

The Big Battle

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It is Germany's turn. Karelia is defended by 40 infantry, 10 armor, 6 fighters, and an AA gun. You have 40 infantry, 20 armor, and 2 fighters in position to attack. This attack will probably lead to a long battle which might go either way, but the odds are in your favor. You have decided to go for it.

Ukraine is defended by a lone British bomber which for some reason was forced to land there on the previous turn. You could detach a single tank from your main attack to kill the bomber and capture Ukraine. But this would weaken your main attack. What should you do? Please think about this before continuing to the next paragraph.

It turns out that the answer is not even close. You must put all your forces into the Karelia attack. Sending anything at all after the bomber is a terrible blunder. The reason is that the Karelia battle is likely to go for several rounds, and the tank will be firing each round, with a 50% chance of hitting. For instance, if the battle goes for four rounds, the tank will on average score two hits! But that's not all. The units that your tank kills will not be returning fire. So not only does putting the tank into the main battle lead to more casualties for your opponent, it also leads to fewer casualties for you. I ran some simulations and determined that on average, if you put the one extra tank into the battle at the start, on average you will have four extra units at the end (if you win), or your opponent will have four fewer (if you lose). Furthermore, at the end of the battle, it is likely that one or both sides will be losing aircraft. The most extreme case is the situation where putting the tank into the battle makes the difference between killing the four allied aircraft and failing to kill them. In this case, putting the tank in was worth 43 IPC to you! The four aircraft are worth 12 each for a total of 48; subtracting the 5 IPC cost of the tank leaves you with a 43 IPC gain.

Returning to the initial situation, you don't need to do any complicated calculations or simulations to make your decision. All you need to do is remember that pulling forces out of a large, close battle is basically never worth it. Even sending an infantry after that bomber would be an obvious mistake and should not even be considered. Now let's alter the situation. Suppose that instead you had 50 infantry, 20 armor, and 2 fighters available to attack, against the same defenses. With ten infantry added to your attack, you are now fairly confident of winning the battle by a large margin. In this situation, sending a tank after the bomber becomes much more reasonable, especially if you are in trouble in other areas of the map, so that a victory in Karelia will not assure a win for you. Incidentally, if this is the situation, your opponent has blundered by leaving Karelia so weak, but that's a topic for another article. The reason pulling a tank out makes sense in this situation is that the Karelia battle is not particularly close and so is not likely to last so many rounds. This greatly reduces the value of the extra tank there. That said, it's still a big battle, and putting the tank into it is still reasonable, especially if you think that a disaster in Karelia is basically the only way you could lose the game at this point.

I've used an enormous battle for this example, but the principle applies to somewhat smaller battles as well. I frequently see players pull a unit or two out of close 30-40 unit attacks on Karelia in order to accomplish some purpose, such as grabbing an undefended region or sinking a transport. This is almost never worth it. Also, for similar reasons, putting a bomber into the defense of a large stack that may be

attacked in a close battle is almost always correct. Even a weak piece, such as a defending bomber, is worth having in a major battle. This is true even though the bomber will be wiped out if you lose.

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General of the Army,

Spring 1942