

Supporting Warfighting Commands

Dr. Tom Allen and Dr. Michael Fischerkeller

Since 2004, two programs have directly engaged IDA's work force in supporting the senior warfighting commands in Iraq and Afghanistan. In a pilot effort in 2004, IDA researchers, sponsored initially by the Joint Improvised Explosive Device Task Force, went to Iraq to analyze the effectiveness of efforts countering the improvised explosive device (IED) threat. Each year since, IDA researchers, sponsored by the Joint IED Defeat Organization, have deployed to Iraq for tours of up to 12 months, performing tactical and operational analyses of the IED threat for Multi-National Corps-Iraq (MNC-I) and its subordinate commands. In 2005, the Joint Advanced Warfighting Program (JAWP)¹ at IDA began deploying analysts on four-to-six-month tours to help Multi-National Force-Iraq (MNF-I), and later U.S. Forces-Afghanistan (USFOR-A), frame and analyze strategic choices. To date, more than 70 IDA analysts have deployed to war zones under these programs, contributing to the effectiveness of military operations and gaining valuable insight and experience.

Iraq

Beginning in 2004, IDA analysts helped establish an IED-specific data management capability in Iraq and developed products to inform commanders and staffs of trends, capability gaps, challenges, and opportunities. Leveraging these products, researchers at IDA mined the data to inform systems development, training, and force structure deliberations. IDA analyses also illuminated emerging tactics and activity patterns of insurgent networks, identified sources and motivations of their civil support, and helped track their finances and anticipate their operations. One detailed IDA field analysis highlighted the vulnerabilities of tactical vehicles to IEDs and the comparative effectiveness of Mine Resistant Ambush Protected (MRAP) vehicles (example right). Another analysis tracked the effects of the troop surge, showing dramatic changes in patterns and levels of violence. This work contributed to the MNF-I Commander's testimony to Congress. IDA also identified critical performance characteristics of explosively formed penetrators, identified channels of external support to insurgent groups, tracked the development

of homemade explosives, and characterized the counter-IED capabilities and limitations of Iraqi Security Forces.



Photo courtesy of U.S. Government

Figure 1: Testing of a Cougar Mine Resistant Ambush Vehicle.

In 2007 and 2008, two IDA researchers served on the MNF-I staff as embedded analysts. One analyst applied state-of-the-art political science research on nation-state instability to provide a strategic framework for characterizing and assessing success. This work helped to inform choices on troop strength and resource allocation. The same analyst also explored the interaction of a small set of salient factors: assertion of sovereignty, re-emergence of socio-cultural norms, and the introduction of non-normal constructs (e.g., democracy, market economy) in shaping Iraq's political evolution. Another analyst developed a campaign assessment framework, applying it to the detainee release program. The detainee program results were reported directly to operators in the field and later to a broader community of interest through an article in *Joint Forces Quarterly*. Other IDA research examined how the structure of the Iraqi state is likely to develop in terms of federalism and power sharing. The analysis identified key unresolved political questions and generated alternative scenarios based on how they might evolve. Then, based on the history of and academic literature from democracy building in post-conflict, multi-ethnic states, the analysis

¹ The JAWP, a unique mix of IDA analysts and military officers serving on joint duty assignments, is funded by the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics and overseen by a government board of directors chaired by the Deputy Commander of Joint Forces Command and includes flag-level representatives from the Joint Staff, OUSD-AT&L, and OUSD-Policy.

derived predictions and policy implications for what types of political structures might be more or less conducive to stability and democracy in Iraq.



Figure 2: Co-author Dr. Michael Fischerkeller meets with General David Petraeus.

Afghanistan

In 2004, the first IDA researcher deployed to Afghanistan established the primary database for examining enemy IED attacks and Coalition responses. Based on experience in Iraq, IDA researchers then helped convert the Afghan database to meet a new Central Command standard. Subsequent IDA analyses identified trends, differentiated by security conditions in various parts of the country, and analyzed high-casualty IED events. The latter study was shared directly with units in the field to help inform training improvements and responses when under attack.

In 2009, JAWP support to current operations shifted its focus from Iraq to Afghanistan, attaching an IDA analyst to USFOR-A's Directorate of Strategic Communications in Kabul. Among the resulting products was a geographic



Figure 3: Defunct Soviet tanks just outside of Kabul, Afghanistan.

lay-down and description of performance characteristics (type media, range, emitter strength, etc.) of the array of communications systems through which information can be disseminated in Afghanistan from within and outside the country by both the Coalition and insurgent groups. A second analyst has since been sent to Kabul to advise the Director of Intelligence on regional threat finance strategy. The JAWP also deployed a team of military and civilian analysts to explore opportunities for reducing the in-country support footprint, improving the efficiency of fire support, and reducing reliance on Afghan roads and forward operating bases. Yet another JAWP-led team deployed to Afghanistan to perform a force optimization analysis.

Conclusion

IDA's support to warfighting commands, sustained with volunteers for over five years, continues to produce important insights and options for warfighters, while simultaneously giving IDA's work force an unparalleled opportunity to both learn from and contribute to military operations.