



## **The Combat Results Table in the Dunnigan System**

By Alan R. Arvold

The Combat Results Table (CRT) has been somewhat misunderstood over the years. There has been much discussion on what was the tactical basis behind the CRT, what exactly did the results mean, and just what exactly did the wreck counters represent. Well this article will give some insight to these questions.

### **Tactical Basis**

The basic tactical basis of the CRT was a single unit, composed of two to six firing elements, engaging an enemy unit of any size. For the Germans and Allies, a firing unit would be an individual vehicle, a single infantry squad, or a single artillery gun. The German vehicular units had two to six vehicles, depending of the unit in question, per vehicle counter. The German artillery units had two to six guns, howitzers, or mortars per counter. The infantry units had about three to six squads, counting reinforcing units that are part of the platoon, per counter. For the Russians, their tactical doctrine held that platoons, not squads or individual vehicles, were the primary firing elements. This worked out fine as their units are company size anyway. In addition, in a Russian AFV company, a company commander's vehicle counted

as its own firing unit, which could at the commander's discretion, engage its own target or join in with one of the platoons in the company in engaging one of their targets. Thus a Russian light or medium tank or armored car company could engage three or four targets, and the heavy tank and all SU units (which are battalion size counters anyway) could engage four to six targets. Russian infantry units could engage three to five targets, again depending on the reinforcing support units that count as part of the counter. The large French armored units in Panzer Leader 1940 were assumed to work much like the Russians. (Although they were trained to operate like other platoons, the lack of radios and reliance on flag signals from the company commander's tank meant that they operated like Russian companies by default.) The artillery units could engage two to four targets. There are however a few exceptions. The indirect fire units on both sides would usually fire in mass as they would engage their target units using area fire, not point fire. Only in self defense would they engage in point type targets. Russian anti-tank gun units would also use mass fire on a single target, switching to another target once the previous one was destroyed or knocked out. As the more proficient anti-tank units using this

method, could engage four to six targets in the six minute time span of a game turn, this worked out pretty well.

### **Combat Results**

As we all know, the CRT has four results, they being No Effect, Dispersed, Double-Dispersed, and Eliminated. While we know what effects they have in the game, what exactly do they mean in real life? Let's examine them one by one.

No Effect: Well this is a no-brainer. It means that the enemy fire either completely missed or had no effect on the target unit. No personnel were hit or affected and no vehicles were hit or if they were hit then the rounds did not penetrate or cause any damage. The unit is still fully functional.

Dispersed: This result has been misnamed, a better term to use is disrupted which could be applied to both personnel and vehicles, whereas the term dispersed could only really be applied to personnel alone. Anyway, a unit that is "dispersed" is assumed to have taken 10 to 20 per cent casualties in the attack. By casualties I mean killed, wounded, or panicked (panicked in this case means that the man has reached his fear threshold and ceases to make any further contribution to the battle). These types of casualties would apply to dismounted infantry and artillery units, but what about vehicular units? Well a "dispersed" vehicular unit would have had one or more of its vehicles hit by enemy fire which would have knocked out one of them (or two of them in the case of the

Russians and large French armored units). Remember that during WWII not every hit on an armored vehicle penetrated the armor and even in some cases when they did, did not knock out the vehicle. Also remember that HE rounds, while not having a great penetration of armor plate, could and often did cause enough damage to a vehicle from direct hits and near misses to knock it out as far as the current battle is concerned. So what about the rest of the unaffected personnel or vehicles in the unit? Well they are considered to be pinned for personnel or disrupted for vehicles, with the leadership within the unit trying to regain control of the unit and continuing on with the mission.

Double-Dispersed: Also called "Special Dispersed", a unit which is "double-dispersed" is assumed to have taken 20 to 40 per cent casualties in the current attack. For vehicles this would mean that two vehicles, or four in the case of the Russians and large French armored units, have been knocked out. A fair share of the unit's leadership is also assumed to be casualties in this result. By itself a double-dispersal is not unit killing result, but when inflicted on an already dispersed unit it pushes the casualty rate up towards the 2/3 mark, which was the accepted level at which a unit would cease to function, hence the reason why the unit is eliminated in this case.

Eliminated: A unit which is "eliminated" is assumed to have taken about 2/3s casualties, including most of the leadership in the unit, thus eliminating it as a combat unit. For vehicular units

this means that all vehicles, except possibly one, have been knocked out. (In the case of the Russians and large French armored units this means that they may have 1 to 3 surviving vehicles left but with the leadership gone they are impotent.)

### **The Dispersed Unit**

Okay, now that we know what these results mean in real life, there are some questions that need to be answered because of them. For example, by using simple math could a unit that has been dispersed five or six times during a game be considered to be eliminated? The answer to this is no. So why is this? Well all those surviving personnel and vehicles from destroyed units aren't just wandering around the battlefield in limbo. It is assumed that the upper level leadership of the higher units is directing those men and vehicles to join the still viable units on the battlefield, thus they are in a sense reinforcing the other units, some of which have also been "dispersed" during the course of the game. Thus a unit can be dispersed eight times during the course of a game and still be a viable unit, reinforced by the survivors from the "dead" units. This was the assumption made by the designers of the game when they formulated the Combat Results Table.

Another question that came up was that why if you have a "Dispersed" result followed a "Double Dispersed" result in the same player turn you end up with a "Destroyed" result, yet if get a "Double Dispersed" result followed by a normal "Dispersed" in the same

player turn, the only result you get is "Dispersed". Well it was reasoned that if you get hit with a result, followed by a greater result, the chances were your unit would not survive. Yet if you got hit by a bad result, followed by a lesser result, the chances were that your unit would more than like still survive intact.

### **The Destroyed Unit**

So how many vehicles are left over from a destroyed vehicular unit, given the variable number of vehicles in a unit. Well in units containing two or three vehicles, there are no surviving vehicles. In units containing four to seven vehicles, there is one surviving vehicle. In Russian vehicular units, which also seem to contain ten vehicles, and the large French armored units, which have 10 to 13 vehicles, there are two or three surviving vehicles.

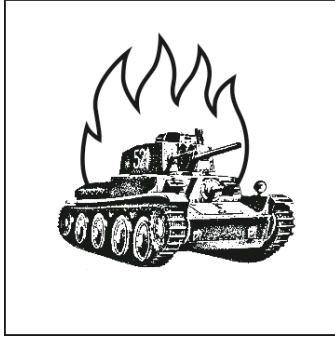
In the dismounted infantry units, there is about a squad's worth of troops left in a destroyed platoon and about a platoon's worth of troops left in a destroyed company. But mind you, these are not complete squads or platoons, just a representative number of viable troops left over and available for "transfer" to other dispersed units.

What about dismounted artillery units? Well most guns, howitzers, and mortars in a destroyed unit usually survived intact or with minor reparable damage. Yes some were heavily damaged or wrecked but most artillery units were destroyed because their personnel took such excessive casualties that they could no longer fire their weapons or

their stockpiled ammunition near their guns were hit and set off.

### **The Wreck Counter**

When Wreck counters are placed on the board, exactly what are they representing? Well the obvious answer is that they represent a group of knocked out armored vehicles. But are the vehicles permanently knocked out? Well for the course of the game, which represents at most two hours of extended combat in long scenarios (20 turns), they certainly are. But what are the long



term fates of these wrecked vehicles? During the Second World War, on the average about 60 per cent of all knocked out AFVs were repairable. By repairable I mean anything from a few hours of repair work by the vehicle crew all the way up to several days of work by the field maintenance units at division level and above. Thus who ever retained possession of the battlefield after the battle would be able to retrieve its knocked out vehicles and restore some of its vehicular losses, manned by surviving crews and replacements, over a matter of days. Even non-repairable vehicles were not a total loss as they could be stripped for parts to repair others before being sent back to the rear to be scrapped. For the losing side, its wrecks were gone for good as the enemy would either send them back to their rear to be scrapped or used for evaluation against their own tanks or in rare cases, be repaired and then be used against their former owners.

The burning tank on the wreck counter is very misleading as it gives the impression that all vehicles are total wrecks, burning forever until they become molten slag. Of course this is wrong as not all tanks that were knocked out burned, and most that did were still repairable. It was those tanks where the fires either set off the on board ammunition, thus completely wrecking the vehicle, or completely gutted out the insides, that were total losses. And even then parts could still be salvaged from the exterior of the vehicles.

Many young gamers love counting up the number of vehicles and men of each destroyed counter in a game, using the information from the Unit Identification Tables, to see just how many casualties they inflicted on their opponents. But as we can see from above, these numbers that they come up with are misleading. If they reduced their numbers by a third, then they will be in the ballpark in terms of casualties inflicted. Even then, the corrected numbers would only reflect the immediate short term effects of the battle.

### **The Structure of the CRT Table**

When Dunnigan created the first CRT for Tactical Game 3, which was the prototype of PanzerBlitz, there were only two effects on the table, either No Effect or Destroyed. There were only six columns of odds, ranging from 1 to 2 up to 5 to 1, each with a corresponding increase in the number

of Destroyed results the bigger the odds got. There were also only six lines on the CRT, each corresponding to a result on the die roll. As development of the game continued, Dunnigan came to realize that there were more combat results down at the tactical level beyond the simple live or die type results of the earlier table. Units could be temporarily disrupted by enemy fire, thus was born the "Dispersed" result. Further research revealed different levels of disruption, thus was born the "Double Dispersed" result. Having now established the different combat results it was now time to move on the table itself. He realized that results of less than Destroyed were possible at even lower odds than what were on his original CRT. Not only that, the plus 1 die roll modifiers for terrain and the minus 2 die roll modifier for overruns and close assaults demanded more die roll result lines on the table.

Thus was born what became the PanzerBlitz CRT. Dunnigan and crew discovered some important facts when they formulated the new CRT. For one thing, there was a substantial increase in possible results when you went from 1 to 1 odds to 2 to 1 odds. For another thing, when you get to the higher odds the lesser results tend to appear less often or disappear altogether off the chart. Still yet another fact was that odds higher than 4 to 1 really did not provide for any further changing of the results, so the 5 to 1 was eliminated from the chart and 4 to 1 was the highest column. All these were reflected in the PanzerBlitz CRT.

When Randall Reed and crew were making Panzer Leader, the CRT was looked at again. For one thing it was possible to get a minus 3 die roll modifier in the game (close assaulting or overrunning a dispersed unit). Avalon Hill had said in response to this to just take the lowest result in the next column if you roll a 1 and have a minus 3 die roll modifier. Reed just decided to add another die roll result line on the chart (minus 2) to resolve this problem. Another thing that Reed did was to change some the results in each column, in some case even adding some into spots that were previously No Effect results. This made the CRT more symmetric in its gradual increase in number of results (Although he did agree with Dunnigan's substantial increase between 1 to 1 and 2 to 1 odds). Lastly, he made 4 to 1 odds less of a total killer than it was PanzerBlitz based on the fact that there had been units that had suffered high odds attacks in real life and still managed to survive (though not in perfect operating condition to be sure).

### **Conclusion**

In conclusion, the Combat Results Table was designed to handle the immediate short term effects of combat in the battle in question. Most experience gamers know this but many new gamers don't and this article may help them get a better understanding of the dynamics behind the Combat Results Table.