DID ISRAEL USE EXPERIMENTAL BOMBS WITH (ENRICHED) URANIUM IN LEBANON

At the end of October *The Independent* (UK) reported on the possible find of enriched uranium in a bomb crater at Khiam in the southeastern region of Lebanon. The report is based on the partly analysis in a UK Defence laboratory of a sample that would have been taken from the crater. In the frontpage article Dr Chris Busby from the European Committee on Radiation Risks (ECRR) speculates on the use of an experimental uranium bomb by the Israeli Defense Forces (IDF).[1]

Is this the smoking gun of what the ‘believers’ in the anti-uranium weapons movement have always believed, namely that uranium is used in large guided munitions; or do we have to deal here with constructed proof caused by a state of mind, called tunnel vision?

During the Israeli attacks on Lebanon I met with a friend of the Amsterdam based grassroots organization D4net, an organization which is among others dealing with Human Rights issues and the Middle East. We both had the feeling that we have to bring a visit to Lebanon to express our solidarity with the grassroots movements in Lebanon and to build contacts with these organizations. Because the entrance to Lebanon was blocked by Israel we had to wait until the Israeli blockade was lifted, which finally happened in the second week of September. Meanwhile an article appeared in the Lebanese (English) *Daily Star* that reported on radioactivity that was found in bomb craters at Khiam and at-Tiri. Dr Mohammad Ali Kobeissi, a member of the Lebanese National Council for Scientific Research, declares that a crater caused by an Israeli munition in the Jlahiyeh quarter in Khiam contained “a high degree of unidentified radioactive materials” and: “A team from the council will test a sample from the crater in order to find out what kinds of radioactive materials it contains.” [2]

In order to verify this I decided to take the radiation measuring equipment of our office with me to Lebanon.

Our journey to Lebanon brought us into contact with a wide range of people: aid workers, artists, representatives of political parties, journalists, taxi drivers, scientists, and so on. We also saw a considerable part of Lebanon: Beirut, the south of Lebanon and the Bekaa Valley.

First we witnessed the destruction caused by Israel’s attack, and the impact that has had on Lebanon and the Lebanese people. To begin with Beirut: the city has mainly remained intact, but the part which was bombed – the Dahieh area – has been partly flattened. The buildings are mainly nine-storey apartment buildings, mostly homes. It is estimated that tens of thousands of houses have been totally destroyed. In the direction to the south and to the Bekaa Valley, all overpasses and highways have been bombed, in the Bekaa Valley most of the factories too. Now Lebanon has almost no industry, because all of the industry that was present has been largely destroyed.

It was also conspicuous that the fuel tanks at the airport and the power station with an oil terminal south of Beirut had both been set on fire by aerial attacks. In general, the villages in the south have been between 30% and 70% destroyed. Most of the targets destroyed did not serve any direct military purpose. Therefore the conclusion is that it has been attempted to damage the land and the economy in order to minimize the basis for Hizbullah’s resistance.

One of the major post-war problems is the wide-spread use of cluster munitions by the Israeli Defense Forces, mainly in the southern region of Lebanon. During the last three days of the war, while a solution was in sight, Israel used all of their 35 years old US cluster shells, stemming from stocks that were made during the Vietnam war. As a consequence the population and the mine clearance teams have to deal with submunitions (bomblets) with a high dud rate. According to Human Rights Watch:
“Cluster submunitions with high initial dud rates effectively become antipersonnel landmines.” A million of these ‘landmines’, more than the US has used in Iraq, Kosovo or Afghanistan, has been added to the thousands of landmines and unexploded shells from the previous military conflicts. Every day two or three people are maimed, wounded, paralyzed or killed by exploding submunitions, most of them are children. Meanwhile the farmers can’t harvest their crops and can’t plough and sow their winter crops, which is a serious problem, because the southern region and the Bekaa Valley are economically mainly dependent on agriculture. [3]

During the last weekend of our 15-days during stay in Lebanon we visited Dr Kobeissi in the vicinity of the town Nabatiyeh, the capital of the southern Nabatiyeh district. After explaining his career as a nuclear physicist he told about his findings in the bomb craters of Khiam and at-Tiri. He tested these pits with a geiger counter from a local scrap dealer and that these results indicated the presence of uranium. He stressed that he has never said ‘depleted uranium’ and regretted the political bickerings this has caused among the different sects. He measured 50 nanosievert (nSv) per hour in the outside rim of the pits and 300 nSv in the heart of most pits with the exception of one which measured 800 nSv/h. He also declared that these dose rates in the pits decreased considerably day by day. On the suggestion that these higher measures could be due to the concentration of uranium in the ash (‘concentrated background radiation from the burnt material’) he agreed that this possibility is highly likely.

At his home Kobeissi had collected tens of samples from shrapnel and soil from more than 50 different places, among which samples from the Khiam-crater. None of these samples measured a higher radiation dose rate than the background radiation dose rate. The samples were measured with a calibrated geiger counter from Laka Foundation.

Before I went to Kobeissi I met with Dai Williams from the UK, the author of a number of reports in which he explained the types of bunker busters that were used in Kosovo, Afghanistan and Iraq. Though in none of these reports is delivered any proof that one or more of these bunker busters contains DU he is continuing to spread this as it is almost a fact. Also, he claims the strange idea that besides DU the US military also uses ‘Natural Uranium’ (NU) in their weaponry in order to mask the use of uranium, because of the same isotope ratio NU has as the mineral uranium, which is everywhere around us. Now, Williams visited Lebanon searching for the smoking gun. While meeting him at the office of the Lebanese daily As Safir he checked all the pictures taken by one of their photographers during the war and thought to see in a number of explosions the clouds of uranium oxide dust. Remarkably, Human Rights Watch Emergencies Director Peter Bouckaert told us that only a few bunker busters have been used on bridges. Even if it might be true that bunker busters with a load of DU would exist, it is highly unlikely that these were used on bridges.

Later on it appeared that Williams took a soil sample with to the UK. Consequently Chris Busby took care for the analysis of this sample at a laboratory. It has to be noted that Busby’s reputation is controversial. Last February he was quoted in the international media asserting that uranium oxides dust particles from the 2003 Iraq War were found on air filters at the British nuclear weapons complex in Aldermaston. It is very unlikely that dust particles traveled that far (considering wind-directions, etc), but there is another reason why this is very improbable. Franz Schönhofer, who was involved in building modern measurements stations across Europe states: “That these claimed elevations would have occurred at only one single sampling station after the “particles” travelled all the way from Iraq to Aldermaston is not explained in this report. Europe is tightly dotted with aerosol sampling and measurement stations.” [4]

On October 28 The Independent reports about the possible use of “a secret new uranium-based weapon” by the IDF in southern Lebanon. Chris Busby bases this claim on two soil samples with “elevated radiation signatures” taken from a bomb crater and the partly analysis of one of the samples, a 25-grams soil sample. The analysis of this sample indicates the presence of (very) slightly enriched uranium. According to journalist Zeinab Ghosn from the Lebanese daily As Safir this report has caused panic among the Lebanese population. Actually unnecessary panic, because the partly analysis
of a 25-grams soil sample is too small and as a consequence the obtained data is too poor to make conclusive statements. Therefore Busby’s claim has to be condemned as a highly irresponsible act. Though Israel has a bad reputation in using dirty and experimental weapons in Lebanon – the use of phosphor bombs has been proven during the last war – there is no reason to accuse Israel of the use of radioactive weapons.

In the first week of November UNEP reports that there investigation teams have not measured radiation levels higher than the background level in Lebanon. In addition, based on laboratory analyses of samples, UNEP excludes the military use of DU or use of uranium with another composition of isotopes in Lebanon.[5] On the analogy of the measurement stations above the question is raised why Busby c.s. finds slightly enriched uranium, while the UNEP and the Lebanese National Council for Scientific Research find nothing. Even more peculiar, in the Daily Star of December 7 Busby states that again (water) samples from the Khiam crater, has been tested positive for (slightly) enriched uranium.[6] The council and UNEP have both vowed to follow-up on the issue and conduct more tests. Though the results of the independent scientific teams employed by UNEP are not yet published it has to be said that they are experienced and have a good reputation in accuracy and scholarship concerning there field work and laboratory analyses on DU. On the contrary Busby can’t be considered as an unbiased scientist, just like his colleague Dai Williams (psychologist). From scientific point of view they are at least controversial.

The results of UNEP are in line with the expectations. Laka had already taken the position that the use of DU munitions by the IDF had to be almost excluded. Firstly Hizbullah hadn’t any armoured targets, therefore there was no need at all to use antitank shells. Secondly there is no single indication that DU or uranium with another isotopes composition are manufactured in cruise missiles, large guided munitions or so-called bunker buster bombs, or whatsoever, let alone that such weapons might have been used. This position was more or less confirmed by the measurements done by the undersigned, a co-worker of Laka Foundation who participated in a delegation from the Amsterdam-based group D4net. As said above, tens of samples, including samples from the craters at Khiam and at-Tiri, were measured at the home of Dr Kobeishi in Nabatiyeh. No higher level than the background radiation level was detected. The results of UNEP confirms that there is no evidence of uranium-based munitions used in Lebanon. Their report will be published one of these days (mid-December).

**Contact:**
Henk van der Keur
Laka Foundation, Ketelhuisplein 43, 1054 RD Amsterdam, The Netherlands.
Tel: +31-20-6168 294; Email: info@laka.org; Web: www.laka.org

**Sources:**
[1] The Independent, 28th October 2006. Robert Fisk: Mystery of Israel's secret uranium bomb - Alarm over radioactive legacy left by attack on Lebanon
http://news.independent.co.uk/world/fisk/article1935945.ece
Chris Bellamy: An enigma that only the Israelis can fully explain
http://news.independent.co.uk/world/middle_east/article1935931.ece
http://www.d4net.nl/node/236
more reviews on Busby's report (scroll to the middle of the page):
http://www.dubbs.info/controversy.htm
[6] Khiam bomb crater tests positive for uranium
(Busby stated in an e-mail message from December 11 that he was wrongly quoted in this article. “Depleted” has to be “enriched”.)