Twitter Thread by Andrea Stricker



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As @laurnorman reports & Iranian officials attest, Iran has notified the IAEA of its intention to start an assembly line at Esfahan to produce uranium metal as part of advanced fuel for the Tehran Research Reactor (TRR).

It's worth exploring Iran's experience with u-metal, a key material that can also be used to produce nuclear weapon cores. We know that Tehran has quite a bit of experience thanks to the Nuclear Archive documents, seized by Israel in 2018. 2/

The Nuclear Archive contained info about Iran's plans to build a pilot uranium metal production facility, called Shahid Mahallati. There, Iran would become adept at u-metal and nuke weapon component fabrication: https://t.co/kAA334GW54 3/

In 2002, Iran was also building a production-scale uranium metal & nuclear weapon components facility, Shahid Boroujerdi, in an underground tunnel complex at Parchin, the military site famous for Iran's early nuclear weapon-related high explosive work: https://t.co/0ffAKmQEAV 4/

In late-2003, under increasing international pressure, Iran halted its crash nuclear weapons program, the Amad Plan, and stopped construction on Shahid Boroujerdi & likely halted work at Shahid Mahallati. Current statuses are unknown because the IAEA has never visited. 5/

Satellite imagery shows that the uranium metals workshop at the Shahid Mahallati site was "gutted and abandoned between late 2010 and early 2011. This may have had to do with the exposure of the covert Fordow enrichment plant in 2009. The IAEA has never visited. 6/

In 2003 and 2004, Iran also razed what is believed to be the original site of uranium metal work at the Physics Research Center, at Lavizan-Shian. It may have produced a UD3 neutron initiator here, a process involving u-metal. https://t.co/HviZJmMxrM 7/

The IAEA stated in 2020 that it would have wanted to visit Lavizan again, if not for Iran's extensive razing of the site. 8/

As @TheGoodISIS asks, what became of the uranium metal equipment, personnel, and capabilities? They speculate that "post-Amad military organizations, such as the Organization of Defensive Innovation and Research (SPND), likely inherited" these. https://t.co/kAA334GW54 9/

.@TheGoodISIS also notes that “Iran may have hidden some of Shahid Mahallati’s assets and materials at Turquz Abad, a secret site unmasked by Israel in 2018 and later visited by the IAEA.” 10/

Bottom line: Iran has vast experience in uranium metal production, and is taking a highly provocative step by establishing a new plant under the guise of producing TRR reactor fuel -- given what we now know about its previous efforts to produce u-metal for nuclear cores. 11/

One must ask if Tehran is simply establishing a dual-purpose nuclear weapons-related facility out in the open, moving forward with establishing further breakout capabilities should it decide to pull the trigger. It is certainly raising the risks of military action. 12/

*Note that #3 should read Iran did build Mahallati & carried out extensive work. This report contains photos of the work: making "surrogate material components" where "melted material was cast & finished into what are evidently nuclear weapon shapes." https://t.co/kAA334GW54 13/