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Iran's Support of the Hezbollah in Lebanon

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Analysts and reporters need to be careful to stick to the facts in covering Iran's role in the current fighting. A number of sources -- including Israeli officials and officers -- have begun to use the Lebanon crisis to find new reasons to attack Iran, partly because of the nuclear issue and partly because it is now seen as Israel's most serious enemy. The end result is blowing up suspicions and limited facts into full-blown conspiracies.

Iran's Role in the Hezbollah

US intelligence has not seen evidence that Iran dominated or controlled the Hezbollah, but for most of the Hezbollah's existence, it has seen Iran as a major source of money and weapons. There have long been cadres of Iranian IRGC forces, with elements of the Iranian Al Quds force (the IRGC element that trains forces abroad) present in Lebanon and training the Hezbollah for some time.

Syria too, however, plays a role and there seem to be regular meetings between Iranian, Syrian, and Hezbollah leaders. One such meeting seems to have occurred in Damascus between Hassan Nasrallah, the leader of Hezbollah and Hamas leader Khaled Mashal, with possible participation by Syrian and Iranian intelligence officers, shortly before Hezbollah's kidnappings of Israeli soldiers and the current fighting began.

From what is known of the Hezbollah, however, it uses Iran and Syria as much as it is used, and Hezbollah is more than willing to put pressure on Israel in a crisis or keep up low level pressure on Northern Israel to show it is a leader in the fight against what it truly does see as a "occupier" and "Zionist enemy."

Iranian Military Support to the Hezbollah

Most sources indicate that the size of the IRGC training and liaison forces with Hezbollah dropped in recent years, as the Hezbollah cut back on its full time cadres to levels of about 500-600 full time fighters, although estimates put the number at anywhere from 300 to 1,200. There are at least several thousand "reserves," but most have little real training and experience.

The days in which the IRGC led training camps in Lebanon seem to be over, and uniformed and "official" IRGC personnel have not been visible recently. It is clear, however, that IRGC and Syrian intelligence and military officers

and personnel meet regularly with the Hezbollah forces and cadres of IRGC personnel seem to have stayed in low profile roles with its full time fighters. The Hezbollah also seems to send some cadres for expert training in Iran and possible Syria.

Reports that Iran provides the Hezbollah with several hundred million dollars worth of aid a year are sharply exaggerated guesstimates based on what the equivalent cost would be in US prices. Iran almost certainly does, however, provide financial aid and goods and military services worth some \$25-50 million in real-world terms.

Iran's Deployment of Short Range Artillery Rockets

At the same time, however, Iran and the IRGC transferred massive numbers of rockets to the Hezbollah to give them a capability to attack Israel in spite of its barriers at the border.

These include some 10,000 short range, small Katyusha-type rockets with individual launchers that have small warheads and ranges of 19-28 kilometers (12-18) miles that can only strike about 7-12 miles into Israel unless launched right at the border. The Hezbollah does not need Iranian aid to fire such weapons and IRGC advisors normally do not go forward or risk Israeli capture. (The rockets are sometimes called Katyushas but Iran has significantly increase the range of the original Russian system)

As of July 15th, the AP reported that some 350 of these rockets had been fired against Israel in the current round of fighting. A massive escalation over the normal low-level harassment fire of random rounds fired against settlements and Israeli military targets.

Iran's Deployment of Long Range Artillery Rockets

The most significant changes in terms of Iranian support for the Hezbollah, however, is that Iran has also given the Hezbollah much longer-range rockets that can be fired into major cities like Haifa -- targets that are far more valuable and have far more propaganda value than the settlements and bases near the border, and Hezbollah has begun to use them.

The LA Times reported on July 15th at that such a rocket that hit a hill near Haifa, and struck more than 30 kilometers into Israel (20 miles). It also

reports that Israeli Brig. Gen. Yossi Baidatz, the head of IDF army intelligence research, told the foreign affairs committee of the Israeli parliament Thursday that Hezbollah had about 100 rockets capable of traveling 40-70 kilometers (25-45 miles). (Haifa was hit by Iraq Scuds twice in 1991; one exploded harmlessly on a hill and another hit the sea.)

Such rockets may also have been used to hit Tiberius three times. AP reports that this was the first attack on the city since the 1973 Mideast war. AP reports that at least two houses were directly hit, but only a few light injuries were reported. AP also reports that residents were ordered into bomb shelters, and Israeli media reported that hundreds of tourists were fleeing the city. Police used megaphones to urge bathers at the Sea of Galilee to seek shelter. This choice of targets is significant because northern Israel and Tiberius, are key tourist sites for Israeli and foreign travelers, and such strikes can do major damage to tourist income.

The exact type of unguided rockets is unknown. Most experts speculate that Iran has given the Hezbollah anywhere from 20-120 such rockets. Most are large, heavy systems by Hezbollah standards that hard are for land crews to site and aim, unless they are part of integrated vehicle transporter, erector, launchers or launch clusters. They require considerable expertise to be aimed and use effectively. They may well be beyond the capability of the Hezbollah to operate without direct IRGC support in the field.

Such rockets are not particularly lethal. They cannot be aimed with any accuracy and most areas in cities mean that one building at most would be hit seriously, and most rockets would either not hit a target or blow out windows. They can easily kill the inhabitants of 1-2 buildings, however, if they have a lucky strike. Their "panic" effect is also serious and cities don't function when they are under constant sporadic attack.

To put the possible weapons Iran could supply in perspective, they include the 122 mm 40 round Hadid rocket launcher system, which mounts the launcher on a 6 X 6 truck, and the entire load can be salvo-fired in 20 seconds. Its maximum range is about 20.4 kilometers, and a hydraulic crane is fitted so the launcher can be reloaded in about 8-10 minutes. It is not clear how many Hadid launchers are currently deployed among Iranian forces, or what variation of such rockets and vehicles Iran has transferred.

The Fajr or Fajr 3 is a 240 mm artillery rocket with a range of up to 40-43 kilometers called the Fajr 3. This system has been used against Israel by the Hezbollah in the past, and seems to be adapted directly from a North Korean design. Both it and Fajr 5 have accuracies at maximum range with CEPs as poor as one kilometer. Under ideal conditions, CEPs under 0.5 kilometers may be possible.

Iran has shown the system mounted in a 12 rocket launcher on a Japanese Isuzu 6 X 6 truck. It has wrap-around fins at the rear that unfold after launch. It is 5.2 meters long and weighs 408 kilograms. The warhead weighs 90 kilograms, of which 45 kilograms is high explosive.

The Al-Fajr 5 is a 333mm unguided artillery rocket normally deployed in a four round launcher that can deliver up to a 200kg payload up to a 75km range. This system can be deployed as a single launcher system without a dedicated launch vehicle, but launch normally is more sophisticated and used a TEL-type vehicle to carry, aim, and fire the four rockets.

According to Jane's, Iran's Aerospace Industries Organization has announced that new versions of this weapon make it easier to move and quicker to launch. The launcher is now deployed on a Mercedes-Benz 6 x 6 forward control chassis that is part of a complete single vehicle weapon system rather than simply launcher. It has good cross country mobility, an enclosed cabin for the three man crew, and hydraulically operated stabilizers lowered to the ground before firing. The AIO claims that a radar can be added to give the system the capability to track and engage naval targets

In addition, Iran is producing variants of Chinese and Russian 122 mm rockets called the Arash and Noor, as well as variants of the Chinese 107 mm rocket called the Fajer and Haseb. Some of these rockets may have chemical warheads when deployed in Iranian forces.

Iran's land forces also operate a number of long-range unguided rockets, including the Shahin 1 and 2, Oghab, and Nazeat. Israeli officials are reported to believe Iran has given the Hezbollah such variant of these rockets capable of traveling 120 kilometers (75 miles). (The LA Times reports that Eitan Ben-Eliyahu, a former air force commander, said this on Israel Radio on Friday.) Israel is such a small country that such rockets could reach the heavily populated fringes of Tel Aviv. Harretz newspaper

reported Friday that reported that Israeli officials believed Hezbollah might have rockets that could go even farther.

Various sources provide very different estimates of the capability of these systems. "Best guess" descriptions are:

--The Shahin 1 is a trailer-launched 333 mm caliber unguided, fin-stabilized artillery rocket with a solid propelled rocket motor, a maximum range of 13 kilometers, and a 190 kilogram conventional or chemical warhead. The Shahin 2 is an improved version of the Shahin 1 with a maximum range of 20 kilometers, and a 190 kilogram warhead. The Shahin evidently can be equipped with three types of warheads: a 180 kilogram high explosive warhead, a warhead using high explosive submunitions, and a warhead that uses chemical weapons.

--The Oghab is various described as a 230mm to 320 mm caliber unguided artillery rocket which is spin stabilized in flight, has a maximum range of 34 kilometers, and a 70 kilogram HE fragmentation warhead -- although chemical warheads may be available. It was used by Iran against Iraq in the Iran-Iraq War during the later phases of the "war of the cities."

While it may have a chemical warhead when deployed in Iranian forces, it lacks the range and/or accuracy to hit anything smaller than large area targets like assembly areas and cities. It has an operational CEP that has proved to be in excess of 500 meters at maximum range. Further, Iran has no way to target accurately the Oghab or any other long range missile against mobile or point targets at long ranges, other than a limited ability to use RPVs.

--The Nazeat (or Mushak or Iran 130) is a TEL launched system with conventional and possibly chemical and biological warheads. The full details of this system remain unclear, but it seems to be based on either technology related to the Russian FROG 7 artillery rocket or Chinese technology similar to the CSS-8 missile (and land attack modification of the SA-2), and uses a solid fuel rocket, with a simple inertial guidance system. Nazeat units are equipped with communications vans, meteorological vans, and a global positioning system for surveying the launch site.

There are believed two variants of the Nazeat solid-fueled rocket system -- a 355.6 mm caliber rocket with 105 kilometers range and a 150 kilogram

warhead, and a 450 mm caliber rocket with a reported range of 130-150 kilometers and a 250 kilogram warhead. Other sources put there maximum range a 130 and 150 kilometers respectively. Both systems have maximum closing velocities of Mach 4-5, but both also appear to suffer from limited reliability and accuracy. There are also reports of a variant called the Mushak 200 with a 200 kilometer range and possible some form of guidance.

These conventional long-range rocket systems now seem to lack the accuracy and long-range targeting capability to be used against anything other than populated areas and static rear area targets. All would have to use chemical or biological weapons to achieve significant lethality, although all could inhibit operations in the target area and potentially force Israelis to don protective gear and take chemical-biological defense measures if there was any fear Iran would give the Hezbollah such weapons -- something that seems extremely doubtful. What they do offer is a relatively survivable way for the Hezbollah (and Iran) to strike at Israeli towns and rear areas.

As a result, any sustained or large-scale rocket attacks on Haifa, Israel's third-largest city with some with 270,000 residents -- or any mix of Israeli cities -- could trigger a massive new round of escalation by Israel, a series of major air strikes, and perhaps a significant invasion.

It should be noted, however, that Iran is developing guided versions of its artillery rockets. One is called the Fateh 110, a solid-fueled system whose guidance system and range is unknown. It is believed to have a maximum range of around 170 kilometers and a diameter of .45 meters. Test firings have taken place since 2002. German sources and Global Security indicate some sources claim it may be derived from the Chinese DF-11, which has a range of 300-400 kilometers, and a nominal payload close to 1,000 kilograms. (which could carry a nuclear or biological weapon.)

Iran's Deployment of Other Weapons

The Hezbollah has also had significant Iranian and Syrian support in other areas, and in helping to train anti-Israeli Palestinian groups. Hezbollah forces now have modified AT-3 Sagger anti-tank missiles reworked to carry tandem warheads designed by an Iranian engineer.

It is unclear how much interaction took place between Iran and the Hezbollah in developing improved IR motion detectors, remote IR and radio triggers, and shaped charge plates for IEDs. Iran have helped develop the systems that did much to drive the IDF out of southern Lebanon and it certainly has provided virtually the same technology used by the Hezbollah to Iraqi militias and perhaps Sunni insurgents.

Iran and Syria have also provide significant numbers of longer-range mortars.

Many of these "security barrier crossers" are small enough to be smuggled into Gaza and the West Bank by human mules and will fit in tunnels under the barriers between Egypt and Gaza.

Iran's Deployment of UAVs

The Hezbollah have also had Iranian supply and aid in using the Iranian Mohajer unmanned aerial vehicle (UAV) that they have used for surveillance over the north of Israel. Hezbollah first began to fly UAVs when it made two flights over northern Israel between November 2004 and again in May 2005. This brought about an increase in the level and intensity of Israeli surveillance flights over southern Lebanon.

One of the UAV sorties reached the coastal town of Nahariya and the other Hezbollah claims reached Akko. Israel disputes this claim asserting that the second UAV flight reached just south of Nahariya before turning back. The Israeli Air Force did not initially detect either of the two UAV flights, explaining that the air defenses do not pick up on such small, low-flying, slow-moving objects. Should the UAV missions continue to be undetected for the first few minutes of their flight over Israel, it is feared in Israel that Hezbollah will use the UAVs to carry small bombs.

Iran's Deployment of the C-802

This may well already have happened. A missile hit an Israel ship -- a Saar 5-class missile ship named the "Spear" on July 14th and crippled it. AP reports, however, that this was not a UAV strike, but rather a strike by a far more sophisticated Iranian-supplied anti-ship missile called the C-802.

The C-802 has steadily evolved over time and it is unclear which version was used. The earliest version had a solid rocket engine, a 815 kilograms weight and a range of 42 kilometers. The latest version is a long-range turbojet missile with a maximum speed of Mach 0.9, range of 120 kilometers, 165 kg. HE payload, and active inertial guidance with search track as well as guidance radar.

The C-802 is a complex system uses separate or integrated TEL, radar, and fire control launch vehicles, although a lighter land launcher and fire option may exist for use on conventional trucks. It is not the kind of system that Iran would normally deploy to the Hezbollah without IRGC crews and control.

The system presents other risks for the future. Global Security and other sources report that a land-attack version may be entering service called the YJ-22 with a range up to 400 kilometers , and possible GPS-assisted and terrain contour matching [TERCOM] guidance. Such a missile could reach any target in Israel and do so with far more precision than unguided artillery rockets. Iran is reported to be cooperating with North Korea in such developments.

AP says that an Israeli intelligence official (Brig. Gen. Ido Nehushtan?) said that about 100 Iranian soldiers are in Lebanon and helped fire the Iranian-made, radar-guided C-802 at the Israeli ship late Friday, and that the Iranian forces were from the IRGC, a force controlled by supreme leader Ayatollah Ali Khamenei.

Nehushtan is quoted as saying that "We can confirm that it was hit by an Iranian-made missile launched by Hezbollah. We see this as very profound fingerprint of Iranian involvement in Hezbollah." The strike is also important because the Israeli ship is one of Israel's most modern missile ships. It carries Harpoon and Gabriel missiles, and has one of Israel's most advanced systems for detecting and electronically jamming attacking missiles. Israel states, however, that the ship's missile detection and deflection system was not operating, apparently because the sailors did not anticipate such an attack.

AP also reports that another Hezbollah missile also hit and sank a nearby merchant ship at around the same time, Nehushtan said. He said that ship apparently was Egyptian, but had no other information. Nehushtan said the

body of one of the four Israeli soldiers missing in the attack was found aboard the damaged warship. Other Israeli military officials said two bodies had been found.

Iran will certainly benefit from Hezbollah strikes in some ways. They distract from its nuclear activities. They show the Arab and Muslim world that Iran is a government willing to strike at the Israeli enemy -- even though it is not Arab or Sunni. Israel's reprisals build Arab and Muslim anger against the US as Israel's allies, and make its charges that Iran is "terrorist" seem in Arab and Muslim eyes as if Iran supports "freedom fighters."

That said, Iran has been supplying rockets and UAVs for years. There is no evidence that it dominates the Hezbollah or has more control than Syria, and the fact its ties to Hezbollah are so well known creates more problems for Iran in European eyes, and raises more risk of Israeli strikes or US strikes in the future.

Until there are hard facts, Iran's role in all of this is a matter of speculation, and conspiracy theories are not facts or news.