

Iraq's Weapons of Mass Destruction: Current and Future Challenges

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Brief Analysis

UNSCOM has been able to establish that in the second half of 1986, Iraq began work on at least fifteen different missile systems, in hopes of finding a weapon that would allow them to put pressure on Iran to end the war. Iraq has admitted to all fifteen of these programs, but UNSCOM suspects that there were still other programs that Baghdad has not yet divulged. Viewed in its entirety, the Iraqi ballistic missile effort was huge, involving dozens of facilities, thousands of people, and billions of dollars. Each of the fifteen Iraqi programs UNSCOM has so far uncovered included production, research, development and design. The personnel involved in this program essentially had carte blanche to spend money to import technology systems and do whatever else was necessary to provide Saddam with the weapons he wanted.

The most successful Iraqi missile program was the effort to increase the range of its Soviet-supplied Scud-B missiles, known as project 144 and headed by General Ra'ad Isma'il. This program ultimately succeeded in producing the al-Husayn missile, which became the mainstay of Iraqi missile attacks during the Iran-Iraq and Gulf wars. As UNSCOM understands it, the feasibility study for this program began in late 1986. The fourth test of the missile in August of 1987 was a major milestone because it validated the basic design of the modified system. By April, 1988 the Iraqis were producing three al-Husayns per day. In just a year and a half (and beginning with almost no experience with liquid propellant missiles) the Iraqis went from producing zero to three missiles a day—a very impressive achievement.

The other fourteen missile programs encompassed a wide range of development approaches and potential capabilities. There were other range modification efforts such as the al-Abbas and the "al-Hussein short." There were a number of turnkey projects such as the Badr 2000 missile (developed jointly with Argentina and Egypt) which generally never got off the ground. Other projects include the al-Abid—Iraq's so-called space launch vehicle, the Autumn missile, and the Harif S-13 to name a few of the ongoing projects. At the time of the Gulf War, Iraq was even working on designs for medium-range missiles (thousands of kilometers in range). These were subsequently destroyed by the Coalition air campaign or by UNSCOM.

Iraq's Contingency Plans during the Gulf War

Iraq readily admits that it filled ballistic-missile warheads with chemical and biological agents during the Gulf War and deployed the missiles to southern and western Iraq. In the event Baghdad was hit by any weapon of mass destruction, Saddam intended to launch these missiles at targets in Saudi Arabia and/or Israel. Some Iraqi officials have even claimed that Saddam had pre-delegated launch authority to his field commanders to ensure retaliation even if he were killed or cut-off from communicating with the missile units. Indeed, Iraq had also developed modified drop tanks to enable aircraft to better disseminate biological agents. Probably as part of these contingency plans, one of the modified drop tanks was found at an airbase in southeastern Iraq, and three others were discovered at Rashid Air Base, outside of Baghdad.

Iraq's Current Missile Capabilities

UNSCOM has made considerable progress in eliminating Iraq's proscribed ballistic missile programs. In particular, UNSCOM has verified the destruction of 817 of the 819 Scuds Iraq imported from the Soviet Union. In addition, UNSCOM believes it has a good feel for the progress made by many of Iraq's indigenous programs, although questions do remain concerning indigenous production of missile engines and of key imported components such as turbopumps and guidance systems. However, UNSCOM has uncovered considerable evidence that Iraq does not intend to comply with the UN resolutions on ballistic missiles over the long-term. According to the UN resolutions, Iraq is allowed to possess and develop missiles with ranges less than 150 kilometers. Quickly after the end of the Gulf War, Baghdad began developing missiles it claimed met those criteria. The designs the Iraqis brought to UNSCOM are thinly designed efforts to subvert the restrictions: for instance, many Iraqi designs had theoretical ranges of 149.7 or 149.8 kilometers. Essentially, Iraq's current ballistic missile program is again under the supervision of General Ra'ad, and focuses on the al-Samud missile, which uses a reverse engineered SA-2 engine with Iraqi changes to the guidance and other systems. In reality, this is a mini Scud. UNSCOM is closely following the program and believes that Iraq does not intend to actually produce the missile nor have their been orders for it from the military. In other words, this program is primarily intended to keep Iraq's engineers employed and working on new techniques that they could use to quickly reconstitute their ballistic missile programs whenever Saddam gives the word.

In addition, UNSCOM has uncovered other Iraqi activities that indicate Baghdad is already trying to maintain its capability to build proscribed ballistic missiles. For example, the Iraqis were caught working covertly on the so-called G-1 program. This is a surface-to-surface missile similar to another missile, the Fahd missile, Iraq had been developing before the war which could reach proscribed ranges. Iraq conducted several covert flight tests up through April of 1993. In addition, only a few years ago, Iraq was caught Russian gyroscopes for use in ballistic missiles. Inspectors also found computer simulations of long-range missiles, done after the war on software the Iraqis had claimed they did not have.

Breakout Scenarios

The key issue in determining how quickly Iraq could reconstitute its ballistic missile program is whether Iraq has been able to obtain critical components related to missile-guidance systems. However, under even worst-case circumstances, it would take Iraq considerably longer than just a few months to be able to produce new, operational missiles.

This Special Policy Forum Report was prepared by Jonathan Lincoln. ❖

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