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IRANIAN MISSILES: THE NATURE OF THE THREAT

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On July 7, Iran announced that it had conducted the final test of its Shehab-3 medium-range ballistic missile. The Iranian announcement confirmed an earlier report in the Israeli media, and the Iranian spokesperson emphasized that the missile test was conducted a few weeks ago and that "there was nothing new in the Israeli reports." The Iranians also stressed that this was the last in a series of systems tests.

The Shehab-3 is a single stage ballistic missile and is based on the technology of the Soviet-built R-17 (Scud-B) ballistic missile. Its estimated range is 1,300 km – just enough to reach targets in Israel – and it can carry a payload of approximately 700 kg. For the time being, the Shehab-3 is thought to carry only conventional warheads but it is probably intended to carry a nuclear warhead if Iran manages to produce one small enough. A chemical or biological warhead is also a possibility.

The Shehab-3 project was started in the mid 1990's, soon after Iran acquired the capability to produce the Scud-B and Scud-C ballistic missiles. As early as 1994, it was assessed that North Korea had transferred prototypes of its No-Dong ballistic missile to Iran. The No-Dong is itself a development of the Scud missile. Like

the Scud, it is a single-stage, liquid-fuelled missile, with a single engine – essentially a longer and thicker version of the Scud designed to achieve a range of 1,300 km. The Shehab-3 is thought to be identical to the No-Dong or a further refinement of it. (The Pakistani Ghauri missile also seems to be very similar to the No-Dong, thus, to the Shehab-3.)

Initial ground tests of the Shehab were carried out in 1997 and its first test flight took place in September 1998. Since then, several more tests have been run, but some of them were deemed to be failures. The first public view of the missile came in December 1998, when it was displayed on a mobile launcher in a military parade. In July 2000, the Commander of the Iranian Revolutionary Guards Corps (IRGC) announced that the organization had formed five new ballistic missile units – apparently to be equipped with Shehab-3 missiles. In late 2001, American and Israeli intelligence sources estimated that Iran had begun serial production of the missile and would be able to produce up to 20 missiles a year.

Israelis have stressed the threat that the Iranian missile program poses to Israel. As far back as 1997, Israeli Defense Minister Yitzhak

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Mordechai warned that the missiles, coupled with the Iranian nuclear weapon program, constituted a serious danger to Israel. And in 1999, Brigadier General Amos Gilead, head of the military intelligence research department, said that Iran's weapon programs were the gravest threat to Israel's security.

Iranian speakers did not deny that the missile program was meant to counter-balance Israel's threats. For example, Brigadier General Safavi, Commander of the IRGC, said in December 2000 that "Iranian missiles can cause irreparable damage to either Israel or the United States." Nevertheless, the Iranians were quick to add that the missiles were for "defensive purposes."

Iran's missile program is not limited to the Shehab-3 and its engineers are working on longer range missiles, currently dubbed the "Shehab-4" and "Shehab-5." These are designed to achieve the ranges of 2,000 km and 5,000 km, respectively. However, the real significance of such missiles is not so much in their ability to hit more distant targets as in their ability to launch satellites into orbit. An Iranian-made satellite, even the simplest one, is a major goal of the program, if only because of the enormous prestige it would confer on Iran.

Israeli fears of Iran's missile program were apparently a bit premature, although not altogether unfounded. This week's announcement indicates that the missile weapon system was not ready for use until now. And even if the development phase is successfully concluded, Iran must still go through the production and system deployment phases. Notwithstanding Iranian claims that these objectives have also been met, it is reasonable to assume that those announcements are premature and that it might take another 2-3 years before the system is fully operational.

Whatever the case, the rationale behind the whole Iranian ballistic missile program means

that Israeli threat assessments are serious. On the other hand, it is also necessary to recall that threats can be perceived from the opposition direction. For example, in his 1997 assessment of the emerging Iranian threat, Defense Minister Mordechai also warned that Israel would strike preemptively if Iran threatened to use its missiles. And Iranian strategists noted as early as 1992 that Israel's acquisition of the F-15I long-range attack aircraft jeopardized Iran's security.

In its present configuration, the Iranian system does not constitute a serious danger to Israel. Even if Iran can launch a small number of conventionally-armed missiles, the damage those missiles could do is comparable to the damage inflicted by the Iraqi "al-Hussayn" missiles fired on Israel in 1991. Of course, the danger would rise exponentially if and when Iran is able to deploy nuclear warheads on its missiles. But in that case, Iran would not only threaten Israel -- the Shehab-3 can cover targets in southern Russia, the Gulf States, Turkey, Pakistan and India, and it would also pose a threat to American interests throughout the region.

Israel's options to counter the threat are limited. A preemptive strike against Iran's missile or nuclear assets is problematic because the targets are too far away, too numerous and dispersed, and too well protected -- some of them in deep underground installations. Thus, the remaining Israeli option against a nuclear-armed Iran would be deterrence -- perhaps by abandoning the policy of ambiguity in favor of a declared nuclear posture. But since the problem would not be Israel's alone, it is reasonable to expect that the United States will act even before Israel does to make sure that the threat to its interests does not materialize.