How to Make Sense of Battlefield Reports Using Analog Methods

by First Lieutenant Christopher K. Counihan

Introduction

A vast amount of information flows through a command post during large-scale ground combat operations, and intelligence staffs must use a systematic approach to process the information into intelligence. As the tempo of operations increases along with requirements for movement and maneuver, tactical units may find themselves dependent more on their own collection and analysis as communications can be constrained. Using a journal entry system and map overlays as a backup to the Distributed Common Ground System-Army will help capture and process all the available information, while allowing the intelligence staff to analyze patterns that will help predict threat actions and reduce operational uncertainty.

Problem

This article addresses the difficulty that a battalion or a squadron encounters when conducting situation development in large-scale ground combat operations. Intelligence officers and staff must collect all the information possible that pertains to the enemy and process this information into intelligence through analysis. However, the amount of information that a command post receives can be so great that the intelligence staff may quickly lose sight of the end state of information collection and analysis, or may not be able to account for all the information when making an assessment. Currently, only unit standard operating procedures (SOPs) exist to guide the staff through situation development, and these SOPs can differ greatly from unit to unit.



An Indiana National Guardsman reads a map during a reconnaissance and surveillance exercise at the Lešť military training center in Slovakia, November 1, 2019.

Solution: A System of Comprehensive Analysis

One solution to this problem is a system of comprehensive analysis. This system involves a collection of map overlays coupled with a journal entry system that captures all the information available through reports in a command post and displays the results in a color-coordinated manner for easy and quick analysis. These tools provide the intelligence officer and analyst a simple yet effective tool to determine and predict patterns indicative of threat actions. Analysis of these patterns could lead to windows of opportunity that enable the friendly force commander to exploit and develop a position of relative advantage. A thorough understanding of these patterns also provides the intelligence staff a quick reference-a visual aid to understand enemy actions in a chronological order that functions like a flipbook. Additionally, this system simplifies the intelligence process and enables the staff to disseminate results quickly using various intelligence products.

Journal Entries

The first and most important tool is the journal. The journal consists of a Microsoft Excel sheet or a writing pad. The headings for the journal serve an important role that synchronizes the rest of the system. The journal contains the following headings: entry/entity number, time of report, time of activity, unit/asset reporting, activity, and analyst comments (Figure 1).

Time of Time of Unit/Asset Activity Analvst Entrv Number Report Activity Reporting Comments 1 1030 1025 A TRP, CAV 3x tracked vehicles moving north Assessed to be along ASR Route. Last seen at tank PLT. grid location. SHADOW 7x vehicles, 1x appears to be Assessed to be 2 1200 1155 POL, stationary at grid location logistics supply point.

Figure 1. Sample Journal Headings and Entries

Entry/Entity Number. The entry/entity number heading is first in order and links the journal to the entities on the map overlays. The intelligence staff numbers the entries chronologically as the staff receives a report.

Time of Report. In this column, the intelligence staff indicates the time they received the report, not the time the activity within the report occurred. The time of report heading adds data about the report that can identify limitations or capabilities within the friendly forces' information collection apparatus. Delayed reports may indicate weak reporting SOPs or some other battlefield action that constrains the friendly forces' asset. Rapid and accurate delivery of the report may indicate well-trained or capable assets.

Time of Activity. The time of activity heading enables the intelligence staff to indicate the time an action occurred rather than the time the staff received the report. This prevents inaccuracies in the assessment of the information because there will be a delineation between the time the report was received and the time the action occurred.

Unit/Asset Reporting. The intelligence staff indicates the unit or collection asset that delivered the report. The data in this heading supplements known information about the battlefield, as it shows a relation between the sensor/ observer and the observed area or unit. This data can assist future collection planning and can provide a capability needed to refine a report.

Activity. The intelligence staff provides as much detail as needed to understand the activity reported. It is important to note all the information possible from the report as well as the accuracy of the report itself. Only known information should go in this section. All assessments or clarifications will go in the analyst comments section.

Analyst Comments. This section enables the analyst receiving the report, or the senior intelligence member on shift, to make comments and assessments regarding the report. One example comment is as follows: This unit is assessed to be the same unit as entry number 7, which was reported 30 minutes earlier and comprised the same number and type of vehicles.

Overlays with Legends

The intelligence staff places a clean overlay on a map sheet and creates markings consistent with unit SOPs for alignment and classification. The staff then creates a legend to categorize entities into specific timeframes (Figure 2, on the next page). One way to do

this is to create a legend of different colors for a 2-hour period. The amount of time used is dependent on average reports received and operational necessity. The staff can use a smaller timeframe (different colors for 30-minute periods) when receiving a large number of reports and when wanting a more thorough product to analyze. It is important to standardize the colors in the legend so that multiple overlays have the same colors for the same time periods. This standardization will assist the staff when an overlay is complete and ready for analysis.

Personnel

In order to execute this system of analysis, the intelligence staff should assign two personnel per shift to these tasks.

Color	Time
\bullet	0001-0200
\diamond	0201-0400
	0401-0600
\mathbf{A}	0601-0800
•	0801-1000
	1001-1200

Figure 2. Sample Overlay Legend

The senior analyst should be assigned to the journal in order to facilitate analyst comments and clarify information, while the junior analyst should be assigned to the map overlays. The senior analyst should receive training on conducting a quality control check of the overlays and journal entries. The senior analyst also ensures that the correct colors are used within the correct timeframes and that a fresh overlay is prepared when the timeframes are concluded. When the staff has gathered the tools and assigned the personnel, the system is ready to receive reports.

Capture Information: Report Received and Personnel React

The intelligence staff receives reports through many channels. Upon receipt of a report, the senior analyst begins the journal entry process. At this time, the junior analyst will assist the senior analyst and request more information as needed in order to complete the journal entry for that report. Once the senior analyst has concluded the journal report, the junior analyst begins the overlay entry. The senior analyst conducts a quality control check of the journal and the overlay once the report entry is complete.

When there is a shift change or an overlay is complete, or in accordance with unit SOPs, the two analysts conduct an update brief on major events and complete a handover. Although an analysis of the overlay can occur at any point, a completed overlay provides the most information of intelligence value.

Analysis: Rucking through the Muck

Once the staff completes two or more overlays, the analysis can begin. These products have three focus areas:

- Analysis of actions related to time (analysis of colors).
- Analysis of activity relationships (trends in actions).

Analysis of operations (patterns across the scope of the battle period).

All three focus areas will indicate to the staff the capabilities, constraints, and preferences that the enemy/threat may have.

Look for Patterns in Colors. Groupings of color-coded entries, or consistent entries through the battle periods, may identify similar activities based on time. This analysis could show that the enemy conducts resupply within the same 2-hour timeframe every day, or that the enemy always starts reconnaissance an hour before dawn. This analysis can also aid planning efforts for future information collection.

Look for Patterns in Activities. Trends in activities will indicate enemy battle drills and SOPs. The staff can identify these trends through analysis of similar activity types through the battle periods. One example could be that the enemy typically initiates jamming activities when the main body begins movement for operations. This analysis can assist the staff in understanding the operational environment. Additionally, the staff can "backwards" analyze these trends to assess when the enemy publishes orders and conducts rehearsals.

Look for Patterns across the Scope of Operations. The intelligence staff then combines the trends in time and the trends in activity analysis to identify patterns across the enemy scope of operations. Identification of trends begins to illustrate an enemy commander's decision-making process, the commander's preferences, the staff's planning timelines, and the unit's SOPs. For example, when the S-2 determines that the enemy artillery units move forward an hour



Soldiers of the 321st Military Intelligence Brigade conduct a briefing at their tactical operations center at Camp Bullis, TX, July 21, 2017, during Exercise Always Engaged, an Army Reserve military intelligence training mission.

before a reconnaissance mission begins and that the reconnaissance for an enemy offense consists of a similar task organization. This analysis can then be summarized through refined threat models and capabilities.

Application: Making Sense of It All

Now it is time to finalize the analysis so that the staff can disseminate the intelligence or brief it to the commander.

Situational Understanding in Current Operations. The first application of this procedure is the use of the overlays and journal to increase situational understanding for the battle period. These overlays help to build the threat portion of the common operational picture (COP) that tracks all enemy movements and assessed movements within their respective timelines. The threat portion of the COP then feeds the overall COP and provides the intelligence staff with hard data to justify assessments made regarding enemy actions or intent.

Understand Operational Timelines. As the intelligence staff analyzes more data, the staff will become familiar with the capabilities and limitations of the enemy. This extends to knowledge of operational timelines and the relationship between units on the battlefield. For example, competent analysis of data may show that one enemy force typically emplaces its reconnaissance elements between 4 and 6 hours before executing a mission. In this example, an intelligence staff can more accurately predict enemy actions, which enables the friendly force commander to interject into the enemy decision cycle.

Analysis of the Enemy Commander's Decision Process. If the friendly force continues detailed information collection and robust analysis, this analysis may offer insight into the preferences, strengths, and weaknesses of an enemy commander. The intelligence officer may observe, over time, the decision-making process that the enemy commander uses. To facilitate this, the intelligence staff should begin pattern analysis of the enemy commander with specific priority placed on when and how the commander makes decisions.

The intelligence staff can then disseminate the results of the analysis obtained through these procedures efficiently across the force. The assessments and threat models can be shared through digital and analog platforms in intelligence summaries and other products. Any member of the intelligence staff can brief results to the commander and staff with confidence in assessments from this thorough data analysis.

Conclusion

While the incredible amount of information that flows through a command post can very easily inundate the intelligence staff, this information can have immense intelligence value. These procedures of comprehensive analysis provide the intelligence officer and staff a simple and effective tool to receive reporting, analyze the data, and synthesize intelligence products to increase situational understanding, accuracy of assessments, and knowledge about the enemy commander. These procedures establish one way for the intelligence staff to execute situation development. Efficient situation development gives the friendly force commander an advantage because the intelligence officer delivers relevant, timely, and accurate intelligence that may provide the friendly force commander windows of opportunity to reach a position of relative advantage.

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