

How the Army Needs to Lead Transformation in the Operational Energy Campaign

By Chief Warrant Officer 4 Ronaldo M. Lachica

The Army defines operational energy (OE) as “the energy and associated systems, information and processes required to train, move, and sustain forces and systems for military operations.”¹ OE includes electricity required by Army installations for daily activities, the fuel required to operate vehicles and generators for training and contingency operations, and even the batteries Soldiers carry in their rucksacks to operate various electrical devices.

The average fuel demand per Soldier has increased from about one gallon a day during World War II, to 20 gallons a day during operations Enduring and Iraqi Freedom (OEF and OIF).²

As the military has become more reliant on energy resources, the Army faces an urgent need to formulate an effective and viable path for its tactical fuel and energy future. Because our national energy requirement is increasing, developing a strategy that incorporates alternative energy sources has become a priority for the Department of Defense (DOD) and the Army.³

The Army realizes it must focus more on increasing its energy efficiency and reducing its logistics footprint without degrading effectiveness. Achieving the Army’s OE goals will not only reduce its massive energy dependence, it will also save lives and money. For example, reduced energy requirements means fewer fuel supply convoys for enemies to target in combat operations.

“This [fuel] dependency translates to a vulnerability, as a significant proportion of U.S. combat casualties in OIF and OEF may be attributed to resupply operations,” according to a 2010 white paper by the Army Capabilities Integration Center.⁴

In addition, fewer dollars spent on fuel and other energy costs will mean more funds available for other priorities as the Army moves into much leaner fiscal times.

In 2010, the DOD consumed nearly 5 billion gallons of petroleum in military operations, costing \$13.2 billion—a 255-percent increase over 1997 costs.⁵

According to a Defense Science Board Study, operations suffer from an unnecessarily high, and growing, battlespace fuel demand that compromises operational capability and mission success, requires an excessive support force structure at the expense of operational forces, creates more risk for support operations than necessary, and increases life-cycle operations and support costs.⁶

To successfully accomplish its OE goals and reduce the organization’s energy consumption and needs, the Army will need to fundamentally transform its internal perspective on energy consumption and infuse a new vision at all levels of the service.

Leading Change

There are many approaches to organizational change, but for the Army to implement a successful OE campaign, I believe it must adapt the eight-step transformation process described by John P. Kotter in his *Harvard Business Review* article, “Leading Change: Why Transformation Efforts Fail.”

Kotter did not create this process but derived it from his observations from the past decade of watching more than 100 companies try to remake themselves. The companies varied in demographics—large and small, in the United States and overseas, profitable and failing.⁷

Their efforts at transformation had mixed results—huge successes and failures and some that fell somewhere in the middle. I feel that the Army can glean some direction in implementing its OE initiatives from Kotter’s lessons learned.

Kotter’s process is ideally suited for the Army be-

¹ “Army Operational Energy,” <<http://www.arcic.army.mil/operational-energy.html>>, accessed Dec. 12, 2012.

² “Power and Energy Strategy White Paper,” Training and Doctrine Command, Army Capabilities Integration Center, Fort Monroe, Va., April 1, 2010, p. 2.

³ “Final Draft Tactical Fuel and Energy Strategy for the Future Modular Force,” DRS Technical Services, Richmond, Va. May 18, 2009, p. vii.

⁴ “Power and Energy Strategy White Paper,” p. 2.

⁵ “Energy for the Warfighter: Operational Energy Strategy,” Department of Defense, Washington, D.C., May 2011, p. 4.

⁶ “More Fight—Less Fuel,” Defense Science Board Task Force on DOD Energy Strategy, Department of Defense, Washington, D.C., February 2008, p. 3.

⁷ John P. Kotter, “Leading Change: Why Transformation Efforts Fail,” *Harvard Business Review*, March–April 1995, p. 59.

cause of its traditional top-down approach to transformation. The Army already has the Joint Capabilities Integration Development System process that considers doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) in the planning and problem-solving process. The idea behind applying the DOTMLPF consideration is to identify and fix known capability gaps. This process synchronizes easily with Kotter's change approach when applied to the OE campaign.

According to Kotter, a successful change process requires a series of eight distinct steps that should progress in sequence without a critical mistake in any of the steps.

"The most general lesson to be learned from the more successful cases is that the change process goes through a series of phases that, in total, usually require a considerable length of time. Skipping steps creates only the illusion of speed and never produces a satisfying result," Kotter writes. "A second very general lesson is that critical mistakes in any of the phases can have a devastating impact, slowing momentum and negating hard-won gains."⁸

Establish a Sense of Urgency

The first step of Kotter's suggested framework for transforming an organization is to establish a sense of urgency. Kotter argued that the urgency rate is high enough when 75 percent of senior leaders are honestly convinced that change must occur because the current system is not working or needs to improve.

An effective way for the Army to establish a sense of urgency is to publish or revise doctrine. Doctrine is the first consideration of DOTMLPF. Top levels of the Army develop doctrine, which then flows down all the way to the Soldier level through Army doctrine publications.

Doctrine is specific and elicits more of the required cooperation to move the campaign forward. The Army has yet to publish overarching doctrine addressing the implementation of OE and therefore has yet to establish a sense of urgency at all levels. Army leaders must address this critical requirement lest the lack of action in this first step doom the OE campaign from the start. Integrating OE into Army doctrine would establish a sense of urgency.

Form a Powerful Guiding Coalition

Kotter identifies the second step to transforming an organization as forming a powerful guiding coalition. This ties directly to the organization in DOTMLPF. The Army almost has this step right. The Army des-

igned its G-4 as the lead agent for OE, and several other organizations have initiated programs in support of the campaign. What the Army lacks is a proponent whose primary function is to integrate OE considerations into day-to-day activities. This organization should have enough power to lead the change effort.

For example, the Army established the Army Safety Center in 1978 and charged it with the responsibilities of implementing the Army Safety Program and serving as the Army's primary advisor on accident prevention. On Jan. 31, 2005, the Army redesignated the Army Safety Center as the Army Combat Readiness/Safety Center with an expanded mission to become the center of gravity for all loss-related areas.⁹ Likewise, the Army must establish a proponent for OE in order for the campaign to be successful.

Create a Vision

Kotter's third step in leading transformation is to create a vision to help direct change efforts and develop strategies for achieving that vision. This step coincides with the leadership aspect of DOTMLPF. Several Army and DOD studies manage to lay out the overarching goals of an OE campaign and the strategies for accomplishing OE goals, but they do not provide a singular, adequately presented, sound OE vision.

To start, the Chief of Staff of the Army needs to issue a sound and sensible vision statement on OE. Commanders down to at least the brigade level would then need to issue their vision statements in support of the OE goals. Commanders draft policy statements to communicate their vision regarding safety and equal opportunity. Commanders must do the same for OE.

Communicate the Vision

The fourth step of Kotter's approach is to communicate the organization's vision. The training and personnel components of DOTMLPF address this step. Soldiers and leaders should undergo mandatory training on OE. This training should happen down to the unit level in order to disseminate the vision and its accompanying strategies to the lowest level.

The Army also needs to develop an OE program that communicates its initiatives from the DA level down to company level, just as it does with the Army Safety Program and the Equal Opportunity Program. This would require training for Soldiers and civilians on OE initiatives. The Army could then train and assign OE officers and noncommissioned officers.

⁸ Ibid., pp. 59–60.

⁹ "U.S. Army Combat Readiness/Safety Center History," <<https://safety.army.mil/usasc/ABOUTUSACRSAFETYCENTER/tabid/278/Default.aspx>>, accessed Dec. 12, 2012.

Empower Others

The fifth step is to empower others to act on the vision. To their credit, leaders across the Army are initiating several efforts in support of finding OE solutions with respect to the materiel and facilities components of DOTMLPF.

The Army needs to continue the strategy of requiring installations eventually to produce as much energy as they consume. The design of new facilities must continue to factor in energy efficiency. Army vehicles in the future need to require less fuel.

Senior leaders should encourage creative thinking and risk taking that produces efficient and effective results. Those who produce results in support of the OE vision should be recognized and rewarded.

Create Short-Term Wins

The sixth step in transforming an organization is to plan for and create short-term wins. The Army has already detailed near-term milestones at the strategic level.¹⁰ These objectives span the DOTMLPF considerations.

The Army has objectives it hopes to achieve by 2014 in the areas of infrastructure and expeditionary power, ground vehicles, aerial vehicles, and Soldier power. The milestones for 2024 build on the objectives of 2014. Milestones achieved by 2024 lead to gains in 2030 and beyond.

Kotter suggests applying pressure in this step to assist with the change effort. The Army needs to employ some type of forcing function to pressure agencies responsible for achieving these short-term goals. In addition, the OE program at each level needs to establish achievable short-term goals.

Consolidate Improvements

The seventh step of Kotter's change approach is to consolidate improvements and produce still more change.

The Army has a long history of incorporating lessons learned and best practices into its operations. This would apply equally to its OE efforts. However, a formal methodology should be in place to gather this data. The Army needs to capture data from all areas of DOTMLPF and ensure it is reflected in new doctrine, organizational change, Soldier and leader training, and materiel and facilities development and management.

Some of the doctrinal and organizational changes could take years to develop. In the interim, lessons learned and best practices could be captured and distributed using the many electronic methods of delivery that have been created since the beginning of

OEF and OIF. The Army could establish a knowledge center similar to the networks now in place for many Army organizations.

Institutionalize New Approaches

The final step is to institutionalize the new approaches. To be successful at this step would be to have OE integrated in all areas of DOTMLPF across the Army.

We have seen this emphasis placed on many other major Army initiatives such as safety, suicide prevention, and sexual harassment prevention. This cultural integration also needs to happen with OE.

The Army needs to adapt Kotter's eight-step approach to achieve its OE goals. It must first establish a sense of urgency by developing an overarching doctrine addressing OE. It should then form of a powerful guiding coalition by establishing a single proponent for OE.

Next, senior Army leaders must create a sound and sensible vision, communicate that vision, and empower others to act on the vision. The Army then should plan for and create short-term wins. The next step is to consolidate all of these short-term wins in order to produce even more changes. Gradually, OE will become institutionalized and an integral part of Army culture, enabling the Army to achieve energy efficiency in support of the real goal of operational effectiveness through energy conscious operations.

Each step of the organizational change approach described by Kotter contains elements of DOTMLPF, so the Army already has the framework to transform its OE culture. Achieving the goals of the OE initiatives will result in Soldiers that are more capable and a better Army for the 21st century.

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¹⁰ "Power and Energy Strategy White Paper," pp. 12, 16, 19–20, 23–24.