



Mortar Factors In The Dunnigan System

By Alan R. Arvold

Mortars were rated in as much the same way as the regular artillery with some exceptions. First, being a high-angled fire weapon, they always used indirect fire, regardless of whether the target is being spotted by an FO (indirect fire) or is being seen by the mortar crews themselves (direct fire). Second, as this makes an area-fire weapon by default, even against point type targets they have to inundate the area around it with rounds and hope at least one makes a direct hit. While this is great against non-armored targets because near misses can still do damage, it severely reduces their effectiveness against armored targets (barring a critical hit). Third, medium and light mortars were frequently treated as direct fire weapons, especially on the Eastern Front, as they often fired at targets that the mortar crews could in fact see.

Attack Factor

Mortars were classified in one of the four following categories:

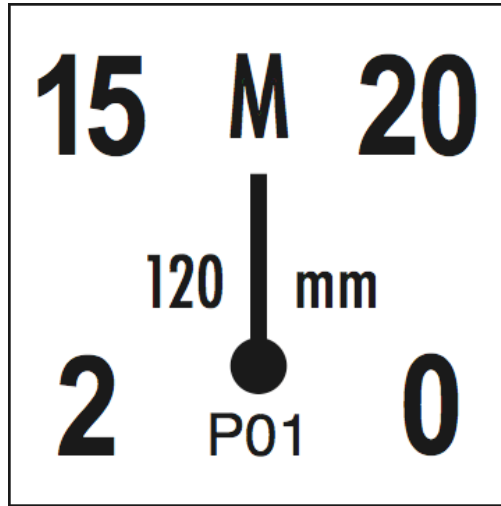
Light Mortars: 2 inch, 50 & 60mm mortars
Medium Mortars: 3 inch, 81 & 82mm mortars
Heavy Mortars: 107 & 120mm mortars
Super-Heavy Mortars: 160mm mortars

Because light mortars were considered to be part of the infantry platoons, they are not represented by their own counters in the Dunnigan system (although several authors back in the early 1970s did indeed make variant counters for light mortars). Thus their weak attack factors were factored into the infantry attack factors. For those who are interested on how the light mortars would be rated in the system, they would have an attack factor of 1 (for a group of three to four mortars).

Medium mortars (of all types) had a base firepower of 24. Since they were lumped in with the light artillery class, their base firepower was divided by four, thus giving them an attack factor of 6. But because of the fact that they always fired indirectly, their attack factor was halved again, thus giving a final attack factor of 3. The Russian motorized mortar unit has 2/3 the number of mortars in the unit, so its attack factor was further reduced to 2 to account for this. Thus they are not very effective against armored targets as it should be. However, as with regular artillery of the light artillery class, their true anti-personnel capabilities are severely reduced.

The heavy mortars had the following base firepower; 30 for the Western

Allies, 45 for the Germans and 78 for the Russians. Because they were lumped into the medium artillery class their base firepower were divided by three, thus giving us attack factors of 10, 15, and 26 respectively. The Russian attack factor may seem strange as it is larger



than the one of the counter. In truth, this was its attack factor in the PanzerBlitz prototype Tactical Game 3. This was based on its then alleged number of mortars in the counter as being nine. However, as Tactical Game 3 slowly developed into PanzerBlitz, the number of mortars represented by the Russian 120mm became eight to nine. It was then decided to lower the attack factor to 24 as it represented eight mortars, the lower number of mortars in the unit. Heavy mortars were not further penalized because their rounds were powerful enough to cause damage to armored vehicles, usually in the form of mobility kills, which even near misses could cause. In game terms this meant that the tank unit could be destroyed as mobility kills could easily take the armored vehicles out of the battle, although in real life, these vehicles could be repaired and returned to service quickly (usually after the scenario is over).

Super-heavy mortars, of which there is only one presently in the system, were treated a little differently. These huge mortars were breach loaded, thus

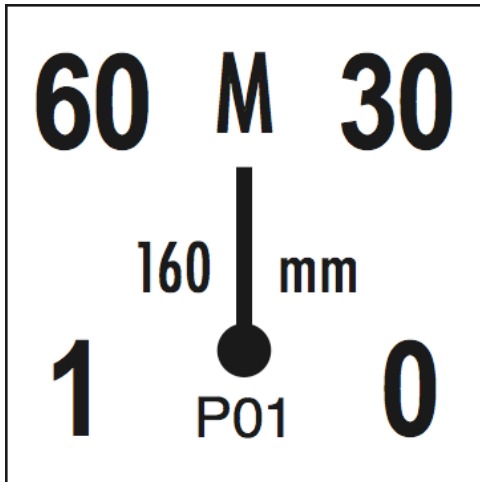
making their rate of fire comparable to those of an equivalent caliber artillery howitzer. Thus they were treated the same as howitzers of the same equivalent artillery class in terms of attack factor. That is the story of the Russian 160mm mortar, which I created. It has an attack factor of 60

which corresponds to the standard attack factor for the heavy artillery class.

Range Factor

The range factors were based on the maximum ranges of the mortars themselves. Unlike regular artillery, which has to register its weapons in order to accurately fire out to their maximum ranges, mortars being purely area-fire weapon can fire out to their maximum ranges from the start.

Two mortars bear special mention. The British 3 inch mortar had a rather short ranged round, only out to about 2,100 meters (8 hexes). This round was used during the entire war. Starting in 1944, a new round was introduced that extended the range to just over 3,000 meters (12 hexes). However, they had such large stockpiles of the old round that it continued to be used right up to the end of the war, while the new round was used only rarely. Thus Randall Reed decided to keep the range of the 3 inch mortar down to 8 hexes to reflect this.



The Russian 160mm mortar was given full mortar capabilities. This meant that it can fire out to its full range of 30 hexes, despite having an attack factor that rates it more as a howitzer than as a mortar. In a way this counter was a compromise unit.

Defense Factor

Defense factors come in two forms, those for the self-propelled mortars and those for the dismounted mortars. For self-propelled mortars, the defense factor is that of the vehicles that they are mounted on. However, this is the subject of another article.

Dunnigan established a table for the dismounted mortars defense factors based on their relative sizes as compared to regular artillery. Reed expanded it to include the possibility of light mortars, probably based on some

of the variant light mortar counters that came out in the early 1970s.

Light Mortars: 4
Medium Mortars: 3
Heavy and Super-Heavy Mortars: 2

As usual, the Russian 160mm mortar was given a defense factor of 1 to account for the Russian tendency to position their guns, howitzers, and mortars so close to each other (sometimes right next to each other), that it is easier to destroy them as a unit with less firepower.

Movement Factor

The movement factors were rather arbitrary. Self-propelled mortars have the movement factor of the vehicle that they are mounted on, which of course, is the subject of another article. Dismounted mortars have one of two different movement factors. Light and medium mortars were light enough that their crews could move them around by themselves, thus they received a movement factor of 1. Heavy and super-heavy mortars were too large and heavy for the crews to move around the battlefield, except by transport units, and so received a movement factor of 0.