

Myths and Lessons of Iraqi Artillery

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The initial euphoria over the performance of coalition forces during Desert Storm operations has now given way to after-action analyses and follow-on recommendations. These processes will play a critical role in determining the future of the US Field Artillery (FA).

However, there appear to be a number of artillery myths spawned by the success of US and coalition artillery operations during the conflict. But improper conclusions today could have catastrophic consequences tomorrow.

This article isn't meant to detract from the outstanding success of Desert Storm and the exceptional performance of US troops during that conflict. Rather, it joins the ongoing discussions about the war and counters some of the emerging myths about the artillery of our potential adversaries.

Myths: False Beliefs

Simply stated, Desert Storm success appears to be leading some individuals to the dangerous conclusion that the artillery systems fielded by Iraq were incapable of inflicting massive damage on opposing forces. A small number of these individuals are going even further to apply this false conclusion to a broad range of potential artillery threat situations.

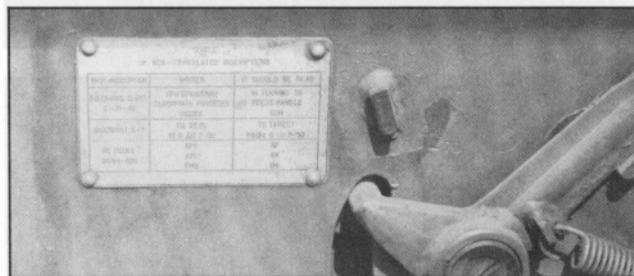
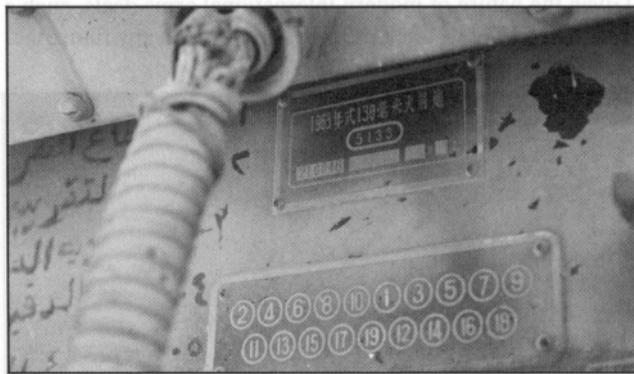
For example, the spectacular success of US indirect fire assets has already prompted some to reconsider recent assessments of Soviet artillery systems. Because of the percentage of Iraq's systems that are traceable to Soviet origins, these same observers may be tempted to declare that Soviet military technology isn't as effective as they have been led to believe.

While such a revisionist interpretation is perhaps understandable, it's based on a number of incorrect assumptions and conclusions. Moreover, such jumps in illogic only will foster a complacent attitude that could have devastating effects on future US FA modernization programs.

Myth: Iraqi Equipment and Munitions Equal Soviet. The first myth is that Iraqi artillery was the same as Soviet artillery. This is simply not true. Iraq fielded a plethora of artillery systems that had been captured, copied and procured on the world market. While some of these systems were Soviets, others had a "mixed bag" of capabilities. A few of them were quite inferior to Soviet designs in areas like mobility and ammunition options. Other Iraqi systems had superior performance capabilities in terms of range and rates of fire, which have serious implications.

The failure of the Iraqi artillery to perform was, in part, due to the geographically mixed collection of its systems, which led to serious difficulties with training. At the lowest levels, the large number of international systems created challenges in crew training. Several captured weapons feature hasty Arabic translations of instructions painted on weapons above the data plates, the originals in Chinese, Russian or English. There were other indications that Iraqis weren't well-trained on their equip-

ment. But it would be a serious mistake to assume another enemy in a future tactical scenario would have the same poor training standards.



Challenges to Operator Training. In these three photographs, you can see hasty Arabic translations of instructions painted on Iraqi foreign-made weapons.

Of equal importance and affecting training was the apparent lack of leadership present in Iraqi combat operations. Anecdotal reports comparing Iraqi units "overrun" versus ranks of prisoners captured indicate some relatively high percentages of senior leaders "beating feet."

Additionally, because of the Iraqi's mixed bag of artillery systems, adequate command and control was difficult to achieve. The weapons weren't designed to operate in an overall tac-

tical structure—there was no system of systems—and were packaged together in a confusing network that decreased overall battlefield effectiveness.

Iraqi difficulties were further heightened by the fact that they bought multiple ammunition options, also from a wide range of suppliers. This situation led to serious logistical problems that Soviet artillery forces simply wouldn't face.

Not only was Iraq faced with ammunition logistical challenges, but also initial reports indicate its artillerymen were denied the most sophisticated ammunition combinations. For example, the reports indicate a complete lack of improved conventional munitions (ICMs) in Iraqi battlefield inventories. Given the nature of modern international arms deals, such a lack of lethality would hardly be applicable to any future tactical scenarios.



The captured ammunition in these two photographs shows Iraq's multiple ammunition option, which led to its logistical problems.

Myth: Soviet Artillery's Ineffective. Perhaps the most dangerous myth that appears to be emerging from the victories of Desert Storm is the belief that the Soviet hardware fielded by Iraq is somehow representative of the equipment found in modern Soviet units. In fact, the most modern Soviet military hardware found in Iraqi inventories is no longer produced in the USSR. Iraq's 152-mm, 2S3 self-propelled howitzers have been replaced in many Soviet units by the 152-mm gun-howitzer 2S19. The 2S19 features a 52-caliber long cannon as well as advances such as automated loading and semiautomatic fire control. Similar examples can be found in Soviet multiple rocket launchers (MRLs) and fire control equipment.

Myth: Iraqi's (Read Soviet) Artillery Mix Limited Its Maneuverability. A related myth that must be disproved involves the mix of weapons fielded by Iraq. The Iraqi weapons and ammunition were not of pure Soviet manufacture or supply, and the fielded systems did not approximate a Soviet weapons mix.

For example, a large percentage of Iraq's artillery systems were towed models. These systems frequently were placed in permanent defensive positions. Their dug-in configuration, combined with a lack of enough or appropriate prime movers, precluded the possibility of "shoot-and-scoot" operations and facilitated the job of US and other coalition target planners.

Myth: Iraqi Counterfire Capabilities Limited. A fourth myth involves hostile target acquisition and targeting capabilities. Specifically, the relative lack of hostile counterfire received by coalition artillery forces could be mistakenly interpreted as a reflection of limited counterfire potential.

The fallacy of this belief is evident with a look at the number of Iraqi military pieces we captured. Many precious target acquisition assets appear to be both undamaged and unused. Unused equipment says absolutely nothing about equipment effectiveness. Reports indicate that the systems that were employed—such as counterartillery radars—were used without the most basic operational survivability precautions.



An Undamaged (or Unused) Iraqi Radar. Unused equipment says absolutely nothing about its effectiveness.

Some Desert Storm Lessons

We must expose the myths about Iraqi artillery operations, but we also can draw from our experiences.

Capitalize on Our Strongpoints. To begin with, there's the general opinion that US and coalition forces were able to defeat Iraqi forces through a combination of teamwork, tactics, training, technology and leadership. As with all positive trends, it's hoped that US artillery decision makers will continue to exploit and expand our strengths in these areas.

Emphasize International Artillery Expertise. Desert Storm also provides Western artillery planners some specific points to ponder regarding future worldwide contingencies. For example, the mix of Iraq's artillery inventory emphasizes the international nature of modern arms procurements. It no longer will be enough for artillerymen to identify the capabilities of



A dug-in Iraqi 2S1 152-mm howitzer is captured by coalition forces. Note the unexpended rounds in the ammunition rack inside.



A Chinese-made armored personnel carrier-ambulance abandoned by the Iraqis.



An Iraqi Astros II, a multiple rocket launcher made in Brazil, is damaged in Desert Storm.



A Soviet-made BM21 destroyed by a US air attack.

the 2S1, 2S3 and one or two Soviet MRLs. Artillerymen must take a much broader outlook in analyzing threat data.

Continue and Improve Our Survivability Techniques. Many of these international systems have range and rate-of-fire capabilities far superior to US or Soviet systems. This is particularly significant when viewed from a potential counterfire perspective.

The worldwide arms market not only includes an impressive array of cannon and rocket systems, but also a variety of sophisticated target acquisition assets. When properly employed, the potential combinations could be devastating to unprepared US forces. We'd be very foolish to assume that a future enemy with such artillery systems also would perform as poorly as the Iraqis; therefore, we must continue to train on and devise survivability techniques.

The Bottom Line

Artillery planners must seize this opportunity to broaden their threat outlook. At the same time, they must realize that the poor performance of Iraqi artillery using "Soviet" equipment says little about the multiple modernization programs taking place in Soviet artillery circles. We must be aware the Soviets undoubtedly also are studying the lessons of Desert Storm. As developers of and international arms dealers for some of the

most sophisticated artillery systems in the world, our continued awareness and appreciation of the true capabilities of Soviet systems is critical.

In the final analysis, there's little doubt that the US artillery can take credit for tremendous success during Desert Storm. But now is the time to hone our performance edge. US artillerymen can't allow success to lead to complacency and smugness—it could be a deadly combination.



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