

DISCUSSION BY FREDERICK W. KILBOURNE

Once upon a time there was an artillery captain who was told by his commanding officer to shell the enemy. "Yes, Sir," said the captain, "but where, pray tell, is the position of our enemy?" "It is your job to determine that position," said the commanding officer, who then turned and walked away.

The captain was perplexed and upset for a moment, but soon he recovered his composure and set about proving that he was worthy of his position. He called before him one of his lieutenants and said, "Lieutenant, find out for me how the other artillery captains are shelling the enemy."

Little more than a fortnight passed when the lieutenant reported back as follows: "Sir," he reported, "the other artillery captains are reluctant to give you the information you request because you are not Regular Army, Sir, and because they envy the size of the artillery weapon at your disposal. I have been able to get some information, however, from a lieutenant who is a friend of mine in one of the other divisions. He tells me that his captain fires regularly and with some success at position 50.00, although there is some concern that the enemy may be moving from that position. Reports from the field indicate that the enemy may now be bivouacked at position 54.00. Since the captain has 70% confidence in those reports he is now in the process of adjusting his gun to shell position 52.80. Therefore, Sir," said the lieutenant with obvious pride at the intelligence he had gathered, "it is clear that you should shell position 52.80."

"You've done a soldierly job, Lieutenant," said the Captain, but he thought to himself, "do I not know more that will help me perform my job? The enemy division that is my target is on foot and therefore has probably not gone so far as the cavalry division with which the other captain is concerned. My gun is a splendid and expensive weapon, though untried, and should be capable of great accuracy. I think I should aim for position 40.00."

And so it came to pass that our artillery captain fired for a year at position 40.00. During that time his lieutenant kept careful count of the number of bodies blown skyward with each blast and at the end of the year he reported once again. "Captain, Sir," said the Lieutenant, "our observations have been somewhat obscured by the smoke from the constant shelling but our body count leads me to recommend that you shift the gun to shell posi-

tion 36.00. Should the smoke and my inexperience so concern you, however, that you have only 20% confidence in my report, Sir, it is clear to both of us I am sure that you should aim for position 39.20." So saying, the lieutenant saluted, smiled and was dismissed from the parable.

The captain again thought to himself. "According to the Army manual," he thought, "I should indeed now fire at position 39.20. But even as I cannot completely accept the observations of my lieutenant, neither can I completely deny the relationship between my original setting and the original setting of the other captain. In fact on reflection I find that my confidence in that relationship remains as high as 78%, although I must admit that I now have 22% confidence in my own operation. Accordingly it is clear that I should not overlook the change undertaken by the other captain, and thus that I should now aim at position 41.57."

At this point the commanding officer returned to the scene and addressed himself to the captain over the roar of the gun now shelling position 41.57. "Captain," he said, "you have done well and show promise of one day helping this army win the war. The enemy is in a defensive position, though not yet beaten. I do not mean to tell you how to calibrate your gun, but I do have some suggestions that you may wish to consider. We now have available at headquarters a machine with which you can measure the wind, and thus adjust your setting to compensate for this factor. Also, I have here the experience reported by an anti-aircraft unit operation in the area which, though not directly applicable to your problem, contains information that is useful by analogy. Further, our intelligence unit has completed a survey of the opinions of peasants in the area as to the probable location of the enemy division with which you are concerned. Better yet, we have captured one of the enemy forces and find that he is willing to plea-bargain and to tell us all that he knows which, though subjective, is enlightened and is useful input indeed. Also, I think you will find that repositioning your gun after each firing rather than merely at yearend will improve its accuracy. And finally, come peer with me through the smoke for I think you will find that, although we cannot see the enemy, we can catch fragmentary glimpses of information that bears witness to his location."

So saying the commanding officer turned and again left the captain to his thoughts. "How proud I am," thought the captain, "of the progress I have made this year. How excited I am to see that there is a wealth of information useful to my job and available, given the proper equipment and supporting

staff. How happy I am that we will win the war this year.”

The story ends happily, but not quite so quickly as within the year. The captain found that he needed approval from the general before he could obtain the equipment and manpower necessary to expand his job and improve his product. The general, it turned out, was impressed by the enthusiasm of the captain, but understood him not at all. The captain thus found that it was not enough to have the right idea, but that it was also necessary to communicate and sell that idea to the general. This he did in time and the war, though not won, at least was not lost.

And they all lived happily ever after, though it took many years indeed before they were really welcomed by the other branches of the Army.