THE DECLINING CREDIBILITY OF THE IAEA

Yesterday, I pointed out that the IAEA is preparing to release a report on potential development of nuclear weapons in Iran almost exactly two years after the departure of Mohamed ElBaradei as its leader. As discussed in that post, one of the key pieces of evidence that is anticipated to be discussed in the report is a large steel container in which explosions are carried out. The claim will be that this chamber is being used to test the use of conventional explosives as a trigger device for a nuclear weapon.

Even before the official report comes out, there are now serious questions about the credibility of the claims on the steel tank. In a post yesterday at Moon of Alabama, b informs us that there is a likely very different use of the conventional explosive technology and the steel chamber where the explosions are carried out. A key to unraveling this mystery was an examination of the area of expertise for the Russian scientist cited as the source of the explosive technology in the Washington Post's "scoop" of the expected content of the IAEA report. From the Moon of Alabama post:

> Dr. Vyacheslav Danilenko is a well known Ukrainian ("former Soviet") scientist. But his specialties are not "weapon" or "nuclear" science, indeed there seems to be nothing to support that claim, but the production of nanodiamonds via detonations (ppt). According to the history of detonation nanodiamonds he describes in chapter 10 of Ultrananocrystalline Diamond – Synthesis, Properties, and Applications (pdf) he has worked in that field since 1962, invented new methods used in the process and is related

> with Alit, an Ukrainian company that produces nanodiamonds.
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> /snip/
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> Some years ago Iran launched a big Nano Technology Initiative which includes Iranian research on detonation nanodiamonds (pdf). Iran is officially planing to produce them on industrial scale. It holds regular international conferences and invites experts on nanotechnology from all over the world. It is quite likely that famous international scientists in that field, like Dr. Danilenko, have been invited, gave talks in Iran and cooperate with its scientists.
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> Producing nanodiamonds via detonations uses large confined containers with water cooling, for which Danilenko seems to have a patent. The Ukrainian company he works with, Alit, shows such a detonation chamber on its webpage as does the picture above from the French-German nano-research company ISL. The detonation nanodiamond explanation thereby also fits with another allegation from the IAEA report:

So it turns out that the most likely use of the "bus-sized steel container" is the production of nanodiamonds. As b points out in an update, that explanation now has reached the Guardian (though without citing Moon of Alabama, I would note):

> Previous IAEA reports have said Iran appears to have received foreign assistance in its experiments with advanced explosive devices, and the Washington Post named Vyacheslav Danilenko, a Russian former atomic scientist, as a key advisor, who is said to have given lectures and contributed papers on explosives at Iran's now

> defunct Physics Research Centre, which had ties to the country's nuclear programme.
>
> Danilenko did not reply to emails seeking comment, but sources close to the IAEA said he told its inspectors that he believed his advice was being used for civilian purposes. He is now carrying out research for a Czech-based company which uses explosives to make tiny diamonds for industrial uses.

It will be very interesting to read the actual IAEA report and to see how much, if any, space is given to a discussion of Danilenko's career and research interests. If his work on production of nanodiamonds is not mentioned, that will be a very serious blow to the credibility of the report. Concentrating only on the potential weapons use of a technology, especially when it has been brought to Iran by a scientist with a noted history in a peaceful use of the same technology, would demonstrate a lack of balance that would essentially render the report useless.

Sadly, IAEA already has issued another worthless report. Last week, Joby Warrick reported in the Washington Post (in a story that I didn't find until this morning) that an IAEA "discovery" of what was claimed to be a centrifuge site for uranium enrichment in Syria was actually a factory for the spinning of cotton:

> After a four-year search for hidden atomic facilities in Syria, U.N. officials appeared this week to have finally struck gold: News reports linked a large factory in eastern Syria to a suspected clandestine effort to spin uranium gas into fuel for nuclear bombs.
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> But after further probing by private researchers, Syria's mystery plant is looking far less mysterious. A new report concludes that the facility

> and its thousands of fast-spinning machines were intended to make not uranium, but cloth – a very ordinary cotton-polyester.
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> "It is, and always has been, a textile factory," said one of the researchers, Jeffrey Lewis, a nuclear policy expert at the Center for Nonproliferation Studies and publisher of the blog Arms Control Wonk.
>
> /snip/
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> The reports, citing Western diplomats and former U.N. officials, said aerial images of the factory were being intensely studied by the U.N. nuclear watchdog, the International Atomic Energy Agency, which has been scouring Syria for evidence of other hidden atomic facilities.

So the IAEA "discovers" a centrifuge site that in less than a week is debunked as a textile factory. And now, even before its report is released, the IAEA's claims on an explosive trigger device may well be an equally misdiagnosed facility for production of nanodiamonds.

But if technical failure is not enough, it would appear that political forces are all too eager to fit this potentially flawed report into the ongoing anti-Iran stance the US has been promoting. From a CNN article from yesterday:

> White House spokesman Jay Carney said Monday that while he did not "want to get ahead of the report, I do expect it will echo our concerns. And I think that the fact that Iran continues to misbehave, if you will, is something that concerns not just the United States, but the broader international community. And that international community, because of the actions we have taken, is now focused on pressuring

> Iran. … You can be sure that we will continue to work to pressure Iran, to isolate Iran."
>
> The IAEA report comes on the heels of recent U.S. allegations of an Iranian plot to assassinate the Saudi ambassador to Washington and could strengthen the U.S. case for tougher measures against Iran.

Carney is confident the report "will echo our concerns". That is probably just an unfortunate choice of language, but it sure sounds like the "concerns" drive the report. Also note how deftly CNN then follows up the "Iran continues to misbehave" wording from Carney with a reference to the Scary Iran Plot. The way in which the IAEA report fits into this CNN article makes the IAEA appear to be just one more tool that the US is using in its propaganda campaign. That is a sad departure from an organization that is meant to be an independent watchdog relying on accurate technical assessments and complete investigations.

Update: The IAEA report has now been released. It can be accessed here (25 page pdf) on the ISIS website (David Albright's organization).