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PRELIMINARY RESULTS OF A PSYCHOLOGIST'S OBSERVATION AND PARTICIPATION WITH A COMBAT UNIT DURING CONTINUOUS OPERATIONS

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The author describes the impact of stress and fatigue factors on the functioning of a battalion sized unit engaged in continuous combat operations during REFORGER 82. As fatigue and stress increased there was a corresponding decline in combat efficiency as reflected in errors of tacticle judgment, decreased map reading ability and impaired communication abilities on the part of unit leaders. Opportunities for effective preventive interventions by mental health personnel in a combat environment are described as are some considerations for handling stress casualties in a field environment.

For many AMEDD Psychologists, indeed most AMEDD Behavioral Scientists, our roles as mental health professionals and as military members seem to follow parallel paths which only infrequently overlap. That is, most of our activities clearly belong to one role (assessment, psychotherapy) or the other (Administrative Officer of the Day) with only a small minority requiring a true integration of the two roles. The author recently had an opportunity to participate in one such integrating experience when he accompanied a Squadron of an Armored Cavalry Regiment on REFORGER 82 as an observer/augmentation to their Medical Platoon.

The purposes of this trip were: first, to gain familiarity with the unit and its functioning as a part of a long-term consultation project; second, to observe the unit for the effects of stress and fatigue in a simulated combat environment; and third, to assess the applicability of current mental health plans and thinking in a highly fluid and mobile combat environment. An armored cavalry unit was particularly well-suited for these observations in that such units are designed to be highly mobile, to fight over extended distances and to possess sufficient firepower to independently engage much larger units in direct combat. These are many of the same elements which characterize the tactics and organization under which much of the army will fight in future conflicts. Wass de Czese and Holder (1982) in describing changes in the new Operations Manual, FM 100-5, emphasize initiative, depth, agility and syncronization as characterizing the new operational concepts. Moving fast, striking hard, and

finishing rapidly are seen as keys to avoiding enemy counterattacks and counterfires. MG Robert Elton, CG of the 9th Inf Div, the division selected as the High Technology Light Division testbed, indicates that the depth to which a typical division will operate has been greatly expanded (Tice, 1982). Now, instead of looking 15-20 Km forward, divisions will operate out to 70 Km and to the rear about the same distance. MG Elton also describes future tactics as characterized by mobility, speed, offensive initiative and deep strikes at the enemy's second-echelon forces. Barbara and Brown (1982) describe in detail plans for using brigade size forces to conduct such strikes against enemy support facilities located between the first and second-echelon divisions. These factors can only add to the anticipated difficulties in maintaining the mental health of soldiers who are involved in continuous operations with highly lethal weapon's systems in high-intensity combat.

The armored cavalry squadron which the author accompanied on the six week REFORGER exercise deployed to Germany as part of an Armored Cavalry regiment which consisted of three cavalry squadrons and a regimental base. Each squadron is composed of three line troops, a tank company, a howitzer battery and a headquarters troop. Each squadron is completely mobile and may be employed as a separate unit or as a part of a regimental force. Squadron medical support is provided by the organic medical platoon consisting of a physician's assistant, a platoon leader, and approximately 26 enlisted medical aidmen. The regimental base has a similar medical platoon and a regimental surgeon. Brigade level and higher medical support must be obtained from Corps assets. It is important to note that there is no organic mental health support for this type unit forward of the Corps rear area.

A squadron size force when deployed for combat typically is organized into four functionally and physically separate areas of operations consisting of the Field Trains area, the Combat Trains area, the tactical operations center and the line unit combat areas. During the deployment period the author was able to gather data from all four locations under varying conditions. Initial observations were gathered from the unit as a whole while based with the medical platoon in the Field Trains area of the Marshaling area. This period of observation consisted of the 10 days prior to the actual start of exercise play during which the unit drew prepositioned vehicles and equipment, rail-loaded the vehicles, moved by troop trains to the exercise area, off-loaded the vehicles, and formed into its combat configuration in the assembly area. During the first week of actual exercise play the author divided his time between the Battalion Aid Station located in the Combat Trains and the Tactical Operations Center located just to the rear of the actual combat elements. During this period the squadron was engaged in 24 hours a day combat operations as part of the offensive action of a Corps covering force. During the second week of exercise play the author road and lived with one of the line troop commanders in his armored personnel carrier. This week was again characterized by continuous combat operations with the squadron acting as part of the Corps covering force on the defensive. An additional feature of this period was a night exercise after three days of continuous operations which involved disengaging the squadron from battle, moving approximately 50 miles by roadmarch to an unfamiliar location and immediately being thrown into a counterattack against overwhelming enemy forces.

Approximately six weeks prior to deployment on the exercise the author began acquainting himself with the officers and senior noncommissioned officers of the squadron by participating in normal preparation activities, attending squadron staff meetings and by visiting key personnel in their typical work areas. Thus, by the time of deployment he had met with all key personnel in the units and had explained his role and purpose in accompanying the unit on REFORGER. These activities were quite successful in gaining acceptance and freedom to operate within the unit. During the entire deployment period the author was allowed total freedom to observe whatever he wished. Particularly impressive was the willingness of the unit personnel at all levels to discuss almost any aspect of the unit's functioning, unit problems, and their own experiences of stress and fatigue.

Data was gathered by the author from direct observations, personal conversations, informal group discussions during lulls in battle, monitoring of radio communications and participation in staff meetings and briefings.

The wide range of observations and data collected during this exercise will take some time to organize and analyze properly. Preliminary analysis has led to some interesting support for previous observations of units functioning during continuous operations and to supporting data for previously proposed roles for mental health personnel in a combat environment.

Manning (1979) and Manning and Ingraham (1980) have addressed the issue of round-the-clock high-intensity combat operations by a field artillary battalion in Europe. During their observation of the unit while engaged in a 36-hour continuous operations scenario they found that impaired judgment due to sleep deprivation was a major problem for senior leaders. They note that the sleep deprivation was in part self-imposed due to an unwritten code which indicates that sleep is only for the weak. Of particular note is that while they found forced-paced activities, such as requests for fire from forward observers and higher headquarters, being handled efficiently they also found that self-paced activities such as updating meteorological reports, plotting pre-planned fire and no-fire zones and setting out perimeter guards being increasingly neglected. Studies by Britain's Army Personnel Research Establishment (1977) and follow-up studies have shown that as little as three to four hours of unbroken sleep per night produced significant improvement on tasks of both cognitive performance and military effectiveness.

Observations of the sleep behavior of the armored cavalry squadron reinforce the findings of previous studies and help to generalize them to front line units. The author specifically noted his own periods of sleep per 24 hour period at each of the functional areas of operations described above. In the Field Trains area during the week immediately prior to the start of exercise play the author averaged 4.8 hours of sleep per 24 hour period. Often this was not the unbroken sleep recommended by the British studies but rather sleep punctuated by frequent interruptions. Typically these interruptions consisted of patients being brought to the battalion aid station for treatment, requirements to perform immediate maintenance on equipment such as generators, or the need to assist with maintaining a radio watch. While in the Combat Trains and Tactical

Operations Center areas during the first week of exercise play the author averaged 2.8 hours of sleep per 24 hour period. Again, this was not typically a period of uninterrupted sleep but rather small increments snatched as opportunities presented themselves. During the second week of combat play while riding with the troop commander the author averaged 2.1 hours of sleep per 24 hour period. At this location all sleep was obtained in less than one hour increments. Bear in mind that the author had no specifically assigned duties during these periods and was thus more likely than others to be able to sleep when an opportunity presented itself. Finally, while riding with the troop commander the author also recorded his sleep behavior which averaged less than one hour per 24 hour period. The platoon leader's sleep behavior was not directly observed, however, it was noted that at all hours of the day or night when called by the troop commander on the radio each answered immediately himself. Thus, it seems safe to conclude that they receive little if any more sleep than the troop commander who was directly observed.

One difference between this unit and the artillary unit observed by Manning and Ingraham was that the almost perpetual movement and continual engagement in direct combat with enemy forces played a greater role in leader sleep deprivation than did self-imposed factors. Fear of being caught napping by a superior during the infrequent lulls in battle was still present but seemed to play a lesser role than in the artillary unit.

The effects of sleep deprivation and stress factors on unit leaders whose future careers depended heavily on their performance during the exercise were progressive and dramatic. On an operational level errors of judgment on the part of leaders began to show after two to three days of continuous operations. On one occasion a troop level commander who had been warned by a neighboring unit that he was in danger of being encircled was unable to take effective action to prevent it. Within an hour his entire troop had been destroyed. On another occasion the entire squadron was easily lured into an enemy trap which caused significant losses. Both of these sets of circumstances had presented themselves earlier in the exercise and had been appropriately handled with very successful outcomes. Highly dedicated and effective squadron staff officers in later conversations with the author confided that after three days of exercise play they were so exhausted that they simply found a secluded spot, stopped their jeep and turned off their radio to obtain three or four hours sleep. This could be disasterous for the unit during actual combat.

As the exercise progressed the time required for leaders to accomplish routine tasks began to increase. The commanders' deployment and positioning of their platoons on the ground took significantly longer as did the time required to read the operational maps. The effects of fatigue and stress on map reading abilities were also apparent in the increased reporting of incorrect map coordinates and positions and in increased errors in locating themselves on the ground in relation to the maps.

Radio transmissions were equally subject to increasing errors as the period of stress and sleep deprivation increased. Particularly susceptible to these factors was the use of call signs. It became common for leaders to identify themselves by an incorrect or previous day's call sign and/or to use the wrong or previous day's call sign for the person being called. Often communicating with the correct individual was based more on voice recognition than on proper call sign identification. Keying the mike for 20-40 seconds while trying to think of calls signs or even to remember who had called became common. This may be particularly lethal in an electronic warfare environment. Similarly, the length of transmissions increased due to less precise communications. Messages which earlier in the battle had taken 30 seconds began to require two to three minutes. At the same time irritability with subordinates and anger toward superiors increased significantly when either failed to grasp quickly what was being said. Often this resulted in a need to repeat the original message. On several occasions commanders gave up attempting to communicate with subordinates by radio and simply drove to their location to show them what they wanted done.

Information flow was likewise influenced by stress and fatigue factors and the increased irritability of leaders at all levels. As these factors increased the amount of information available about higher and adjacent units decreased. Information flow within the individual troops became the minimum necessary - often no more than "follow me." Similarly, information flow up the chain decreased even further, perhaps in part due to the increased irritability of leaders in their dealings with subordinates. The information flow between combat elements and their supporting elements also decreased to the point where it led to much shorter notice moves for the supporting elements than would have been necessary. This is extremely disruptive to their functioning and may directly impair their ability to sustain the combat elements.

The vehicle accident record of the squadron was another factor which appeared to be related to the effects of stress and fatigue on the judgment of both vehicle operators and unit leaders. All seven of the squadron's major vehicle accidents involving serious injury or property damage occurred following three to four days of exercise play. No serious accidents occurred prior to the start of the exercise nor after it had finished. Three of the seven accidents definitely involved poor judgments on the part of leaders who had previously demonstrated a considerable concern for the safe operation of motor vehicles.

In their studies, Manning and Ingraham additionally focus on "the will to continue" as an important issue involving junior enlisted personnel. They report that they found this to be even more important than physical endurance and related it to a lack of unit cohesion and espirit. In the present case this was evident at the troop level and seemed to be a function of unit organization and employment policy. Each troop receives certain dedicated support elements from squadron/regiment such as medics, ground surveillance radar operators, red-eye air defense teams, etc. Since these elements are not organic to the troop they support, they are often not seen as belonging to the troop. This attitude is encouraged by a failure to consistently employ the same people in support of the same troop and by the frequent turnover of personnel in the support

sections. On a practical level this resulted in several supporting elements being "forgotten" in the chain of notification when a troop size unit moved location at night. Other supporting elements described such things as being threatened with withholding of rations if they didn't comply with the commander's wishes and as having been forgotten when water rations were being distributed. Most of these instances appear to have been oversights in the heat of battle but never-theless they severely impacted on the "will to continue" of the individuals involved. Perhaps the trend to centralize functions at battalion and higher levels makes good sense from a cost analysis perspective; it surely does not from that of unit cohesion on the battlefield.

The recommended roles for mental health workers was the second area of interest for the author. Rath (1980) has suggested three major tasks for mental health personnel in combat: consultation to command to minimize the rate of psychiatric casualties and to maximize combat effectiveness; management of psychiatric casualties for maximum return to duty; and maintenance of effectiveness of mental health personnel.

The author found ample opportunities to engage in both preventive consultation activities and to assist in the management of psychiatric casualties during the exercise. The preventive activities fell into three main categories: 1) advice to commanders; 2) rumor control efforts; and 3) tailgate supportive interventions with commanders, staff officers and enlisted personnel. On several occasions he was able to provide feedback to the squadron and troop level commanders on the results of various policies and procedures which were negatively impacting on troop morale. Frequently this feedback dealt with misinterpretations by subordinate commanders and leaders of the squadron commander's directives or the spirit of his directives. One area where this feedback proved to be particularly helpful was regarding information flow to the enlisted personnel. For example, on the day before exercise play began the author noted that many junior enlisted personnel from a variety of sections appeared to have little idea of what was to happen during the exercise and even less of an idea as to where the squadron fit into a large picture. Incredibly, a few even thought the unit was to engage in a tank gunnery exercise with no opposing forces. Interestingly, informing the troops had been a theoretical point of interest for the squadron commander. Following his re-emphasis of this point at the day's staff meeting it was noted that most section leaders were conducting exercise briefings for their men. On another occasion during the defensive phase of the exercise one particular troop was doing exceptionally well in defeating attacking enemy forces but then repeatedly being ordered to fall back to new defensive positions. This was becoming very demoralizing for the hard fighting soldiers. Once this was brought to the attention of the troop commander he quickly informed the soldiers that it was in no way a reflection on their performance but rather necessitated by the pull-back of adjoining units. As this information became known, the soldier's moral and fighting efforts rose again to their previously high level.

In the confusion of combat activity, rumors and misinformation were common and at times very detrimental to effective combat operations. This was especially true as formal channels of communication became less effective and

psychologically accessible due to the previously noted effects of stress and fatigue. In this situation it was found that a mental health worker who is seen as approachable by the enlisted soldiers could serve a useful function. At times this function involved on the spot corrections of misinformation or rumors and at other times it involved informing commanders of the impact of various rumors or misinformation so that they could take corrective action.

An activity that appeared to be of significant value in preventing stress casualties amongst leaders and in maintaining the combat effectiveness of some units was the provision of tailgate supportive therapy to unit commanders. This primarily involved finding a relatively quiet time and place to talk with a unit commander who had previously been observed exhibiting signs of stress build up. These talks were not in any way defined as therapy and were not exclusively problem centered. It is the author's belief that this was extremely important to the commanders for they are the one group which is very isolated psychologically under battle conditions. In a garrison setting they often gather together to share mutual concerns, offer support and exchange information. Due to the expanded distances over which they had to operate this mutual support was not possible during the exercise play. That the commanders themselves found these talks to be helpful was demonstrated by several expressions of appreciation even after the exercise was long over.

The effectiveness of these and other such preventive interventions and consultations was very dependent upon the credibility of the author not only as a mental health professional but also as a fellow soldier. In part this credibility was based on face to face familiarity with the commanders and leaders developed prior to deployment in their work areas, at staff meetings and at the officer's club. In part it was based on the willingness to share the hardships of family separation and field duty with them. And, in part it was based on demonstration of some appreciation of what their jobs and functions were, conveyed in their language.

The same credibility with commanders was extremely important to the effective management of the psychiatric casualties which occurred. A case in point was that of an E-6 scout platoon leader who developed a toxic psychosis from eating nightshade berries several days before the start of the exercise. This unit had observed this individual in a state of total disorientation, running through the woods without boots or equipment and to have put his hands around his driver's neck as if to choke him. Since he is the person who is to first make contact with the enemy and warn the unit of their approach, all members of the unit were somewhat dependent upon him for survival in combat. You can imagine their concern when he returned to duty from the hospital just before the start of the exercise. His unconditioned acceptance back into the unit by the commander and the rest of the unit was greatly facilitated by explanations of what had happened to him and of the temporary, nonrecurring nature of his illness. This would not have been possible had not the commander and unit members truly believed that the author understood the nature of this man's job as well as his illness. They had had too many previous experiences with medical experts who had not understood their work and its setting to have simply

accepted him back "on the say so of some rear echelon doctor." Similarly, explanations to the soldier himself of what had happened to him and reassurance that he would be able to function properly by the hospital staff did not have the same impact as did the same reassurances from someone whom he felt knew his job and situation.

This, and other cases ranging from manipulative soldiers threatening suicide to situationally distressed soldiers who had received "Dear John" letters from home, often required quick assessments and immediate intervention efforts which could not usually be performed in our customary office manner. Due to the fast pace of the battle activities and distances involved, almost all contacts were of a one-time crisis intervention variety. Follow-up contacts were the result of later accidental meetings or, occasionally, the result of a specific effort by the author to find the soldier. Most frequently follow-up reports were obtained during brief encounters with the soldier's superiors or fellow soldiers. At this point some might raise the issue of confidentiality as a problem. In fact, a soldier's unit and superiors were well aware of any difficulties or unusual behavior long before medical personnel. Actually, with some exceptions, too much confidentiality in a combat environment may be detrimental to both the individual and the unit involved by delaying or complicating the soldier's re-entry and conveying the attitude that there is something wrong with having strong feelings or problems.

Working with soldiers in a combat environment required a significant shift in therapeutic orientation from that of assisting a person to seek his optimal level of functioning to helping him return to the minimum level of functioning necessary for him to continue in his duties. It further required a shift in thinking concerning who the client actually was. Basically there was a need to identify with the unit and its function as the primary client, over and above the individual, in order to convey the degree of expectancy of return to combat that has been consistently identified as necessary for treating psychiatric battle casualties. Further, this identification, blended with appropriate clinical skills and a measure of reality therapy, was of significant value in preventing manipulative epidemics.

Finally, based on the above observations of a unit engaged in continuous combat operations, several points stand out as deserving future attention or reemphasis as the case may be:

1) Mental health professionals must begin to reconsider their garrison mode of operations if they are to be prepared psychologically to function in a combat environment and if they are to develop the skills necessary to function in that environment.

2) Face-to-face familiarity of unit leaders and members with the mental health worker provides the most important source of credibility for the mental health worker and greatly increases the likelihood of quick cooperation in a combat setting.

3) Familiarity of the mental health worker with units and the functioning of unit leaders prior to combat is extremely beneficial and may provide the only baseline data for assessing the effects of stress and fatigue on both the unit and its members.

4) Mental health workers must not only believe in and practice preventive intervention, but also must educate commanders and leaders regarding the tactical impact of such factors as stress and fatigue using the language of the commanders.

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