The Training of the Battalion Staff Intelligence Officer: A Descriptive Analysis and Sample Program

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This report summarizes deficiencies in battalion staff functional area training and, using the intelligence officer (S2) as an example, provides guidelines for improving the skills required by the S2 to function effectively in the maneuver battalion. A prototype distributed training module for the battalion S2 is presented. This prototype module could form the basis for other staff modules for battalion staff officers that will contain both computer-based instruction and asynchronous computer conferencing.
I owe my gratitude to several people who generously gave time, ideas, and products that benefitted this document. Captain Piester of the Infantry Pre-Command Course, U.S. Army Infantry School, provided a general scenario that was modified into the prototype scenario in the report. The intelligence annex is a modification from an annex provided by the Military Intelligence School, Fort Huachuca, Arizona. The figure depicting the intelligence cycle was reprinted by permission of the Tactics Division of the Military Intelligence School, Fort Huachuca, Arizona. I extend my thanks to those mentioned, and to all others who assisted me.
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THE TRAINING OF THE BATTALION STAFF INTELLIGENCE OFFICER: A DESCRIPTIVE ANALYSIS AND SAMPLE PROGRAM

Introduction

This report briefly summarizes current deficiencies in battalion staff functional area training and, using the intelligence officer (S2) as an example, provides guidelines for improving the skills required by the S2 to function effectively in a maneuver battalion. A prototype distributed training module for the battalion S2 is presented. This prototype module could form the basis for other staff modules to be developed as part of a larger training package for battalion staff officers involving both computer based instruction and asynchronous computer conferencing.

The Need for Battalion Staff Officer Training

Currently, when officers are assigned to battalion staff positions, they lack some of the fundamental skills and expertise required to perform their jobs (Thompson, Thompson, Pleban, & Valentine, 1991; Goldsmith & Hodges, 1987). Staff officers are frequently less than maximally effective, in part because most of the battalion staff functional area training is on-the-job.

In order to be effective, staff officers must accomplish the duties in their area of responsibility and synchronize these activities with the activities of other staff officers (FM 100-5, 1993). Further, staff officers are required to perform their responsibilities quickly and accurately. Then, for the staff to function effectively as a team, staff officers must integrate their activities with one another.

The battalion is the echelon that is ultimately responsible for the outcome of the land battle (CAS³, 1990). The importance of training to successful battle outcomes is strongly emphasized in FM 7-20, Operations, (1993). Frequently repeated sentiments are illustrated by the statement that "there is never a time when Army forces can afford not to train and maintain the highest levels of readiness" (p. 1-6).

Yet the foundation of successful synchronized battle, staff functional area training, is being systematically neglected. The substitute, on-the-job training, is haphazard and not standardized. As such, it is not an adequate training method.

Staff training analysis by Thompson & Thompson (Dec 8, 1992) has revealed systemic training deficiencies. Surveys of Armor Officer Advanced Course (AOAC) and Infantry Officer Advanced Course (IOAC) participants reported that only 15% and 18%,
respectively, had received any training to prepare them for staff duties (Thompson et al., 1991). This is due in large part to the removal of staff functions from the officer advanced courses (OAC) programs of instruction in 1974, ostensibly to be replaced by staff position specific training programs. However, the S4 course is limited to sixty participants per year. The S1 course was canceled altogether in 1989.

The surveys by Thompson et al. (1991) of AOAC and IOAC participants provide even more evidence of the dire need for battalion staff specific training. AOAC and IOAC participants responded that 63% of armor and 56% of infantry officers had already been in a staff position prior to attending the Officer Advanced Course. For officers that had attended the Officer Advanced Course prior to a battalion staff assignment, the training was probably beneficial in a general sense. As already mentioned, however, the Officer Advanced Course does not provide staff functional area training. The officers assigned to battalion staff positions prior to the Officer Advanced Course do not even have the benefit of the general tactics and techniques taught in that course.

More telling is that only 48% of armor and 45% of infantry officers reported having received adequate training prior to assuming a staff officer position. Two explanations are possible for these low percentages of officers reporting adequate training. First, officers may be adequately trained even though they have not attended a staff position specific training program, but just are not confident in their skills. Even if this is the case, a serious problem exists. Most would agree that officers must be confident in their abilities in order to make decisions in the heat of battle that put lives at risk. The second explanation is that a majority of officers correctly assess that they have not received adequate training prior to assuming a staff position. This explanation is probably closer to the truth. If this is the case then a major problem exists.

The current state of affairs is clearly inadequate and all indications point up the need for more battalion level staff functional training. It is important that this training teach critical combat functions for specific battalion staff positions and that this training occur in logical temporal relation to officer assignment to staff positions. Ideally, this training should occur shortly after assignment to a battle staff position. If the training occurs too long prior to assignment, key staff functional area information will be forgotten.

With the training need identified, the Army Research Institute (ARI) has become active in providing products to aid staff officers in learning and doing their job. One product that works as a quick fix is the Commander's Battle Staff Handbook (Pleban, Valentine, & Thompson, 1993). This product is useful for
acquainting new staff officers with their new jobs as well as helping staff officers get a basic grasp of the other staff positions. It is also useful as a quick reference to assist officers who temporarily can not recall a crucial piece of information or who wish to double-check that they have accomplished all critical tasks. Initial response to this product has been overwhelmingly positive (Pleban, Thompson, and Valentine, 1993). However, this handbook does not go into enough detail to completely train an officer, it is merely an introduction and overview. Instead, the development of computer based distributed training modules will pick up where the Commander’s Battle Staff Handbook leaves off.

Explanations of the S2 Prototype

The battalion staff intelligence officer (S2) position was chosen to develop the paper prototype included in this document. The S2 is demonstrated for several reasons. Intelligence officers are frequently rated as needing training at the combat training centers (CTCs) (See for example, Crawford and Hensler, 1990). The weaknesses of the S2 are difficult to document, but they are commonly known. Studies at the CTCs provide for detailed data collection in a setting that is professed to be a realistic battle simulation. For the complex position of the S2, the CTC’s have been instrumental in identifying the various areas in need of improvement and providing opportunities to document training needs. At the CTCs, S2s often fail to: delegate responsibilities to their subordinates, (Dyer, Fober, Pleban, Salter, Valentine, & Thompson, 1992); synchronize with the S3 (Campbell, 1990); plan aggressive counterreconnaissance (Ozolek, 1986); and integrate a reconnaissance plan into the overall plan (Stahl, 1992). In fact, five studies that observed a total of twenty-four CTC rotations all cited S2 weaknesses (Crawford & Hensler, 1990; Thompson, et al., 1991; Wells, 1989; Mc Daniel, 1990; Siebert, 1990).

Part of this problem can be traced to the continual shortage of Military Intelligence branch officers. Because more senior officers are (rightly) assigned to higher echelons, the shortage effectively leaves relatively inexperienced junior officers to fill other available positions. In the past, this resulted in the practice of assigning relatively inexperienced lieutenants to work as S2s, when the position actually calls for a captain (Manki, 1990; DA PAM 600-3, 1990). It is not known if lieutenants are still being assigned frequently as S2s.

It is fairly clear that the S2 is having problems being maximally effective when placed under the strain of severe time constraints while facing a wily, creative, and well-trained Opposition Force. Of course, the S2 job is daunting and demanding, making it difficult for the S2 to do everything to the
standard that the battalion commander (BN CO) would like. Moreover, subject matter experts have reported that the relative inexperience and lower rank of S2s compounds the problem. When new S2s join staffs, BN COs and operations officers (S3) are reported to ignore the S2s input. New S2s are ignored because they have not had chances to work with the staff and to build relationships that give staffs confidence in their S2s. Training should aid S2s in becoming more efficient at performing duties as well as give S2s opportunities to demonstrate their competence and value.

At the time ARI, Ft. Benning decided on the development of a prototype module, it was not known if there would be contract support. This heightened the importance of developing a workable/usable module. A workable module in a much needed area could lead to further funding for the project. Because the S2 is a very important staff position with documented problems, it was chosen as the position for prototype module development.

The paper prototype module described in this report provides an initial draft of a training package that would teach officers the basic Army battalion S2 doctrine and give them vital opportunities to practice producing the products they will be called upon to provide in battle. Emphasis was placed on learning not only the basics, but "the tricks of the trade," as well. Interactions with other staff sections, particularly the Operations Officer (S3), and BN CO were included to build confidence and experience. The training package was designed to provide realistic opportunities for the S2 to practice battlefield skills, with feedback from experts.

Method and Strategy of Training Development

The development of this material followed several stages. The first stage was gathering background information. This was followed by an analysis of current training for the S2 position. Next, a draft concept was written and revised. Finally, some specific training material was written.

The first stage involved gathering background information from several sources. Understanding battalion operations with emphasis on battalion staff interaction was an important first step because the S2 must function in the context of a battalion staff. Thus, to understand the S2, one must first understand the environment in which the S2 operates. A review of research concerning battalion operations and tactical doctrine was conducted. It is not necessary to summarize that literature, nor is it possible to do so in a short amount of space. It is enough to say that staff interactions are not unlike the interactions that occur among all small groups. Further, the battalion staff is susceptible to the same sorts of pitfalls that all small
groups encounter such as failure to clearly define roles, failure to communicate changes in plans to all affected parties and so on. The interested reader should see Olmstead (1990) for the definitive work on battle staff functioning, as well as Operations, FM 100-5 (1993) and The Infantry Battalion, FM 7-20 (1992) for pertinent battalion staff doctrine. For those wishing to understand the interactions of battalion staff officers through realistic examples, a useful exercise is to watch Joint Readiness Training Center (JRTC) After Action Review (AAR) videotapes. Understanding of battalion staff functions and malfunctions is gleaned by viewing these AARs which contain lively discussions of successes and failures in the wargame environment. These videotapes are available through the archival service of the Presidio of Monterey Field Unit of the Army Research Institute.

The next stage of work conducted was understanding the Intelligence Officer (S2) and his¹ position in a maneuver battalion. The study of intelligence doctrine was a useful endeavor. The doctrine is plentiful, and fairly descriptive. Again, a lengthy description is not necessary. Most important to tactical operations are Intelligence Preparation of the Battlefield, FM 34-130 (1992) and Combat Commander's Handbook on Intelligence, FM 34-8 (1992). FM 34-130 has been recently revised (October 1992) and although it is still in draft form, and as such has not been widely circulated, the newly revised version should be used in conjunction with the to be superseded 1989 version to insure that the updates in doctrine are incorporated into training development. FM 34-8 spells out the functions of the S2 in a concise manner, making it a good introduction. Figure 1 provides a quick and comprehensive visual introduction to the S2 position. The outer concentric ring describes the responsibilities of the S2.

Research by Crain (1989) validates the notion that the S2s function is crucial to the success of the battalion as a whole. Moreover, research by Goldsmith & Hodges (1987) demonstrates the importance of the reconnaissance planning function of the S2. Others deserving mention who have expounded on the strengths and weaknesses of the battalion S2 include Caniano, 1992; Manki, 1990; and Stahl, 1992.

The S2 position was analyzed further by interviewing subject matter experts. Using the Light Infantry Battalion and Brigade Operations and Battalion ARTEP Mission Training Plan, FC 7-13, (1985) and Drills/Procedures for the Intelligence Section, ARTEP

¹The use of "his," instead of "his or hers" is appropriate as only males are currently assigned to the maneuver battalion staff intelligence officer position.
Figure 1. The intelligence cycle.
34-245-10-DRILL, (1987) as guides for understanding typical unit training of the staff intelligence officer, former S2s and US Army Military Intelligence School instructors were interviewed concerning what training would be useful for S2s. Interviewees were given the parameters that the training had to be home based and involve computerized exercises. Responses mostly included descriptions of what the best possible training would be, strengths and weaknesses of the typical "green" S2, existing practical limitations to training, and the concepts and content areas that are most important to training the S2.

Practical limitations described by interviewees necessitate molding any training package in specific directions. The garrison duties of the S2 preclude his absence for a lengthy training session. Instead, the training must be divided into shorter blocks or sections that can be accomplished without major interference into the S2s normal workday. The S2 is a vital member of a small staff and must be present within the unit. Also important, interviewees made it abundantly clear that S2s just would not like a long training session. Although at first this may sound trivial, acceptance by the trainees is absolutely essential to successful training.

Another practical limitation is the subjective nature of the S2s combat functions themselves. Because the job of the S2 involves predicting the behavior of other humans, namely an enemy who is actively trying to be deceptive, it is difficult to determine if the S2 is right or wrong. Unquestionably, there is no one right answer because nobody really knows precisely what any given enemy will actually do. Therefore, much of the training of the S2 must include a review of their work by intelligence experts and discussion of why some things are probably more right than others. Work that can be evaluated objectively (i.e., computer scored) represents mostly superficial procedural lists that, although necessary for success are by no means sufficient. For example, correct reading of a weather report is necessary, but the more subjective process of evaluating the effects of weather on the enemy's predicted course of action is also needed before the S2 is able to utilize the weather report.

The changing nature of war presents another limitation. With the end of the cold war came the end of a pre-defined enemy. It used to be that an S2 could memorize Soviet order of battle and doctrinal solutions to various field problems and draw upon this knowledge to extract a predicted enemy course of action in novel situations. No longer is there consensus, even among intelligence experts, as to what an enemy will look like and/or what intelligence reports from the battlefield should indicate about an unknown enemy. There is also disagreement about the best strategies for collecting intelligence. Correct solutions require more discussion and arguably more correct solutions now
exist than ever before. Again, the subjective nature of the S2 function requires that products produced during training be reviewed by military intelligence experts.

The very products produced by the S2s result in training limitations. Many of these products are graphic. For training to be generalizable to real battle, the products should be produced in the exact fashion they are produced in battle. Therefore, even though the capabilities of computers now allow for graphics to be developed relatively simply and in adequate detail, it is important that this medium not be used until the Army is ready to field a product that allows the S2 to routinely generate computer graphics in the field. The present medium for generating graphics is using a magic marker on either butcher paper or acetate which is taped over a map. This means that either an intelligence expert must be physically present to provide feedback on graphics or creative means must be used to rapidly transmit the graphics to an intelligence expert for review and feedback. Possible means include the use of a photocopier to reduce the size of the graphic, use of an electronic scanner to digitize the graphic thereby allowing for transmission via computer and modem, and use of a fax machine to transmit the graphic. Use of government mail or private, overnight mail services (e.g. Federal Express) is highly undesirable because of the unacceptable amount of time that must pass between completion of each graphic and the receipt of feedback and the expense of mail services. The technology is stretched when one considers the requirement to generate multiple overlays simultaneously.

Interviewees' suggestions concerning the best possible training for the S2 can be categorized into three broad concepts. Responses concerning the strengths and weaknesses of the typical "green" S2 are inter-related to responses concerning rationale for what the best possible training would include, making it beneficial to discuss both types of responses together. The following is a summary of comments.

First, training must be realistic. Time constraints must be built in. Scenarios should be used whenever possible. Moreover, scenarios should be used that have relevance to the S2. For example, scenarios based upon the terrain of the JRTC are desirable for light infantry S2s, while scenarios based upon the terrain of the NTC are desirable for armored forces S2s. The S2 should perform actual critical combat functions as often as possible. The amount of total training time spent by the S2 actually developing intelligence products will be directly related to the effectiveness of training. In other words, the only way for S2s to improve is by practicing their craft over and over with frequent performance feedback. New S2s can draw doctrinal solutions on maps, but one of the hardest things to get across to them is the "what does this mean." S2s need practice
interpreting the meaning of the situation and the only way to learn that skill is to be exposed to a lot of situations and given the opportunity to discuss the possible meanings of different information with more experienced officers.

Second, training must involve the BN CO whenever possible. Less crucial, but still desirable is involving the XO, S3, and FSO in the training process. Different BN COs want variations on intelligence products. By including the BN CO in training, the S2 can tailor his products fit the needs of his BN CO. New S2s frequently produce their products "in a vacuum," without being included in the "decision loop." New S2s need to assert themselves into the process. By including other staff officers in the training, the S2 demonstrates his usefulness to the other staff officers.

The final category of comments is that training must be "bought into" by all levels. To be accepted at upper levels, the training must be demonstrated as effective. To accomplish acceptance at lower levels, the training must satisfy the requirements of realism and BN CO involvement. The new S2 is going to look to his BN CO for guidance. If the BN CO believes the training is important, the S2 will give it a fair chance.

To better understand the problems of S2 officers, it was useful to study the training materials with which S2s come into contact. It was suggested by instructors at the US Army Military Intelligence School, Fort Huachuca, AZ that most officers assigned as battalion S2s had only the Military Intelligence Officer Basic Course (MIOBC). These instructors stated that it was unlikely that students in the Military Intelligence Officer Advanced Course (MIOAC) would be assigned anything below a brigade staff position. Therefore, the training material to be analyzed was the program of instruction of the MIOBC.

Careful analysis of the MIOBC program of instruction (Dec 1991) revealed that little time was spent specifically discussing battalion operations. In fact, it appears that out of 922.3 hours of instruction only between 15 and 34 hours are specifically devoted to battalion operations. The number of hours arrived at depends on how liberal one is in determining what can be correctly deemed as battalion operations. In contrast, approximately 290 hours is spent on brigade, division, and corps level training. Approximately 278 hours are spent on all-source intelligence training, which is generally training for those who will be assigned to a military intelligence battalion. The other 330.3 hours are spent teaching basic officers skills to include everything from professional writing to survival skills. A scan of the actual lecture materials used suggests that this is probably a fair estimation of the training content.
Before going further, it should be noted that this is not intended to be a criticism of the Military Intelligence school. Experiences with the instructors have always been positive. However, their task is to train intelligence officers for a variety of important assignments, only one of which is the battalion staff officer position. Moreover, they must train basic officer skills and this alone takes up a good portion of the allotted time. This is part of the reason that the training is being developed by ARI with contract support. It targets a specific need that the Military Intelligence school can not fill because of an over abundance of other obligations in the MIOBC.

To be fair, it also should be noted that much of the training provided in the MIOBC is probably generalizable to the battalion staff officer position. The fact remains, however, that about 290 hours is specifically devoted to brigade, division, and corps operations whereas only 15 to 34 hours is given to specifically teaching behaviors that are functional at the battalion level.

All forms of analysis of the battalion intelligence staff officer position converge to two conclusions. First, the S2 needs to develop a clearer understanding of the basic tactical doctrine, referred to as Airland Battle doctrine. The S2 has likely heard this material before, but hasn’t learned it to a level of mastery that is required to synthesize the concepts into applied warfare planning. This is in keeping with established training theories such as Bloom’s taxonomy of learning (Bloom, 1956) and the fluency of learning concepts (Johnson & Layng, 1992). Second, the S2 needs practice. The S2 has very few opportunities to analyze novel scenarios and develop the intelligence products for those scenarios.

Recommendations for Training, General Guidelines

Certain recommendations for training battalion staff intelligence officers can be made. These recommendations are based upon the opinions of subject matter experts, including former S2s and instructors of military intelligence, as well as the analysis of current training briefly described above. Many of these recommendations are probably applicable to training battalion staff officers in other positions (e.g., S4, S1).

1. Break training down into approximately 10% Introduction, preparation, and explanation, 25% computer based instruction (CBI), and 65% asynchronous computer conferencing (ACC), practical exercises, and scenario training. The introduction will teach the S2 the necessary skills to use computers in an interactive environment. The CBI portion will refresh some of the knowledge that the S2 may have forgotten since taking the MIOBC or MIOAC, or teach him this knowledge if he has never taken an MI course, which is common for S2s in the National Guard. It
may also serve to get the S2 thinking about some new ways to accomplish his mission. For example, some literature on better reconnaissance and surveillance (R&S) planning may teach the S2 a new "trick of the trade." The ACC portion should require the S2 to go through the intelligence preparation of the battlefield (IPB) process (See Possible Course Design below). This will allow the S2 to hone skills necessary for effective IPB such as reconnaissance planning, and templating at very detailed levels as well as learn maneuver unit characteristics, limitations, and capabilities.

2. The ACC portion should probably be scenario driven mission analysis and planning. Interviews with MI subject matter experts overwhelmingly support the position that the most valuable training is training that requires the S2 to work through scenarios from beginning to end, developing intelligence products that all support the same mission. This facilitates teaching the process of revising earlier estimates and plans based on new combat information, as well as teaching more complete intelligence production through aggressive reconnaissance, collection, and dissemination efforts that complement one another.

3. S2 duties should be completed in abbreviated form under time constraints. In reality, time pressure usually forces the S2 to perform his duties hastily, taking shortcuts whenever possible. To create realism, the S2 should be asked to complete tasks quickly using techniques understandable to other staff, thus building his skills and adding to his value on the staff. For example, this may mean that the S2 should create just one template with only absolutely crucial information included, instead of creating several templates. The notion of abbreviated intelligence products are in accordance with guidelines outlined in CGSC Student Text 100-9 (1991). The amount of time should be liberal during the first portion of training to allow the S2 to learn how to do the job correctly, but time requirements should be steadily tightened as training progresses to shape the S2 towards hasty, yet accurate accomplishment of his function.

Previous research covering the home station determinants of success at the CTCs identified synchronization problems that arise under demanding CTC conditions and stated the need for home station training with equally demanding conditions (Thompson, Thompson, Pleban, & Valentine, 1991).

4. Information overload and inaccurate information should be built in. In reality, the S2 is inundated with an overabundance of combat information. Much of the information is irrelevant or useless. The S2 must learn to quickly sort information, and determine what is and is not important, as well as what is and is not accurate.
5. More scenarios are preferable to fewer because of the greater opportunity to hone skills. Also, if time only permits a staff working through one scenario, having several scenarios available would allow the BN CO to choose the scenario that will be most beneficial to his particular staff.

6. Performance feedback should be given by the computer during work-alone, computer based instruction. Feedback during scenario training should be provided by a military intelligence subject matter expert and/or the BN CO and other staff in AARs that occur after each section or block of training. If possible, it would be ideal to have someone experienced at a particular staff position, such as a former battalion S2 or an S2 from a different battalion, sit in on training sessions to provide performance feedback.

7. A useful feature would be for the computer to have a database of remedial topics for the S2 to study when he finds he has gaps in knowledge. This information is readily available from the Military Intelligence School, Fort Huachuca AZ.

8. As previously mentioned, participation of the BN CO, XO, FSO, and S3 is vital. Although not always feasible, participation of the BN CO and staff officers fulfills several functions. First, it makes the training more realistic. This also teaches the S2 his role in the staff and how to synchronize with the rest of the battalion (what intel products specific officers want to see, when they need specific intelligence etc.). Finally, it presents an opportunity for the S2 to demonstrate his competence and usefulness to the battalion. He interacts with the rest of the staff and each gain an understanding of each other’s operating styles and capabilities.

Summary

Although battalion staff officers are a critical element for winning battles, staff functional area training is often not available. It can be concluded by analyzing the S2 position that specific recommendations for training can be made. A prototype of a partially developed training package for the S2 that incorporates the training recommendations is included to illustrate how training could be accomplished.
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APPENDIX A

POSSIBLE CBI ACTIVITIES

Based upon suggestions of military intelligence subject matter experts and analysis of the S2 position, some exercises that might be developed into useful self-paced, work-alone computer based instruction are listed below.

1. Read and complete a packet of reconnaissance, counterreconnaissance, and intelligence articles from past issues of *Infantry*, *Soldiers*, *Military Review*, etc. Much of the information in these articles represents "lessons learned," yet newer members of the military intelligence community may not be exposed to these lessons of the past. Short multiple choice questions should be interspersed throughout each article to probe the trainee for understanding. A high percentage of correct answers should be required before the trainee is allowed to continue to the next section of training.

2. Complete "What does this mean" quizzes to develop critical thinking skills. These exercises would involve reading a paragraph description of a situation, then choosing a one or two sentence answer that gives a possible interpretation of the situation. Both situations and interpretations should be developed by military intelligence subject matter experts with discussions included that explain why some possible interpretations are more reasonable than others. As previously mentioned, this is an area that some members of the MI school recommend needs work.

3. Work through a quick review of garrison (administrative) duties including physical security, personnel security, operations security (OPSEC), information security. This type material lends itself to short fill-in-the-blank and multiple-choice questions.

4. Complete a description of the methodology of developing intelligence requirements (IR) including how to look at a situation and boil it down to what is known, what is unknown, and what needs to be known as well as using the IRs to develop priority intelligence requirements (PIR) to recommend to the BN CO. The description would have examples to demonstrate the process and include opportunities for the trainee to choose from possible lists of IRs and PIRs with feedback as to why some IRs and PIRs are better choices than others.

5. Trainees could improve skills at developing lists of indicators. One exercise that might accomplish this would involve providing a list of possible indicators, which the S2 would sort into the various correct categories (e.g., NBC, air assault, defend, armor). Lists of indicators and categorization

A-1
of what they indicate could by provided my military intelligence subject matter experts.

6. Quiz trainees on available intel assets, including developing larger recon forces from line units to augment scouts, particularly in light infantry. (who, what, how many, list ways they can be utilized, etc.)
APPENDIX B

PRELIMINARY PROTOTYPE FOR S2 ACC TRAINING

This is an example of one option for a possible battalion staff intelligence officer training asynchronous computer conferencing (ACC) system. This module was written under the assumption that staffs would not be able to participate in training at the same time. As currently designed, this module allows the S2 to work through all sections without interaction with the rest of the staff. Informal interaction with staff members is highly encouraged, however. Ideally, the staff should train together. This would allow much more versatility than is presented here. In either case, the functions/tasks that need to be performed by the S2 will be very similar. Also, the information requirements of the S2 in order to perform those functions/tasks will likely have many similarities.
General Introduction to Trainees:

Welcome to the Battle Staff Training System. This product is designed to give you an opportunity to hone your skills as a battalion S2. Too often, officers are expected to learn on-the-job with little or no assistance. This may make life exciting, but definitely not any easier. Hopefully, you will find this to be exciting as well and make your transition to being an S2 easier.

The S2 position is an extremely important one. In fact, a study by the RAND corporation (Goldsmith & Hodges 1987) at the National Training Center shows the importance of just one S2 responsibility, reconnaissance planning (See Tables 1 and 2). As you can see, when reconnaissance was good, units almost always succeeded in battle. And just as often, when reconnaissance was poor, units lost in battle. The S2 is crucial. Train hard. Your entire battalion is depending on you.

### TABLE 1

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<tr>
<td>Good recon</td>
<td>13</td>
<td>9</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Poor recon</td>
<td>50</td>
<td>4</td>
<td>38</td>
<td>8</td>
</tr>
<tr>
<td>Unclear</td>
<td>14</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>
Training Objectives

There are four objectives for this training:

1. Introduce you to the tasks you will be required to perform in the field as an S2, without making you leave your home station.

2. Teach you some tricks of the trade by giving you access to:
   (a) Training materials written by MI experts
   (b) Expert instructors at the MI school
   (c) Experienced peers such as the other S2s participating in the training and your division's G2 shop

3. Provide you with an opportunity to demonstrate how good you are. When those who are monitoring your performance (your BN CO, Bde S2, Div G2) gain confidence in you, it makes it easier for everybody to do their job.

4. Help you to discover areas in which you should practice to improve, as well as assess your strengths.
Training Breakdown

This ACC/CBI training is divided into two major sections: a self-paced Computer Based Instruction¹ (CBI) section and an Asynchronous Computer Conferencing (ACC) section. These 2 sections are divided into training blocks.

The CBI section of the training is divided into several blocks. Each of these blocks require 20 to 40 minutes to complete. Some of them concentrate on training a very specific skill, while others are more general in scope. CBI is designed to be self-paced and stand-alone, meaning that you can do this whenever you want and go as fast or slow as you want. The only requirement is that you finish the CBI section before the ATC section begins.

The ACC section of the training is intended to take approximately 17.5² hours if your BN CO has designated one scenario, or 30 hours if your BN CO has designated two scenarios.

Before you start the ACC scenario training, you should work through the CBI section in order to refresh your memory.

¹The CBI portion of the module is not presented here. Instead, some possible CBI activities have been suggested earlier.

²The amount of time is probably much greater than would be available in real life, but anticipated unfamiliarity with computerized training as well as time for administrative tasks (e.g., sending documents, reviewing feedback) require that temporal parameters be expanded somewhat. The times given are estimates; pre-testing of the module would lead to adjustments and confirm the amount of time needed for completion of training.
Tasks to be Trained in a Scenario:

Block 1: Battlefield Area Evaluation and Intelligence Requirements:

A. Set up the S2 portion of a Tactical Operations Center (TOC)
B. Determine Area of Interest (AI)
C. Battlefield Area Evaluation (BAE): Using a warning order and available intel, S2 requests terrain, weather, enemy intel from division and corps. Then he performs a preliminary brief to the staff. Also, he enters important info into intel journal.
D. Get feedback on AI, BAE briefing,

Block 2: Intelligence Requirements

A. List Intelligence Requirements (IR)s and recommend CO's Priority Intel Requirements (PIR)s
B. Get BN CO or S3 to choose PIRs
C. Collect & process intel updates from div, corps, etc.
D. Receive feedback on IRs, recommended PIRs and adjust if necessary

Block 3: Courses of Action

A. Generate situation templates for 3 possible enemy COAs
B. Generate event templates (with NAIs).
   Get S3 to use these to develop decision support template (DST) and synch matrix, in consultation with the BN CO if possible.
C. Recommend High Value Targets (HVTs)
D. Collect & process intel updates from div, corps, etc.
E. Receive feedback on situation temps, event temps, and HVTs

Block 4: Wargaming

A. Prioritize (Wargame) COAs logically, using BN CO, XO, S3, FSO, others if available.
B. Brief FSO, get him to choose HPTs for chosen COA.
C. Collect & process intel updates from div, corps, etc.
D. Receive feedback on COA process
Block 5: Reconnaissance and Surveillance Planning

A. Develop R & S collection plan, include requests for increased assets within battalion as well as brigade, div assets.
B. Receive feedback on R & S plan

Block 6: Reconnaissance and Surveillance Planning, Continued

A. Develop R & S collection plan, include requests for increased assets within battalion as well as brigade, div assets.
B. Receive feedback on R & S plan
C. Review R & S collection plans for adequacy. Based upon a predetermined situation, determine the types of intel an R & S plan is likely to provide.

Block 7: Intel Annex, Battle Updates

A. Handle intel messages/updates (log them, prioritize them, etc.
B. Update/brief those who need this new info.
C. Revise R & S plan according to intel updates
D. Receive feedback on revised R & S plan, updates.

Block 8: Wrap-up of scenario 1, begin scenario 2

A. Conduct an after action review (AAR), receive feedback and suggestions on ways to improve during second scenario
B. Receive maps of second scenario AO, as it is currently known, mission
C. Have S2s, other training participants evaluate quality of training.
S2, the situation here is going to require us to act fast. I don’t have time to fully describe the situation, but I’ve got a written description here for you. Also, I’ve got a copy of the Brigade OPORD here for you. I’ve only looked at this stuff briefly, but it looks fairly cut and dry. We’re going to be operating as task force 1-77, in coordination with TF 1-66. Our mission is to seize OBJECTIVE MARY.

Your assignment for this 2 hour block of training is to:

1. Get familiar with the situation and the OPORD.
2. Set up your S2 shop.
3. Determine the Area of Interest (AI). AI should be drawn on the Modified Combined Obstacles Overlay you will develop (see 5 below)
4. Conduct Battlefield Area Evaluation (BAE) and prepare a preliminary mission analysis briefing, describing your BAE, for the staff and me. Keep in mind that this is a preliminary briefing, I would rather have a sketchy, but quickly completed briefing than a detailed briefing that we have to wait for. Take a look at the INTEL ANNEX to the BDE OPORD. You will conduct a Mission Analysis Briefing by the end of your 2 hour training today. This preliminary briefing should include:

   A. Weather info, and its likely effects on enemy and friendly.
   
   B. Terrain analysis. OCOKA emphasis should be on giving the staff some guidance on how we can use the terrain in developing a COA that gives us the terrain advantage.
   
   C. Enemy.
      (1) Disposition
      (2) Composition
      (3) Strength of committed forces and reinforcements
      (4) Air - what types, will they employ and why
      (5) NBC - number, delivery means, and likely agents
      (6) Recent and present significant activities
      (7) Peculiarities and weaknesses

   D. Take a stab at conclusions. Can our mission be supported? Are there enemy vulnerabilities that we can exploit if we incorporate them into our planning?
5. I want to see a Modified Combined Obstacles Overlay (MCOO) and a Weather Effects Matrix. Don’t bother with other weather overlays such as a Precipitation Overlay, if there is any crucial weather info, you can give it to me in your Mission Analysis briefing.
COMMANDER'S GUIDANCE, Block 2

Time 180200 OCT 1993  (Note: Although 2 hrs were allocated for the last training block, only 1 hr was added to the scenario time. This is because much of the background information would have, in reality, been processed before deployment. Thus, S2s, in reality, can complete the work requested in training block one somewhat quicker than the time allotted)

S2, thanks for the MCOO, and BAE briefing. I’ve taken some time to look at the situation and based upon all the information I’ve been getting, it looks like there are several possible COAs. I’m still not clear on what we know and what we need to know. While I go to a forward OP to study some possible avenues of approach, I need you to prepare some information during the next 1 hour. 45 minutes.

Your assignment for this training block is:

1. Give me a list of IRs and recommend what my PIRs should be.

2. Give me situation templates for two possible enemy positions. I don’t think there are too many likely possibilities for their positions, so two sit temps ought to cover the most probable situations adequately. But, since you’re only doing two, I want to see the enemy in fine grain detail wherever possible. Whatever we don’t know, I want to have tasked to somebody in the R&S plan you develop in the next training block. Be sure to describe which situation is most likely and why.

3. Using your MCOO and other terrain info, draw a new overlay showing what you think are the possible friendly avenues of approach. Keep in mind that the Bde CO says we are definitely going through the Great Sandy Wash (LANE GOLD), because that is the only way we can keep TF 1-66 from being cut off from the rest of the Division.

4. Also, start recommending high value targets (HVT).
COMMANDER'S GUIDANCE, Block 3

TIME: 180400 OCT 1993

Our S3 is tied up working out the logistics with the S4 right now. We need to push ahead without them for the time being. Using the 1/3 2/3 rule for planning, I'm thinking that we need to have our OPORD NLT 181030. That gives us only 5 and 1/2 more hours to complete the planning. Although the S3 and you usually do the Decision Support Template together, I want you to go ahead and do it yourself today. He can look it over with you and revise it when he returns.

Here's your assignment for today's 2 hour training block:

1. Show me the named areas of interest (NAIs), as well as event templates. I want it to be very clear what indicators will confirm or deny enemy COAs. Of particular concern is the possibility of a counterattack. What indicators will give us advance warning?

2. Update your list of high value targets (HVTs), if necessary.

3. Use the Avenues of Approach you gave me yesterday to generate templates outlining 3 possible friendly COAs. I don't care if you develop separate templates for each COA or put 3 COA's on one template. Use your own judgment.

4. Make sure to compute relative combat power (force ratios) for each COA you've templated. Use standard procedures for including combat multipliers (e.g. synchronization of combat systems, effects of terrain, fields of fire). This will make it easier to wargame during the next training block.

5. Next, I need to see a preliminary decision support template. You'll get a chance to flesh it out more fully after wargaming.

6. Contact other S2s to schedule 2 hours of time for conducting the next training block. You will be working together, using a simultaneous conferencing option on the computer bulletin board, so you need to find a time that fits all your schedules. The ideal group size for this is 4, but it can be conducted with 2-5 participants, depending on how many S2s are currently in training. You should choose the friendly COA that you would recommend to your BN CO and fax an overlay that displays it to the S2s that you will wargame with during the next training. They will fax you theirs so that you can begin considering the pros and cons of each.
COMMANDER'S GUIDANCE, Block 4

TIME: 180615 OCT

We've got to decide what course of action to take, S2. It's time to wargame. This will be accomplished by linking up through the computer to discuss the various COAs. By now you should have received faxes from other S2s, and you should have chosen one COA and faxed a template of it to these S2s. Use these COAs to wargame. In order to do so, we need to role-play a bit so the first order of business you need to conduct is to determine who will be acting battalion commander, S3, and S2. The 4th player will act as recorder and as all other staff members. Thus, whenever input is needed from the FSO or the S4, the 4th player becomes that officer for the moment.

Play these roles as realistically as possible. As you take on the roles, you will gain insight into the decisions that other officers sometimes face.

Your assignment for this 2 hour, 15 minute training block is:

1. Conduct computer link-up with other S2s and choose roles to act.

2. Wargame the possible COAs each S2 contributed. Arrive at a consensus decision as to which COA is most logical.

3. Based upon the COA chosen, update your list of IRs and recommended PIRs.

4. Based upon the COA chosen, update and complete the DST.

5. Determine one partner for the next 2 training blocks. You will need to train simultaneously (work together) during two 1.5 - 2.5 hour sessions. Therefore, choice of partners should be made according to scheduling considerations.
COMMANDER'S GUIDANCE, Block 5

TIME: 180815

Here's the deal S2. This training block is an R & S exercise that operates using two sides of the same coin. Today you will participate on one side, and you will participate on the other side during the next training block.

During the last training block you were informed that today's training block requires you to have a partner S2 participating at the same time as you. Contact your partner S2 (via telephone or computer link) to decide who will be the S2 and who will be the OPFOR today. Once this is determined, proceed through the exercise described below.

Before our COA is fleshed out in any greater detail, I need you to get our R & S assets off of the dime and out in the field. Here is your assignment for today's 2 hour training block:

IF YOU ARE THE S2:

1. Develop an R & S plan. You will probably wish to put it on a planning matrix. Use organic assets liberally, but realistically. Don't forget electronic warfare as well as counter-recon. Your partner S2 will have to agree that your plan is not overzealous. Computer upload this plan to your partner S2 within 1 hour, 15 minutes.

2. Wait for your partner to upload intelligence updates back to you from your R & S assets. He will give you updates based upon the plan you gave him.

3. While you're waiting for your partner to give you intel updates, prepare your OPFOR defenses so you are ready for the next training block. These defenses should be prepared using information from the Bde OPORD to project a probable enemy situation.

4. When you receive intel updates, process this information. Determine if you collected the intelligence you had expected, hoped for, and needed to answer before the attack begins. Check to see which IRs have been answered. This step is for self-evaluation only.

IF YOU ARE PLAYING THE OPFOR:

1. Using the composition, general location, and general mission of the 76 MRD, to project and prepare a template showing a likely defensive posture. This template should be
very detailed, showing individual fighting positions, crew
served systems, and vehicles wherever possible. It should
be clear from this template what type of weapons,
surveillance systems, obstacles, and so on are in place. Be
realistic, yet cunning. Your partner is trying to develop
an R & S plan based upon what he believes will be a
realistic, probable situation. Hint: You should be able to
use your sit temps from the last training block as a start
and then project estimates on unknowns in realistic fashion.

2. When you receive the R & S plan from your counterpart S2,
compare the R & S plan to the sit temp you just created.
Use your knowledge of friendly capabilities to determine
what information would be gained by the various aspects of
your counterpart’s R & S plan. Try to be fair, when it
seems that a bit of intelligence has about a 50% chance of
being collected, flip a coin to determine if it was gained
or not. Write brief messages to your counterpart stating
intelligence that has been collected. The format of the
message should be as close as possible to the format that
would be sent by the actual collection asset during combat.
Computer upload these messages to your counterpart by the
end of today’s training block so that he can process them.
You should upload them a few at a time.
COMMANDER’S GUIDANCE, Block 6

TIME: SUSPENDED, to allow reversal of R&S roles

Okay S2, the tables are turned, the roles reversed. Your assignment is the opposite of yesterday. If you were the S2 during the last training block, then today you act as the OPFOR and vice-versa.

Note that these two training blocks are an opportunity to demonstrate to the commander the value of an aggressive R & S operation. Show him what you’ve got.

Here is your assignment for today’s 2 hour training block:

IF YOU ARE THE S2:

1. Develop an R & S plan. Use organic assets liberally, but realistically. Your counterpart S2 will have to agree that your plan is not overzealous. Computer upload this plan to your counterpart S2 within 1 hour, 15 minutes.

2. Wait for your counterpart to upload intelligence updates back to you from your R & S assets. He will be fair and honest because you were fair and honest during the other half of this training block.

3. While you’re waiting for your counterpart to give you intel updates, continue developing friendly courses of action. This R & S planning exercise may have given you some new insight into what the best courses of action will be.

4. When you receive intel updates, process this information. Determine if you collected the intelligence you had expected, hoped for, and needed to answer before the attack begins. Check to see which IRs have been answered. This step is for self-evaluation only.

IF YOU ARE PLAYING THE OPFOR:

1. Using the composition, general location, and general mission of the 76 MRD, to project and prepare a template showing a likely defensive posture. This template should be very detailed, showing individual fighting positions, crew served systems, and vehicles wherever possible. It should be clear from this template what type of weapons, surveillance systems, obstacles, and so on are in place. Be realistic, yet cunning. Your partner is trying to develop an R & S plan based upon what he believes will be a realistic, probable situation. Hint: You should be able to
use your sit temps from the last training block as a start and then project estimates on unknowns in realistic fashion.

2. When you receive the R & S plan from your counterpart S2, compare the R & S plan to the sit temp you just created. Use your knowledge of friendly capabilities to determine what information would be gained by the various aspects of your counterpart’s R & S plan. Try to be fair, when it seems that a bit of intelligence has about a 50% chance of being collected, flip a coin to determine if it was gained or not. Write brief messages to your counterpart stating intelligence that has been collected. The format of the message should be as close as possible to the format that would be sent during combat. Computer upload these messages to your counterpart by the end of today’s training block so that he can process them. Upload only a few messages at a time.

For Both S2 and OPPOR:

1. Use the phone or computer to discuss each other’s plans. Conduct an AAR among yourselves. Talk about what each other did well and not so well. Describe why you did what you did. Give each other tips and hints for improvement. Congratulate each other for clever strategy where applicable.
COMMANDER'S GUIDANCE, Block 7

TIME: 180930 OCT

The R & S plan and the DST you have provided have been very helpful. There are only a couple things left to do. Good thing, because we should have our OPORD out already.

Your assignment for this 1 and 1/2 hour training block is:

1. Update your R & S plan according to feedback given by your counterpart S2 (if needed).

2. Complete the intel annex to the OPORD. Assume the OPORD will be based upon the COA that was chosen during the wargaming session.

3. Develop a matrix to use for disseminating intelligence.
COMMANDER'S GUIDANCE, Block 8

TIME: 181100 OCT

The OPORD has been completed. This brings this section of the ATC to a close. Because this is an exercise, not a simulation, we will not attempt to determine battle outcomes. However, your BN CO probably has several comments for you and you will be given a chance to provide comments of your own.

Your assignment for this training block is:

1. Talk over the exercise during an AAR, get as much feedback as you can. Respond to questions.

2. Carefully look at the other training participants products. No doubt they each did some things differently that you can learn from.

3. If you are participating in a second scenario, you may read over the mission and prepare for it.

4. If you are not participating in a second scenario, please take a minute to fill out the evaluation form. Your input is used regularly to make improvements in this training package.
SITUATION BACKGROUND, MISSION 1 OF ACC

1. **General Situation**: Tension has developed between the US supported country of Yoman and the former Soviet surrogate country of Lutonia. The Lutonian Army, citing a need to suppress alleged increasing terrorist activity by Yomanians, invaded the country of Yoman from the west in early October. Lutonian propaganda has stated that Lutonia has international rights to squelch longstanding unrest in the region by occupying Yoman, to bring it under Lutonian rule.

   The Lutonian Army is modeled on the army of the former Soviet Union. Lutonia’s long history as a Soviet surrogate is apparent in the composition and training of its armed forces.

   The US has a great deal of economic interest in Yoman. Free trade agreements with the Yomanian government have resulted in considerable economic interdependency of Yoman and the neighboring US region. In fact, thousands of US citizens who either live or work in Yoman near the common border with the US now feel that the Lutonian advance is endangering them. The Yoman government has pleaded for US military intervention to repel the Lutonian invaders and restore the former Yoman border. The 10th and 20th Corps of the US Army were alerted and crossed the Yoman common border with the US. By mid-October US forces had temporarily stopped the advance of the Lutonian Army. Enemy forces have been in their current positions for approximately 8 hours.

2. **Specific Situation**: You are part of TF 1-77. 1st brigade is part of the 52d ID (M) of the 10th (US) Corps. The 52d ID (M) is J-Series M1A1/M2A2-equipped. A light infantry brigade has been attached to the division. 1st Bde consists of one mech battalion task force (TF 1-77) and one light infantry battalion (1-66 Inf (LT)). You are the S2 of TF 1-77.

   Your battalion is now in hasty defensive positions along PL ROBERT vicinity NJ5296 (based upon map of NTC, Ft. Irwin, CA). The time is now 180100 OCT.
BRIGADE OPORD, 1st BDE 52d ID

References: FT. IRWIN MAP SOUTH, special training overlay

TASK ORGANIZATION:

TF 1-77
A/1-77 Inf (M)  BDE CONTROL
B/1-77 Inf (M)  1-40 FA (155,SP) (DS)
C/1-2 AR  2-606 FA (203)(R)
D/1-2 AR  A/1-441 ADA(-) (DS)
E/1-77 Inf (M)  52d En Bn (-)
1/A/1-441 ADA (V) (DS)  52d CML CO(-)
2/A/1-441 ADA (V) (R)  1/52 Cml (Smoke)
1/3/A/1-441 ADA (S) (R)  4/52 Cml (Smoke)
A/52d Engr  1/B/52d Sig
1/B/52d Engr(+)  1st FSB(DS)
( Assault Sec)  1/52d MP
Tm 1(GSR)/A/21st MI
(CEWI)(DS)

1. SITUATION:

A. Enemy Forces: See Annex A (Intelligence)

(1) Composition, Disposition, Strength.

(a) The Lutonian 76th MRD is composed of three MRRs (two BMP, one BTR), the 54th (BMP), 55th (BTR), and 56th (BMP) MRRs; one TR, the 57th TR; and an artillery regiment. The 76th MRD is DMP-1, BTR-70, T-72, 2S1, and 2S3 equipped.

(b) After sustaining heavy casualties, the 76th MRD has established defensive positions from vicinity NJ 3487 to NK 2008. They have been in position for eight hours. The two BMP MRRs are forward in the first echelon with the 54th in the north and the 56th in the south. The 55th MRR is back in the second echelon vicinity NJ 1884. The MRRs each have two reinforced MRBs forward and one back. The TBs from each MRR are broken down and reinforcing the MRBs. The 57th TR is in battalion assembly areas vicinity NJ 1276 conducting sustainment operations. The MRD has not established a security zone; however, sections of regimental reconnaissance are forward up to 10 km to the front of main defensive positions. Also, combat outposts from first echelon MRCs are 3-5 km forward of the main defensive positions.
(c) The 76th MRD is estimated to be at only 55-65% strength in personnel and equipment.

(2) Capabilities. The 76th MRD can complete deliberate defensive positions within 36 hours from now. They have no nuclear capability but they do have both persistent and non-persistent chemical munitions. Despite friendly air superiority, the enemy may generate a limited number of air support sorties to support the MRD. The MRD is capable of limited air assault operations into rear areas utilizing the six MI-2/HOPLITE and four MI-8T/HIP C helicopters from the MRD's helicopter squadron. MRBs are capable of counterattacking with AT and tank Platoons. It is expected that the 57th TR can counterattack into our zone of attack within sixty minutes upon notification. The TB(-) of the 55th MRR can counterattack into our zone within forty-five minutes of notification.

(3) Most probable course of action. The 76th MRD will continue to defend for the next 36-48 hours to allow the 57th TR time to complete sustainment operations in preparation for resuming offensive operations. It is expected that the 57th TR, supported by the 55th MRR, will pass through the MRD's forward defensive positions attempting to seize the Avawatz Mountain passes.

B. Friendly Forces:

(1) 52d ID (Mech) attacking 190545 OCT blocks enemy movement north vicinity OBJ MARSH (NK0912) in order to protect the southern flank of 54th ID (Mech), the 10th (US) Corps main effort. Division will attack through enemy defenses in zone to gain the key terrain which will block enemy counterattacks into the Corps' main effort. Division wants to be in a position to continue the attack to destroy bypassed, cut-off enemy forces. We will be successful by penetrating the enemy defenses and controlling key avenues that will protect the Corps main effort's southern flank. (See Concept Sketch, Appendix 1 to Annex B)

(2) 2d Yomanian Division (to the south) attacking in zone 190545 OCT fixes enemy first echelon MRBs to prevent them from moving to influence the 20th (US) Corps attack to seize OBJ ORLEANS (NJ5070), cutting off Lutonian divisions east of the border.

(3) 2d Bde (to the north), the Div main effort, attacking 190545 OCT blocks enemy movement north vic OBJ MARSH (NK0912) to protect the southern flank of the 10th (US) Corps main effort, 54th ID (Mech).

(4) 52d AB conducting deep attacks 190300 OCT destroys enemy artillery groups vic OBJ SMASH (NJ078948), and OBJ SLAM (NK045185) to prevent the enemy's massing of artillery against
maneuver brigade attacks into the Division's flanks vic Engagement Areas RED, BROWN, or YELLOW.

(5) TF 1-2, division reserve, follows 3d Bde.

(6) 70th FA Bde supports the operation by providing counterfire missions in support of the Division.

C. Attachments and Detachments: See Task Organization.

2. MISSION:

1st Bde attacking 190500 OCT secures OBJ MARY (NJ2392) to protect the southern flank of 2d Bde (Div main effort) from enemy reinforcements.

3. EXECUTION:

INTENT: My intent is to control the BARSTOW ROAD with a force sufficient to protect the southern flank of the 2d Bde from battalion or larger force. Concurrent with consolidation on OBJ MARY to protect 2d Brigade's flank we must prepare to continue the attack to destroy bypassed enemy elements.

A. Concept of the Operation: Annex B (Operation Overlay). We will have a supporting effort infiltrate and secure a foothold vic NJ2794 to control this high ground allowing the Bde main effort speed of movement to envelop OBJ MARY vic NJ 2392, the decisive point. This will support the division main attack (2d Bde) on OBJ MARSH by isolating any enemy moving north along BARSTOW ROAD, thus protecting the southern flank of 2d Bde. Surprise and speed are critical to the success of this mission. If the enemy detects our infiltration, he will disrupt the attack and slow our movement to OBJ MARY. Speed is critical in the movement to OBJ MARY to get into an advantageous position before enemy elements CATK the 2d Bde southern flank.

(1) Maneuver: 1-66 Inf(L) beginning infiltration NLT 181900 OCT and assaulting at 190500 OCT seizes OBJ AXE (NJ2993) to enable TF 1-77, the main effort, attacking 190545 OCT secures OBJ MARY (NJ2292) to prevent enemy interference from the south with the Div main effort.

(2) Fires: The purpose of FA is to suppress enemy positions on OBJ AXE and disrupt platoon size or greater enemy counterattacks. Priority of fires, with two priority targets, initially to 1-66 Inf (L) during infiltration and assault on OBJ AXE. On order, or upon link-up, priority of fires, with two priority targets, changes to TF 1-77. The purpose of CAS (A-10) is to disrupt enemy counterattacks. 1st Bde is allocated eight CAS sorties. Two sorties will be held by Bde, four sorties are
allocated to TF 1-77, and two sorties are allocated to 1-66 Inf (L).

(3) Counter Air Operations: Priority of protection is to TF 1-77, 1-66 Inf(L), BSA, FA units, and Brigade MAIN in that order. Air superiority expected throughout operation with limited periods of air parity.

(4) IEW: Purpose of IEW is to disrupt enemy command and control. Priority will be to locate enemy C&C and RAG locations. Commencing at 1-66 Inf(L) assault time (190500 OCT), located C&C and RAG enemy emitters will be jammed.

(5) Engineering: The purpose of engineering is to enhance the brigade’s mobility to OBJ MARY, block enemy units moving north, and improve the defensive posture of the brigade on OBJ MARY. Priority of engineer effort is mobility to rapidly breach or bypass enemy obstacles in securing OBJ MARY, then countermobility to block enemy movement north along BARSTOW ROAD, thus protecting 2d Bde’s southern flank. Priority of work, mobility, TF 1-77, 1-66 Inf (L) and MSR clearance. With seizure of OBJ MARY, priority shifts to obstacle emplacement along BARSTOW ROAD and force protection to AT systems, BFVS, ADA, and C2 in order. Short duration FASCAM authority retained by Bde Cdr. Long duration FASCAM requests will be forwarded to Division for approval.

B. Tasks to Maneuver Units:

(1) TF 1-77:

(a) Conduct linkup with 1-66 Inf(L) at Passage Point D (NJ304935) and pass through 1-66 Inf(L) along LANE GOLD.

(b) After securing OBJ MARY and gaining control of BARSTOW ROAD, clear enemy in your zone.

(c) Plan seven FA targets.

(2) 1-66 Inf(L):

(a) Conduct truck movement along ROUTE CROSSBOW to dismount point at CP 8(NJ354999) 181600 OCT.

(b) Occupy AA GIMLET (NJ345986).

(c) Establish Passage Point D (NJ304935) NLT 190600 OCT.

(d) LOA is PL COUGAR.

B-22
(e) Be prepared to continue the attack south to vic CP3 (NJ298904) to destroy enemy forces preventing the Bde from securing OBJ MARY.

(f) Plan five FA targets.

C. Tasks to Combat Support Units:

(1) Fire Support

(a) Field Artillery.

1-40 FA (155, SP) (DS)

2-606 FA (203) (R) 1-40 FA

Authority for use of illum. retained at Bde.

(b) Air Support.

A-10, equipped with pave penny system, on 30 minute strip alert.

PRF code 0126.

Sortie allocation: 2 retained at Bde, 2 to 1-66 Inf (L), and 4 to TF 1-77.

(2) Air Defense: A/1-441 ADA(-) Provide early warning over the Bde Cmd net. Monitor AM and FM early warning nets.

(3) 52d Engr Bn: Provide engineer recon team to TF 1-77’s scout platoon effective 172300 Oct.

(4) Tm A/52d MI:

(5) 1/52d MP:

(6) 52d Cml (-):

D. Coordinating Instructions.

(1) LD is PL ROBERT.

(2) Limit of Advance is PL RUFUS.

(3) PIR: See ANNEX A, Intelligence Annex.

(4) IR: See ANNEX A, Intelligence Annex.
(5) Report any bypassed minefields with details on the type of mine encountered. Buried, surface laid, metallic, nonmetallic, and the spacing between mines.

(6) Use panel markers on U-shaped pickets to mark lanes (Bde SOP for initial lane marking pattern). Battalions must upgrade these lane markings to the intermediate level within two hours after OBJ MARY is secured.

(7) Air Defense Warning is YELLOW. Weapons Control Status is TIGHT.

(8) MOPP level one.

4. SERVICE SUPPORT: Annex D (Logistics) (Note: not provided)

5. COMMAND AND SIGNAL:
   A. Command.
      (1) The TAC will move with TF 1-77.
      (2) The MAIN will initially be located vic NJ555994. On order it will move to NJ352972.
   B. Signal.
      (1) SOI INDEX 3-789 in effect.
      (2) A retrans site will be located vic NJ 355979.

ACKNOWLEDGE:

OFFICIAL: Westing
HANNIBAL COL
S3

Annexes: A - Intelligence Annex
         B - Operation Overlay
         C - Fire Support Overlay
         D - Logistics
ANNEX (A) (INTELLIGENCE) TO 1st BDE, 1st Bde (M) OPORD

Reference: Ft. Irwin South Special Map Sheet, special training map overlay

1. SUMMARY OF ENEMY SITUATION. See BDE OPORD.

2. INTELLIGENCE REQUIREMENTS.
   a. Priority Intelligence Requirements (PIR):
      (1) Will the enemy use his air assault assets? If so, where and when?:
      (2) Where are his armor formations of company size or larger?
      (3) Where are his major obstacles in and around OBJ MARY and OBJ GOLD?
   b. Intelligence Requirements (IR):
      (1) Will the enemy use chemical weapons? If so, where and when?
      (2) What is the location of the RAG and C&C nodes?
      (3) Where is the enemy’s engineering assets and what activities are they engaged in?
      (4) Will the 55th MRR counter-attack? If so, where, when, and how?

3. INTELLIGENCE ACQUISITION TASKS:
   a. Orders to Subordinate and Attached Units.
      (1) All units report as obtained:
         (a) Strength, composition, disposition, and identification of all enemy units.
         (b) Location of enemy recon units to include dismounted patrols in the brigade’s area of operations.
         (c) Report location and direction of travel of all withdrawing units.
         (d) Location of field artillery, rocket, missile, and air defense systems.
         (e) Location/ID of enemy engineer activity.

B-25
(f) Location of enemy CPs, logistics facilities, and COMCENS.

(g) Location and identification of enemy communications and noncommunications emitters.

(h) Indications of physical surveillance of brigade and battalion command, control, and logistics facilities.

b. Requests to Higher, Adjacent, and Cooperating Units.

(1) 52D ID Requested to provide as obtained:

(a) Indications of the use of chemical weapons.

(b) All anti-US activity by terrorists in the 52 ID area.

(c) Indications of additional Lutonian forces deploying into the 1st Bde area of interest.

(d) Location of enemy aviation units and indication of aviation use.

4. MEASURES FOR HANDLING PERSONNEL, DOCUMENTS, AND MATERIEL.
Per 52d ID (M) SOP (Attention S2: Use your own division’s SOP).

5. DOCUMENTS AND/OR EQUIPMENT REQUIRED.

a. Map: Ft Irwin South Special Map Sheet.

6. COUNTERINTELLIGENCE. Per 52d ID (M) SOP (Attention S2: Use your own division’s SOP).

7. REPORTS AND DISTRIBUTION. Per 52d ID (M) SOP (Attention S2: Use your own division’s SOP, except when instructions in a training block instruct you otherwise).

Acknowledge:

OFFICIAL:  
TURGESSON  
G2

Westing  
COL

APPENDIX:

1 - Intelligence Estimate

2 - Sit Template # 1, 76 MRD Fwd Def options A, B, & C (Must go to bde headquarters to see)

3 - Ground Order of Battle (Lutonia) (Not written)

B-26
Appendix 1 - Intelligence Estimate to Annex A (Intelligence) to 1st Bde (M) Bde OPORD

Effective Time: 171800L OCT 93

Time Zone Used Throughout the Plan: LOCAL

1. MISSION. See BDE OPORD

2. BATTLEFIELD AREA OF OPERATIONS.

A. Weather.

(1) Existing situation.

(a) 24-72 Hours Forecast (18-20 Oct). No precipitation. Partly cloudy skies. Ceiling > 3000 ft. Daytime highs 60-70 degrees Fahrenheit. Nighttime lows 30-35 degrees Fahrenheit. Mean humidity will be less than 40%. Winds are 5-7 knots from the NW. Periods of calm around sunrise can be expected (+/- 1 hour). Surface visibility greater than 5000m. Blowing sand and dust may hinder visibility slightly.

(b) Light Data (all times Uniform).

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<th>Moon Rise/Set</th>
<th>Moon Illum</th>
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</table>

(2) Effect on enemy courses of action.

(a) Forecasted weather equally favors enemy’s continued defense or its resumption of offensive operations.

(b) High daytime temperatures is not likely to adversely affect personnel engaged in strenuous activities, particularly those wearing chemical protective suits.

(c) Winds from the NW will favor enemy use of chemical agents.

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(d) Conditions will be generally suitable for employment of smoke.

(e) Forecasted weather will not affect cross-country movement.

(f) Weather will be favorable for both helicopter and fixed-wing aircraft operations.

(g) Decreasing moon illumination during the forecast period will adversely affect enemy's imagery intensification devices.

(3) Effect on own courses of action.

(a) Weather equally favors offensive or defensive operations.

(b) Wind does not favor friendly use of chemical weapons.

(c) Other weather effects are the same as for enemy.

B. Terrain.

(1). Existing situation.

(a) Terrain is generally desert sand and rock compartmented by numerous wadis. Occasional rains affect trafficability, especially in wadis. Observation and fields of fire are good in desert floor areas. Ridges and wadis provide good masked positions for both cover and concealment. Wadis are obstacles to forward movement when the terrain is reinforced. Key terrain tends to be high ground that dominates desert floor routes and passes through ridgelines. Avenues of approach generally parallel ridgelines and lead to passes that allow forward mobility. The terrain is generally flat and open, with the exception of the mountain ranges and dry hill masses. Scarce vegetation consists primarily of small shrubs. Observation and fields of fire are generally good throughout the area, with the exception of the areas dominated by dry washes and hill masses. The only cover and concealment provided by this terrain exists in and around hill masses, dry river bottoms, and washes.

(2) Observation.

(a) Ground observation from one point on the desert floor to another ranges from poor to good. The concentration of bushlike vegetation generally restricts observation at ground level. Observation from a higher elevation to the desert floor is excellent and is favored by the threat reconnaissance units. Observation from the desert floor to the mountains is generally excellent, except when locally restricted by washes, ravines, and
passes. Observation in ravines and in the mountains may be restricted by local terrain features. Dust clouds formed by moving vehicles are easily observed. Unhindered observation and lack of appreciable terrain references makes range estimation difficult without the aid of sensors.

(b) Aerial observation is excellent over the desert floors and good to excellent throughout the area. In the mountains, ravines, and washes, personnel and equipment can hide from fast-moving aircraft when properly camouflaged and concealed. However, the lack of natural vegetation reduces natural camouflage potential. As mentioned, dust clouds formed by moving vehicles favor long-range observation.

(c) Electronic and sonic observation are generally excellent when directed toward the desert floor, but less effective when employed in the mountains.

(3) Fields of fire.

(a) Maximum flat-trajectory weapons’ ranges across the desert floor will be hindered only by low vegetation and the numerous ravines and washes. In the mountains, fields of fire are limited by terrain irregularities.

(b) High-trajectory weapons will have excellent fields of fire with no hinderance from overhead vegetation. With forward observers placed on high OPs, unlimited visibility should give excellent results.

(c) Cover and concealment: Due to the lack of significant natural vegetation, cover and concealment throughout the area depends on terrain irregularities, ravines, washes, and separate hill masses. These provide cover and concealment for both troops and vehicles from ground observation and flat-trajectory fire, but virtually no protection from air observation. Camouflage netting employed in shadows in irregular terrain is of significant value.

(4) Obstacles. Manmade obstacles consist of the Fort Irwin cantonment area. The principal natural obstacles are the steep mountains. Movement over these is possible, but in many instances is limited to foot traffic. The dry lake floors are generally dry during the winter months, but their thin crusts will not support heavy, wheeled or tracked vehicles.

(5) Movement.

(a) Roads and trails. Wheeled vehicle movement by road will be slowed in areas where the roads are corrugated by numerous washes from water runoff.
(b) Cross-country. Cross-country wheeled vehicle movement is possible on the desert floors, but is generally slow and difficult due to wadis, rocks, and sand. Wheeled movement close to and parallel with mountain ranges is also difficult to impossible due to ravines, rocks, and deep washes. Wheeled vehicle movement through mountain passes presents no problem. Tracked vehicle mobility in the desert is generally good, deteriorating closer to the mountains. However, movement rates are slowed due to the difficult terrain, sand, and boulders. In most cases, dust trails inhibit visibility and permit long-range acquisition. Foot movement is possible throughout the area, degraded in some instances by the rocky terrain.

(6) Key terrain features include those natural chokepoints created by terrain that restricts movement of forces, the major roads and passes throughout Fort Irwin, the airfield at Bicycle Lake (NK3404), and the built-up area (NK2902).

(7) Avenues of Approach. Sorry S2, the brigade S2 has not completed this. You are on your own to develop avenues of approach for your battalion.

(8) Effects on enemy courses of action.

(a) Defense. The terrain presently occupied by elements of 76th MRD favors the threat defense.

(b) Air. The Granite and Goldstone Mountains (that anchors the threat defense) mask radar hampering early warning of low-level air counterattacks.

(c) Armor. The climate, terrain, and lack of cover and concealment certainly favors the use of mechanized and armored forces.
(d) NBC. The blast, heat and radiation effects of nuclear weapons are enhanced in the desert. The sand will reflect and intensify heat and provide large quantities of soil for fallout. Although moderately strong prevailing winds are normal, the heat and broken terrain create sudden shifts in surface winds that make it difficult to precisely predict fallout patterns. The moderately strong winds and low humidity will rapidly dissipate any chemical or biological agents. Non-persistent agents will be effective for a very short period.

(e) Smoke. The lack of cover and concealment will increase the need of obscurant to conceal the movement of units from visual observation.

(9) Effects on friendly courses of action. Unknown, battalion S2 will have to determine specific effects.

3. ENEMY SITUATION.

A. General: See general situation handout

(1) Composition, Disposition, Strength.

(a) The Lutonian 76th MRD is composed of three MRRs (two BMP, one BTR), the 54th (BMP), 55th (BTR), and 56th (BMP) MRRs; one TR, the 57th TR; and an artillery regiment. The 76th MRD is DMP-1, BTR-70, T-72, 2S1, and 2S3 equipped.

(b) After sustaining heavy casualties, the 76th MRD has established defensive positions from vicinity NJ 3487 to NK 2008. They have been in position for eight hours. The two BMP MRRs are forward in the first echelon with the 54th in the north and the 56th in the south. The 55th MRR is back in the second echelon vicinity NJ 1884. The MRRs each have two reinforced MRBs forward and one back. The TBs from each MRR are broken down and reinforcing the MRBs. The 57th TR is in battalion assembly areas vicinity NJ 1276 conducting sustainment operations. The MRD has not established a security zone; however, sections of regimental reconnaissance are forward up to 10 km to the front of main defensive positions. Also, combat outposts from first echelon MRCs are 3-5 km forward of the main defensive positions.

(c) The 76th MRD is estimated to be at only 55-65% strength in personnel and equipment.

4. ENEMY CAPABILITIES.

A. The 76th MRD can complete deliberate defensive positions within 36 hours from now. They have no nuclear capability but they do have both persistent and non-persistent chemical munitions. Despite friendly air superiority, the enemy may generate a limited number of air support sorties to support the
MRD. The MRD is capable of limited air assault operations into rear areas utilizing the six MI-2/HOPLITE and four MI-8T/ HIP C helicopters from the MRD’s helicopter squadron. MRBs are capable of counterattacking with AT and tank platoons. It is expected that the 57th TR can counterattack into our zone of attack within sixty minutes upon notification. The TB(−) of the 55th MRR can counterattack into our zone within forty-five minutes of notification.

B. Most probable course of action. The 76th MRD will continue to defend for the next 36-48 hours to allow the 57th TR time to complete sustainment operations in preparation for resuming offensive operations. It is expected that the 57th TR, supported by the 55th MRR, will pass through the MRD’s forward defensive positions attempting to seize the Avawatz Mountain passes.

C. NBC. Lutonians have the capability to employ nonpersistent chemical agents by aircraft and indirect fire systems. During defensive operations nonpersistent chemicals will be used primarily to disrupt enemy assaults and artillery fires, deny recently occupied defensive positions and protect defensive positions. Non-persistent agents are designed to "break" the assault by attacking the enemy as he attempts to breach obstacles. We can expect the 76th MRD to employ non-persistent chemical agents to break contact and during withdrawal operations.

5. Conclusions.

A. Effects of intelligence considerations. All friendly courses of action can be supported by intelligence operations.

B. Effects of AO on our action.

(1) Terrain favors defensive operations. Long range visibility and potential acquisition between PL CAT and PL Jaguar allows defending forces to slow the attacker’s momentum.

(2) Weather impacts friendly COAs equally.

C. Probable enemy course of action. The enemy will continue to defend in its current position for the next 36-48 hours.
D. Enemy vulnerabilities:

(1) 76th MRD has been fighting since the start of the conflict. Troops are likely exhausted and relieved to be defending. Exhaustion may increase the time they need to prepare a defense. Supplies are low, equipment is worn. Troops may be complacent in counter-reconnaissance. Psyops, vigorous patrolling (combat and recon), and interdiction of LOCs will affect their morale.

(2) The enemy does not have thermal night vision devices.

Acknowledgement

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