
 3. Al-Tamanah, 18 April 2014
 4. Marea, 1 September 2015
 5. Ltamenah, 24 March 2017
 6. Ltamenah, 25 March 2017
 7. Ltamenah, 30 March 2017
 8. Saraqib, 4 February 2018
 9. Douma, 7 April 2018

Can IIT staff resist pressures similar to those applied to the FFM?

- ▶ The director, Santiago Oñate, is employed as a consultant and cannot be a line manager. This implies that the staff of the IIT report to the Chief of Cabinet.
- ▶ The four investigator / analysts have conflicts of interest:
 - ▶ employee of Canadian security service and foreign ministry
 - ▶ employee of Netherlands Ministry of Justice.
 - ▶ former NATO intelligence officer, works for company that has NATO as main customer
 - ▶ spouse of employee of Netherlands Ministry of the Interior, her published writings cast doubt on impartiality and ability to assess evidence.
- ▶ We have learned that other individuals with even more serious conflicts of interest have been brought in to help prepare the report.

The right of inspectors to report “differing observations”

- ▶ Safeguards in the CWC for investigations of alleged use have been bypassed by establishment of the Fact-Finding Mission.
- ▶ The [Verification Annex Part II](#) of the Chemical Weapons Convention specifies in the section on reports that *Differing observations made by inspectors may be attached to the report*

and that

The provisions of this Part shall apply to all inspections conducted pursuant to this Convention.

- ▶ This clause has been understood as granting the right to attach “differing observations”.
 - ▶ Template for OPCW verification inspections includes a section for “differing observations”, but template for FFM reports does not.

Attempt by US officials to influence the inspectors

- ▶ 5 July 2018: all FFM team members were summoned by the Chief of Cabinet to a meeting with three US officials who asserted that their findings proved that there had been a chlorine attack.

Article VIII Part D of the Chemical Weapons Convention stipulates that:

*In the performance of their duties, the Director-General, the inspectors and the other members of the staff shall **not seek or receive instructions from any Government or from any other source external to the Organization**. They shall refrain from any action that might reflect on their positions as international officers responsible only to the Conference and the Executive Council.*

*Each State Party shall respect the exclusively international character of the responsibilities of the Director-General, the inspectors and the other members of the staff and **not seek to influence them in the discharge of their responsibilities**.*

Conclusions

- ▶ With backing of FR/UK/US-allied delegations, OPCW management continues to deny any misconduct.
- ▶ All reports from FFM Team Alpha and Joint Investigative Mechanism should now be considered unreliable.
- ▶ Concerns about irregularities in the Douma investigation cannot be resolved by the IIT, whose members are subject to the same pressures as the FFM team members.
- ▶ Modern standards of scientific reporting require raw data and code used for analysis to be made available.
 - ▶ No basis for classifying engineering analyses of Douma cylinders as “highly protected information”.
 - ▶ If the three external engineering reports exist and their conclusions were as described, it should be straightforward to establish how they obtained results different from Henderson's, despite using the same data.