Improving Tactical Cost Forecasting to Optimize Readiness

■ By Col. E. Deacon Maddox

Forecasting the cost of readiness at the tactical level is a critical skill that has implications at the operational and strategic levels. As the Army continues operating in an environment of fiscal uncertainty, tactical-level forecasting skills take on increased significance. Over the past three years, the Army has begun fielding enterprise tools to assist with resource management; however, more is needed at the tactical level.

This article examines the state of forecasting at the tactical level through the lens of one installation, Fort Bliss, Texas, as units there prepared for and executed operations under federal sequestration in 2013. I will attempt to address what impediments exist to accurate cost forecasting at the tactical level and how the Army can remove these obstacles in order to optimize readiness in an environment of fiscal uncertainty.

Pfc. Michael Mazzarella, a cannon crew member with the 4th Battalion, 27th Field Artillery Regiment, 2nd Brigade, 1st Armored Division, awaits orders in an M109A6 Paladin during Network Integration Evaluation 14.1 at Fort Bliss, Texas, Oct. 24, 2013.

Background

On March 1, 2013, the U.S. government began operating under the Budget Control Act of 2011 (BCA). Commonly referred to as "sequestration," the BCA mandated across-the-board spending cuts split evenly between defense and nondefense accounts.

Gen. Raymond T. Odierno, chief of staff of the Army, told the Senate Armed Services Committee on Feb. 12, 2013, that the Army's share of the first round of sequestration was estimated to be $12 billion, with nearly half of that coming from operations and maintenance Army (OMA) accounts.

Then Deputy Secretary of Defense Ashton B. Carter testified during the same hearing that, in accordance with the BCA, the Army was bound by law to make the cuts on a straight percentage basis across all nonexempt accounts, including OMA, once sequestration took effect.

On Feb. 21, 2013, Gen. David M. Rodriguez, the Forces Command commander, issued an order titled "U.S. Army Forces Command (FORSCOM) Optimizing Readiness to Ensure a Highly Capable Force Execution Order (EXORD)." In the EXORD, the FORSCOM commander outlined very specific instructions regarding how subordinate units should plan and execute training for the remainder of fiscal year 2013. The commander's intent stated, "Success ahead requires a shift in mindset from 'doing more with less,' to 'doing what matters with less.'"

Less than a week later, on Feb. 27, Gen. Rodriguez chaired a video teleconference involving leaders from each FORSCOM installation. The purpose of the conference was for the FORSCOM commander to hear how each of his subordinate commanders planned to implement his EXORD guidance and to outline how the cuts to OMA would affect the Army's combat forces stationed in the continental United States.

As the conference unfolded, it was clear that this was a priority effort at each installation and that significant preparation had gone into analyzing available resources, prioritizing efforts, and making hard decisions regarding the readiness of the force. On its face, it seemed a simple thing to do: implement clear guidance on a specific task. The devil, as the phrase goes, was in the details.

> The enormity of the funds being cut during sequestration virtually ensures that savings will be realized by optimizing training resource forecasting. Aside from the direct savings, an effective forecasting program coupled with a force trained in basic resource management would improve trust throughout the Army.

At Fort Bliss, preparation included a comprehensive review of scheduled deployments, planned training exercises, and discretionary initiatives underway to address a host of issues ranging from improving Soldier quality of life to training area improvements.

As part of the preparation, representatives from each major subordinate command at Fort Bliss came to the senior commander's headquarters in the week before the video teleconference to brief their training schedules, expenditures, and associated spending plans for the remainder of fiscal year 2013.

This series of meetings ultimately proved to be an effective way for all involved to understand requirements and priorities, reach compromises, and recommend prudent cuts. However, a lack of software tools coupled with inexperienced staff members presented significant impediments to efficiency.

Estimating the Cost of Training

What the Fort Bliss sequester planning sessions repeatedly demonstrated was that most of the participants had little experience forecasting the costs of training. This lack of experience resulted in inaccurate forecasts of what units would need, and in almost all cases, unit representatives underestimated their costs because they had incomplete information.

For example, fuel—one of the bigger costs in readiness—was not discussed comprehensively in any single spending plan. Repair parts, another high readiness expense on an armor-heavy installation, were accounted for marginally. Although the unit representatives were keenly aware of the costs of external contracts needed for interpreters, role players, and field toilets, they generally had no understanding of how much it would cost to move a brigade and its equipment to a combat training center for a training exercise.

The senior commander's staff tried to fill in the gaps by querying historical data in the Army's financial and retail supply systems of record. The resulting reports summarized the units' financial obligations in time and, because the data came from systems of record, reflected actual costs; however, these reports lacked the context of what events were occurring at the time of the obligations.

For follow-up meetings, unit representatives gathered and brought historical training information: calendars, schedules, and operation orders. The senior commander's staff produced detailed logistics and finance reports, including document history from the Integrated Logistics Assistance Program (ILAP) and financial reports from the General Fund Enterprise Business System (GFEBS). The participants then manually reconciled the data sets to produce a more detailed history, which in turn produced spending plans that were more accurate.

Estimating Maintenance Costs

On Feb. 13, 2013, Lt. Gen. Raymond V. Mason, Army Deputy Chief of Staff, G–4, published a memo-

randum to the Army called, "Waiver Guidance Based on Fiscal Uncertainty." The memorandum allowed commanders to maintain equipment at a lesser level called, "fully mission capable plus safety."

This memorandum stands as another example of how seemingly simple guidance from the strategic level resulted in inaccurate forecasts at the tactical level because of a lack of effective tools. As with FORSCOM's "Optimizing Readiness" EXORD, the fully mission capable (FMC) waiver required significant manual reconciliation in order to understand the financial implications of the change.

The information required to analyze item priority designators (to determine whether a repair part would bring an item to FMC status) and essentiality codes (to determine if a repair part was required for the safe operation of the item) for the FMC waiver resides in the ILAP document history. After cancellations and rejections of requisitions have occurred, the actual amount of funds obligated within the Army's retail supply system resides in GFEBS.

Any useful tool for building a model and scenarios for repair parts ordering must be developed internally, but the technical expertise required to build the databases and spreadsheets following the business rules of the retail supply and finance systems is rare. To the hypothetical and often insistent questions from the senior commander and his deputies about what kinds of savings would be realized by going to the lesser maintenance standard, only scientific guesses could be made without a reliable percentage of statistical error.

Case Conclusions

Four major conclusions can be drawn from both cases. First, there is no automated way for commanders to tie expenses to discrete training events. Second, no available analytical tools allow a commander to place a historical event in the context of financial obligations in order to forecast the costs of similar events in the future.

Third, any reconciliation among training management, resource management, and retail supply systems will require significant manual intervention by highly skilled individuals at multiple echelons. Finally, the stakes are high and margins are shrinking; accuracy matters. Getting to an 80 or 90 percent solution for expenditure planning is not sustainable in the current fiscal environment.

Recommended Solutions

To remove the impediments and improve forecasting accuracy, the Army should provide resource management training and a cloud-based tool that allows personnel to select and task organize force elements from GFEBS. The Army should provide resource management training for officers and senior noncommissioned officers in the Captains Career Course, the Command and General Staff Officers' Course, the Senior Leader Course, and the First Sergeant Academy.

Such training should focus on how to draft (and defend) a spending plan that supports training objectives within the higher commander's budget and how to read GFEBS reports. At a minimum, graduates of these courses should be trained on how to request and analyze GFEBS expense reports outlining the following:

- ☐ Government travel, to include meals and incidental expenses, per diem, transportation, and rental vehicles.
- ☐ Strategic movement in a training capacity, to include troop and equipment movements by air, rail, and line haul.
- ☐ Contracts and military interdepartmental purchase requests, to include government purchase card expenses, service contracts, and equipment and facility leasing.
- ☐ Supplies requisitioned from the Army's automated retail supply system, to include general supplies, packaged petroleum products, construction supplies and repair parts.
- ☐ Medical supplies requested through medical logistics channels and bulk fuel purchased from Defense Logistics Agency–Energy.

The Army should provide a cloud-based tool that allows personnel to select and task organize force elements from GFEBS and subsequently tag GFEBS documents with a named training event. This tool will essentially synchronize the unit's Digital Training Management System records with GFEBS.

From these inputs, the tool must be capable of merging training events with expenditures to render event cost summaries. Moreover, the tool must be capable of using these summaries to model future events and produce spending plans at the company, battery, and troop levels. A convenient way to visualize this tool would be to imagine a form of Intuit Quicken or Mint for GFEBS.

The enormity of the funds being cut during sequestration virtually ensures that savings will be realized by optimizing training resource forecasting. Aside from the direct savings, an effective forecasting program coupled with a force trained in basic resource management would improve trust throughout the Army.

These solutions would allow tactical commanders to provide context to what is otherwise random data at the strategic level. The Army has long prided itself on its ability to succeed with a "90 percent solution." In the age of sequestration and steep reductions in OMA funding, the Army will have to rethink this maxim.

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