

Editor's Note: The original incarnation of this article appeared (in two parts) in the ASL newsletter *At The Point*. It was then reprinted in the ASL Annual '93a. With the publication of the 2nd edition of the ASL Rule Book Bruce decided that the article was in order. We are thrilled to present it here.

The engine roars obediently as the driver carries out your latest order: "Forward up the hill, eighty meters." Slowly, almost grudgingly, your tank grinds up the hill until finally reaching the crest. A picturesque rural valley lies before you. Scattered farmhouses interspersed with grain fields and clusters of woods. Now, to assess your position.

"Assume hull down." It is a maneuver your driver has made dozens of times, and after a few minor adjustments you're satisfied. Only the turret is now visible from lower elevations.

From the intermittent chatter in your headphones, you know that a platoon of enemy armor is approaching from just behind that slight rise to the left. You swing the turret to face that direction. A brief sweep of the area through binoculars from the open hatch reveals nothing. All you can do now is wait. Nerves tingle in anticipation of combat with the unsuspecting enemy.

Then: There he is! The first enemy tank appears right where you expected, apparently oblivious to your presence as it approaches. "Hold fire... hold fire. Steady now. Not too soon..."

Abruptly the enemy tank stops, swings its turret. Surely he has spotted you. "Fire!" A hit! It appears to have had no effect, for still the enemy turret swings towards you. POOF, a tiny puff of smoke from the enemy barrel, then a quick THUD of the shell impacting the slope below. Again, before he can reload...

"Fire!" This time, an explosion offers grim testimony to the validity of your tactics. Once again your patience and experience have paid off. No enemy crew are seen escaping the burning tank...

Introduction

Even though tank-to-tank warfare may not be quite so dramatic in a game, ASL does offer perhaps the finest playable system available for representing armored combat. From its birth with the original *Squad Leader*, through its coming of age with *Cross of Iron* and continued growth with *Crescendo of Doom* and *G.I.: Anvil of Victory* the AFV aspect of

this great game has matured into a system that is remarkably realistic and elegantly detailed. To become really proficient at armored tactics on the cardboard battlefield, like every other aspect of "war gaming's premier tactical simulation," requires study and, above all, practice.

In an ASL scenario containing armor, you assume the role of a single tank commander; each vehicle distinct, regardless of the number in your OB. Much more so than for infantry (which may break or become Berserk), you have total control over your tank's actions, and the decisions you make will determine its fate.

The basic premise of this article is that a tank's primary task is to destroy enemy tanks, and that the enemy tanks pose the greatest threat to your own tanks. While this is a generalization, your AFVs will usually be your best anti-tank weapons. Certainly, whenever opposing tanks appear on the ASL battlefield they almost inevitably tend to seek each other out, and at some point in his career an ASL player should expect to become involved in an ASL tank battle.

Fundamental to any study of tank combat is an understanding of the tank itself. Three principles have characterized the tank from its inception: *firepower, protection, and mobility*. In ASL, these principles are expressed in the tank's main armament (MA) type (turret-mounted; D1.31-.322), armor status (Closed-Topped (CT); D1.24), and movement type (Fully Tracked; D1.13), respectively. This article is divided into parts roughly correlating with each of these principles and is based upon the capabilities and mechanics of handling a tank during play. Many of the points raised will certainly also apply to other types of armored vehicles or to ordnance in general.

At its most basic level, ASL tank combat is a two-step process. First, the firer must determine if he has hit the target; if he has, he must then determine the effect(s), if any, of that hit. Each step in this process requires a DR, first a To Hit (TH) DR (C3.3) and then a To Kill (TK) DR (C7.1). Since the winner of a tank-versus-tank encounter will usually be the one possessing the best odds (either TH or TK), the goal during a tank battle at the individual level becomes that of increasing one's own odds while reducing those of your opponent. These odds are determined by a number of several TH DRM (C5. and C6.) and basic TK# modifications (C7.2); much of the following discussion will revolve around the application (or avoidance of) these modifiers.

It is expedient at this point to introduce a term which will lay the foundation for our discussion of armored tactics: *Engagement*. Simply put, a

tank is said to "engage" the enemy when it places a 1/2" -1 target acquisition counter on its target, thus enabling it to apply the Case N TH DRM (C6.5) to its next shot.

An Engagement takes place when opposing tanks have acquired (i.e. *engaged*) each other. The term Engagement is a convention used to describe the situation in which this mutual acquisition occurs, and as such provides a convenient means of reference for this event. Implicit in its definition is the understanding that the firer will continue shooting at the target until it is destroyed. Indeed, the whole purpose of placing an acquisition counter on a target is so you might benefit from a favorable DRM with your next shot. In the meantime, the enemy will likely be firing back, and, hit or miss, he will place an acquisition counter on your tank.

If the goal during a successful tank battle is to increase one's TH and TK odds, the purpose then is to win the Engagement. This purpose could alternately be expressed as "destroying the enemy when both you and he have acquired one another," but this is rather cumbersome. It becomes much simpler to use a single understood term, and then build the discussion around it.

There are many factors to be considered in winning an Engagement. A given side's odds may change drastically from situation to situation within a single scenario, and will largely influence the course of action you take at any given moment. For now, however, we will assume that the odds remain equal for both sides, in which case success or failure becomes more a question of timing. From this assumption can be established certain principles which might be referred to as the *Rules of Engagement*:

Rules of Engagement

1. Take the first shot
2. Take the first shot of the Engagement
3. Take more shots than the enemy

1. Take the first shot

This premise is simple: he who shoots first can kill first. Such a shot may occur at any opportunity, and may not actually lead to an Engagement *per se*. Nevertheless, by remaining alert and actively seeking that first shot, you may present yourself with such favorable opportunities as a shot at the enemy's side or rear facing as he moves. The side shooting first will usually also benefit from rule #2.

2. Take the first shot of the Engagement

In other words, take the first shot that benefits

from the Case N DRM. Once the Engagement is under way, the first side to benefit from Case N receives a considerable advantage. Since both combatants will likely be stationary at this point, few positive modifiers will apply (the exceptions perhaps being those for TEM or LOS hindrances), and even the penalty for being BU (Case I) will be negated by Case N. What will usually result is an unmodified shot, or even one with a negative modifier. At close range, a hit may become as nearly automatic as it will ever get.

3. Take more shots than the enemy

This may, but does not have to, include intensive fire, and is similar in philosophy to rule #1 in that the more shots you take, the more chances you give yourself to destroy the enemy. While it may be true that more shots also means more likelihood of a gun malfunction, consider that the odds of this occurring are usually identical to that of obtaining a CH.

The key in winning an Engagement is to concentrate on these Rules of Engagement, and the easiest way to assure adherence to these rules is by integrating them into the phased nature of play. Thus, an examination of shot selection during play will quickly reveal that your first shot (rule #1) will likely occur as defensive fire; that your first shot of the Engagement (rule #2) will normally occur during your ensuing PFPh; and that by following rules #1 and #2 throughout the scenario you will accumulate more shots than your opponent (rule #3).

It will be assumed for the remainder of this article that you are playing the role of tank commander, and that you will seek to engage the enemy armor at every opportunity within the tenets outlined in the Rules of Engagement.

We begin, as do all Engagements, with the manifestation of the tank's first principle: *Firepower.*



Part I: Hit To Kill

Once you have decided to engage the enemy, your first decision involves which target type to use; vehicle (C3.31) or area (C3.33). The vehicle target type is the more obvious, and is assumed barring a declaration by the player to the contrary (C.9). Your decision may be influenced by the ammunition available, a topic that will be examined shortly. Generally, if armor piercing (AP) ammunition is on hand there is little question that you will prefer the vehicle target type against the enemy tank.

Under certain combat situations, you may find yourself facing a formidable AFV which your MA has little or no chance of destroying using the vehicle target type and the available ammunition. If such an enemy has you trapped, and the odds of escaping make it seem likely that you will be destroyed in the attempt, you may decide to go down fighting and hope for a critical hit (CH; C3.7), using the vehicle target type. But obtaining a CH is an unlikely occurrence and is not to be relied upon.

On the other hand, if you have high explosive (HE) ammunition available, you could instead fire using the area target type. While the odds of a CH remain the same using either target type, an area target type hit gives you a chance you would not otherwise have when the enemy AF is greater than your modified TK#. Area target attacks versus armor are resolved in the IFT using half the FP of the firing ordnance (C1.55).

The first thing to note is that AF never apply directly to such an attack. Instead, a -1 DRM applies to an area target attack if all the enemy's AF are ≤ 4 , and a +1 DRM applies if all the enemy's AF are ≥ 8 . The only other DRM which could apply to such an attack are those for TEM, and for an OT AFV.

Granted, any positive modifiers to an area target attack would make a kill all but impossible, since a final KIA is required. However, a K/# or 1 greater than a K/# would result in either an Immobilization (which might force the crew to leave its vehicle; D5.5) or an automatic Shock (which in itself may ultimately result in the vehicle's elimination; C7.4). Keep in mind that a CE enemy crew will also be more Vulnerable to a General Collateral Attack (D.8B) when using the area target type than with normal HE Equivalency (C8.31) using AP shot.

The circumstances in which you might choose the area target type over the vehicle target type are probably limited, but always be aware of your options. In particular, consider using the area target type if desperate situations call for desperate measures.

Regardless of which target type you choose, the C3 To Hit Table will have a direct bearing upon the range at which you engage the enemy. The C3 table is divided into columns of six-hex increments, with the basic TH# in each column decreasing as the range increases. The closer you are to the target, the better are your odds of hitting it, as reflected in the higher basic TH#. Notice also that there are two basic TH# listed for each range column, one red and one black. The firer's nationality will determine which color to use (as indicated on the A./G. Nationality Capabilities Chart), though this sometimes varies with the date of the action. Since the discrepancy between the red and black TH# increases with range, the side which must use the red TH# will probably attempt to keep fairly close to the target to ensure a rough parity.

These basic TH# are modified by the C4 Gun & Ammo Type Basic TH# Modifications, which may further influence your decision of which range to open the Engagement. If your MA has

an "L" or "LL" gun type, you may want to keep the enemy at a longer range in order to take advantage of your gun's standoff capability, somewhat like a boxer with a longer reach keeping his opponent at a greater distance. Except for the desert boards, many ASL map boards do not offer LOS far beyond 12 hexes, so the opportunity to use the "L" or "LL" (especially) modifiers will rarely present itself. If an open expanse does exist, or if any dominant hills afford excellent LOS, then you may seek to Engage the enemy at longer ranges.

Conversely, the modifiers for "*" guns, or for the smaller calibers, tends to reduce the TH# more rapidly as the range increases. The modifier for small caliber may be offset by the "L" modifiers discussed above, but generally such a tank will still likely prefer to Engage the enemy at the shorter ranges. Notice also that the modifier for a gun ≤ 40 mm may be cumulative (C4.2). Finally, the Basic TH# is reduced even further if you use APCR or APDS ammunition.

Bear in mind that all the C4 modifications are cumulative, and serve to transform the basic TH# into a modified TH# (C4.5). Any player interested in excellent studies on the effects of range, red-versus-black TH#, and C4 modifiers would be well served by playing scenarios A20 *Counterattack At Sidi Bou Zid* or AP7 *Directive Number Three* a number of times. These scenarios will help you develop a real feel for the C3 To Hit Table.

In order to hit the target, the firer must make a final TH DR that is \leq the modified TH# (C3.3). The TH DR itself is modified by various firer- and target-based DRM, which can (more or less) be controlled by the players. In particular, an attacker can directly influence his odds by limiting the effects of any C5 Firer-Based To Hit DRM which must apply to a given shot.

What follows next is a brief analysis of some of the C5 DRM which most commonly affect the outcome of an Engagement. For convenience, they are presented in the order they appear on the table.

To Hit

Case A: Fire Outside CA

This should be self-explanatory: "All Guns use Case A to fire at targets outside their current CA when changing their CA for a shot in that phase" (C5.11). The actual DRM is determined by the type of ordnance and the number of hexspines adjusted for the shot. For tanks with a "T" type turret (D1.31), the penalty is less severe than for a "ST" type turret (D1.32).

A tank has two CA, depending on the point of reference. The VCA (D3.11) determines the CA of the vehicle itself, which is used for movement purposes and for Target Facing and hit location. Being turreted, a tank also has a TCA (D3.12), which exists independently of the VCA. When firing outside of its CA, a tank will typically only change its TCA for that shot in order to incur the lesser Case A DRM, but it is not required to do so.

You could instead change the entire VCA, but then the Non-Turret (NT) DRM would apply as your first hexspine adjustment. If you do decide to change the VCA when firing, just keep in mind that "the TCA changes the same number of hexspines while retaining its position relative to the VCA. Any further changes of the TCA incurs normal TCA Case A DRM in addition to the NT Case A DRM of the VCA change" (D3.51).

Note as well that "the Case A DRM is doubled if the firer is in woods/building/rubble... Furthermore, once such a Gun... fires from a woods/building/rubble it may continue to fire during that phase from that hex only inside its current CA" (C5.11). These factors alone present a strong argument against placing your tank in such restricting terrain. The benefit gained from the TEM may be offset to a large degree by these penalties, not to mention the initial hazard of bogging to enter the terrain in the first place.

Remember that any Gun may change its CA without firing at the end of a friendly fire phase in which it is still able to fire without using Intensive Fire (C3.22). This tactic may prove useful in avoiding the doubled Case A DRM for woods, building or rubble, though if VCA is changed in this manner while in such terrain you would still have to pass a Bog Check (D8.2).

An additional +1 penalty applies to the Case A DRM for a vehicle which changes TCA to or through a side Target Facing while in Bypass (D2.321). Furthermore, a "TCA based on a Bypass side Target Facing... must pay appropriate Case A (C5.1) penalties for firing within this enlarged CA," unless the target is acquired.

Ideally, you would rather not have to change CA when firing. This is not always possible, particularly as the enemy is expected to avoid your field of fire whenever possible. Since you, as a player, can usually see where your opponent's units are located on the map board, at least you will be able to position your tank to face the direction of the greatest threat.

Case B: Fire in the AFPh

Case B applies to all "ordnance weapons firing during the AFPh which did not enter their current hex/hexside during that Player Turn" (C5.2). Only rarely will Case B apply by itself during an Engagement, unless a VCA changes during the PFPh/DFPh, or an already in-Motion vehicle stopped in the same hex. In most such cases, you will probably fire during the PFPh, since waiting until the AFPh allows the enemy to intervene with Defensive Fire. It may be that the enemy was destroyed during Prep Fire and that no decent targets remain, perhaps being concealed or outside your CA. In that case you might want to sit tight and await developments rather than move during the MPh, particularly if you occupy an excellent tactical position.

Case C: Bounding Firer

Case C applies to vehicles which enter a new hex/hexside during the MPh but do not fire until the AFPh. It also applies to vehicles that start the MPh already in Motion. Case C is based upon Case B and the vehicle's Turret Type, and is the likely situation in which Case B might apply.

Bounding Fire typically involves moving into the enemy's LOS (since it may be presumed that you would use Prep Fire otherwise), and presents that enemy with an opportunity to fire at you in the meantime with Defensive Fire. Thus it would seem that Bounding Fire breaks the Rules of Engagement discussed previously, since the enemy would get the first shot (Rule #1), and would also get the first shot using Case N (Rule #2). It appears the enemy holds the advantage in this case and that Bounding Fire should rarely, if ever, be planned.

As a broad generalization this might be the case, if the only factors involved were your single tank and a lone enemy in open terrain. But in certain situations you may find it advantageous or prudent to work your way into a favorable position to destroy the enemy before an Engagement even develops, the idea being that you would hopefully destroy the enemy before he can take his second shot.

For instance, it may happen that the enemy is already Engaged with a different friendly unit. By moving another tank into this enemy's LOS, you offer him the rather unpleasant prospect of becoming the target of two different attackers. Or perhaps the enemy currently occupies restrictive terrain (woods, building, rubble), thus enabling you to maneuver around him while presenting him with an excessive Case A DRM should he choose to fire at your AFV. In any case, should the enemy fire and miss, and should you fire in the ensuing AFPh (Case C) and miss, the enemy would regain the advantage.

On the other hand, if your tank is virtually invulnerable to his threat, then you may have no reservations about moving right up and allowing the enemy that first shot. This should be regarded as the exception rather than the norm, so Bounding Fire is generally not the ideal way to open an Engagement. However, if your strategy is to destroy the enemy before an Engagement actually develops, you may be able to do so before he can even shoot by firing at him during your MPh.

Fire during your MPh is termed Bounding First Fire (D3.3), and also uses the Case C DRM if you have had a continuous LOS to the target for more than three MP. There is thus no greater penalty for firing during the MPh than if you had waited until the ensuing AFPh. The exception to this occurs when you have had a continuous LOS to the enemy for less than three MP, in which case there would be an additional +1 (Restricted Aim; C5.31) or +2 (Limited Aim; C5.32) added to Case C. Since a target cannot become Acquired using Bounding First Fire anyway [EXC: C6.55], this is nothing more than a hit-and-run tactic, intended to destroy the target in passing rather than to become involved in a perhaps lengthy Engagement.

This is all well and fine, provided the enemy obliges by letting you shoot at your whim. Since you subject yourself to possible Defensive First Fire with every MP expenditure (A8.1), chances are quite good that the enemy would get the first shot at you during your MPh. Even so, you may

possibly pre-empt his Defensive First Fire by declaring a Gun Duel (C2.2401). Provided you need not change CA, you may then Bounding First Fire before he fires if your total C5 and Acquisition DRM are lower than his. If the Gun Duel DRM are equal, then the lower Final TH DR is resolved first (and may void the opponent's shot). If the Final TH DR are equal, both shots are resolved.

Since Case C for a Bounding First Firer is at least +4 [EXC: Gyrostabilizer, D11.11], the situations in which an ATTACKER is able to win a Gun Duel are probably pretty rare. If you are planning to use Bounding First Fire, try to approach the enemy with a view toward winning any potential Gun Duels.

It may occur to the reader at this point that an ATTACKER could fire at the start of his MPh prior to expending any MP, thereby avoiding any possibility of Defensive First Fire. However, a complete understanding of Bounding First Fire will reveal that the DEFENDER is able to declare a Gun Duel against a Bounding First Firer that declares a shot prior to any MP expenditure (C5.33). This is the only case in which the DEFENDER may declare a Gun Duel, and counters the shoot-before-moving tactic.

The application of Case C during the MPh assumes that the firer has Stopped (C.8), but it is not actually necessary to expend a Stop MP before using Bounding First Fire. You may use Motion Fire (Case C4; C5.35), a tactic favored by the Russians more for its psychological effect than with any great expectation of causing real damage. The psychological effect is lost in ASF, but the inherent inaccuracy of such fire remains, that being the appropriate Case C DRM with an additional doubling of the lower dr. This is indeed the proverbial "long shot," and would typically only be considered by a Motion vehicle during Defensive Fire, or when you want to retain every available MP during the MPh and yet want to take a crack at the enemy on the way by.

Finally, any vehicle with a multiple ROF using Bounding First Fire must expend at least one MP between shots, which of course allows Defensive First Fire each time. Also take particular note that once any vehicular weapon fires (except for a MA retaining ROF), its other weapons may fire in that phase only from that same hex (D3.51).

Case F: Intensive Fire

A Gun which has exhausted its normal ROF may take one additional shot as Intensive Fire (C5.6). Intensive Fire entails a calculated risk for the firer in that the B# of the Gun is reduced by two (C5.62). Hence, a 12 TH DR will result in a Disabled gun and a Recalled tank. A Gun unable to use Intensive Fire will be so indicated by "No IF" on the back of the counter.

Intensive Fire also suffers a loss of accuracy by adding the +2 DRM of Case F. Since Case N can apply to an Intensive Fire attack, at least Case F can be reduced or negated. Intensive Fire can also be used to place an Acquired counter, or to flip an already existing Acquired counter to its -2 side.

Yet it still comes down to that reduced B#, and this might be the determining factor in deciding whether or not to use Intensive Fire. You should generally hold off using this option until the Engagement is well under way, when the enemy has a good chance of hitting you with his next shot. Excessive or untimely use of Intensive Fire will invariably lead to grief.

Case G: Deliberate Immobilization Attempt

"Often an AFV target's AF is so formidable that it makes a kill by certain Guns unlikely if not impossible" (C5.7). Even if this were not the case, you may decide at certain times that an Immobility enemy is as good as a dead one (particularly if he must exit units to win), and so you may make a Deliberate Immobilization attempt.

To try Deliberate Immobilization, the ammunition used must have a Basic TK# greater than the target's lowest hull AF, and must score a hull hit \leq a six-hex range. A kill is not possible using Case G, but a hull hit automatically Immobilizes the target and forces the crew to take a Task Check (D5.5). Target Acquisition DRM do not apply to a Deliberate Immobilization attempt, though you may gain Acquisition with such a shot. The +5 DRM of Case G makes this a rather tough proposition, so it really becomes a tactical decision made on the spot.

Case I: Buttoned Up

The pros and cons of remaining CE or BU will be discussed more fully in the next section. For now, just keep in mind that firing while BU incurs the +1 DRM of Case I, but does protect your commander from Collateral Attacks, small arms, and sniper fire.

Other Cases

Of the three C5 DRM not mentioned so far, one (Case H: Captured Weapon) does not occur under normal circumstances; another (Case E: Firing Within Hex) comes into effect only under special conditions; and the last (Case D: Pinned Firer) does not affect a CT AFV as such.

A few miscellaneous DRM remain under the heading of C5, listed as "Other." Of these, the penalty for overstacking (A5.12) should be avoided whenever possible. If your CE crew should happen to become Stunned (D5.34), you will just have to pay the price in the form of a +1 DRM for the remainder of the scenario. The rest either do not apply to armor or have been touched upon previously.

One very important To Hit DRM remains to be considered. Even though it is treated as a Target Based DRM, its application depends solely on the firer, and its use forms the basis for the concept of an Engagement. This is, of course, the modifier for Acquired Target, Case N (C6.5).

Whenever a Gun fires at a Known unit, it may place a -1 Acquired counter on its target, which then applies as a TH DRM for subsequent shots at that target. The target will remain Acquired so long as certain conditions are maintained, these being listed in C6.5. Most of these conditions ultimately depend upon the firer (or on fate), since the only way the target can shake off an Acquired counter is by leaving the firer's LOS after entering a new Location or vertex (C6.51).

Of the firer-based conditions which cause loss of Acquisition, the only one the firer has no control over is a Gun malfunction. As long as you do not leave your present Location, nor change CA without firing at the Acquired target, nor use Interdiction, maintaining Acquisition should not be a problem. Remember that these same restrictions apply to the firer's CMG, so Acquisition is also lost if the CMG attacks or Interdicts a different target.

The Acquired counter will otherwise remain on the target for as long as it stays in LOS. Thus, if the enemy moves out of your Gun's CA but is still Acquired, Case N would reduce or even negate the applicable Case A DRM for changing CA when firing. Notice also that if the enemy succeeds in leaving your LOS, the Acquired counter will remain in the last in-LOS Location occupied by that target, and would then apply to any other Known unit which subsequently enters that Location.

These same principles also apply to Area Acquisition when using the Area Target Type. However, Area Acquisition applies only to the target hex, and may not follow the target when it leaves that hex. This in itself is not a great concern during an armored Engagement, since the circumstances in which you will prefer the Area Target Type over the Vehicle Target Type are probably very limited. Area Acquisition will most likely affect an Engagement when used against an empty hex.

Since "a Gun can fire on a hex not containing a Known enemy unit" when using the Area Target Type (C6.521), and since you as the player can see where the enemy units are located, you could place Area Acquisition in those hexes the enemy must move through in order to Engage you. If the enemy entered an Acquired hex, you could then transfer (C6.52) that Area Acquisition DRM to the Vehicle Target Type when announcing the shot. If nothing else, you might influence the route the enemy will take by covering the terrain choke points with Area Acquisition markers. A down side to this tactic is the risk of a Gun malfunction while firing at an empty hex. What is advised here is not indiscriminate firing, but rather a carefully crafted Engagement plan.

To Kill

Scoring a hit is only half the battle, as it were, because then you must make a TK DR in order to destroy the AFV. The means available to increase one's odds are somewhat limited during this TK process, but there are ways to optimize your chances.

First, you must consult the appropriate TK Table (C7.3) for the ammunition type used in order to find the Basic TK# for your Gun's Caliber Size. Certain TK modifications serve to create a Modified TK#, from which the target's AF is subtracted to reach a Final TK# needed to destroy the target (C7.11).

Typically, a tank is able to fire AP or HE. If the Caliber Size is overscored, then AP is not available; if underscored, HE is not available. Some

tanks also have *special ammunition* (C8.) available to them, as indicated on the back of the counter by a symbol and Depletion Number representing the type and availability of that ammunition. In the case of certain guns, AP or HE may even be considered special ammunition and is likewise represented and governed by the rules for *depletion numbers* (C8.9). If available and not considered special ammunition, the firer is assumed to be using AP versus any armored target, barring a declaration to the contrary (C2.21).

When using the vehicle target type, there is really little choice in deciding whether to use AP or HE. The HE basic TK# for a given caliber lags far behind the AP basic TK# for the same gun, so it serves no practical purpose trying to defeat armor using HE when AP is available.

We have already looked at the possibility of using the area target type when confronting an enemy AFV that is invulnerable to AP shot in its current facing, but if such an enemy is CE then another option presents itself: fire on the vehicle target type using HE. Even though you cannot hope to kill the target outright in this case, you just might blast that CE crew with a Specific Collateral Attack (D.8A). A Specific Collateral Attack uses the ammunition type's IFT FP and the same original effects DR that resolves the attack against the vehicle, and is modified only by the CE DRM (D5.31). Even the smallest caliber thus has a chance to Stun the target using HE. It won't necessarily put him out of action permanently (unless the tank is Recalled; D5.341), but it may buy you time to work your way into a more favorable position.

The availability of special ammunition presents other options. For anti-armor purposes, only APCR/APDS (C8.11) and HEAT (C8.3) interest us here. Both of these types are governed by *depletion numbers* (C8.9), which means their use and availability are strictly limited. After announcing his intention to use special ammunition, the firer must make an original To Hit DR less-than or equal-to the depletion number. If the original To Hit DR is greater than the depletion number, the firer no longer has that ammunition and is not considered to have fired for any purpose except for a possible gun malfunction. If you wish, you could then move your vehicle instead of subsequently firing with a different ammunition type. If the Original To Hit DR is equal to the depletion number, that special ammunition is used to resolve the shot but the firer is then considered to have run out of that ammunition for the remainder of the scenario.

Since the odds of depleting your special ammunition are often greater than the odds of retaining it, the timing of its use becomes critical. There is simply no accounting for the many situations which might occur, so no hard and fast rules can be established for the use of special ammunition. As a *general* rule, you should consider holding off using it until such time as the final DR needed to hit the target is roughly equivalent to the depletion number. At least if you then do hit your target, it will be with the enhanced TK odds of that special ammunition.

Regardless of the ammunition you choose, the Basic TK# is modified by various factors to reach a modified TK#. There are four possible modifications to the Basic TK#, but only three that apply to direct fire from a tank, and only two that the firer may have control over. The first one we will look at is actually the fourth on the list, Case D (Range Effects; C7.24).

Only an AP, APCR, or APDS round is affected by the range. Simply look in the correct row for the caliber you are using and cross-index that with the range to the target to find the TK modification that applies. Notice for AP that the smaller calibers tend to fall off more rapidly at longer ranges, while benefiting from a better modifier at very close range. APCR, which has a higher basic TK# than the corresponding AP round to begin with, becomes especially lethal at close range, though it does diminish rather quickly beyond 18 hexes. APDS rounds are relatively unaffected by range.

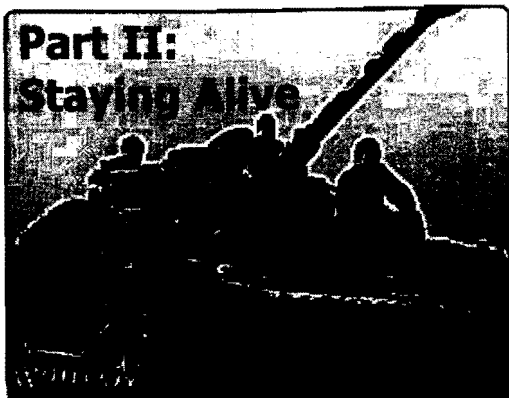
The TK range effect, combined with the TH modification for range, generally dictates that Engagements take place within 12 hexes for smaller calibers, and 18 or more for larger calibers, terrain permitting. Engagements at one- or two-hex range can quickly become quite deadly, but are correspondingly more rare because of the difficulty in getting that close to begin with. The range at which you decide to open the Engagement should be influenced by the range modifications that apply to both the enemy's and to your own MA. A certain amount of hex counting may be required to find the optimum distance, but a single -1 modifier on either the TH or TK table can make a difference.

Of course, the easiest way to increase one's TK odds is by striking the enemy's weakest AF. This should be self-evident, if not always easy to achieve. The lower his AF, the greater your final TK# and consequently the greater your odds of knocking him out. This is further enhanced by TK Case A, which adds +1 to the basic TK# for any hit scored on a rear target facing (C7.21).

An examination of *target facing* (D3.2) is very important here. Note that the "Target Facing is determined ... depending on which target hexside is crossed by the firing unit's LOS," not on the target's CA as one might expect. You may be in for a nasty surprise the first time you discover that an expected side hit actually strikes the front. Almost ironically, the front target facing is the largest of the three since a LOS which runs exactly along a hexspine uses the target facing least favorable to the attacker. Not surprisingly, most kills will occur from the front; historically this was the case as well. The final consideration to keep in mind is that target facing is determined differently for a vehicle in bypass (D2.32), where it is based upon where the fire originated rather than on the hexside crossed.

Once a hit is scored, there is nothing more the player can do to increase his odds of destroying the target. The hit's the thing, and the greater part of your attention during any Engagement will be spent in achieving the optimum location for that hit. In the meantime, the opposing player is

doing everything he can to destroy your tank as well. To win an Engagement you must also ensure your own survival, and thus enters the second principle of the tank: *Protection*.



Protection can be characterized in two different ways. The first and most obvious is the tank's armor. Armor protects the crew from small-arms fire and artillery shrapnel, and allows the tank to move forward in the face of the enemy. This does not mean that a tank is impervious to enemy fire altogether, of course. The enemy is likely to possess guns capable of penetrating your tank's armor. Before armor can be defeated, however, the shot must first hit the tank, and this leads to the second – and best – means of protection, avoiding fire.

Armor

Of these two types of protection, the first is literal and the second circumstantial. During a tank battle involving several vehicles, you can expect that your tank will eventually be hit. If the enemy's basic TK# is higher than your AF, you can only rely upon luck to survive that hit. Since the player has virtually no means available to increase his tank's literal protection (its armor), he must concentrate on minimizing the circumstances in which he must rely on that armor. In particular, this section will offer a contra-distinction to some of the points raised earlier, and will concentrate primarily on using certain TH DRM to decrease the enemy's odds of hitting you. First, however, let's take a look at the physical manifestation of a tank's protection, its armor.

In ASL, a tank is given an armor rating known as an *armor factor* (AF) (D1.6). Each tank has four such AF, which are used to represent the armor thickness of each particular Aspect (C3.9). Again, this armor protects the crew from small-arms and most other non-ordnance attacks, but is effective against the enemy's guns only in that it transforms the enemy's modified TK# into a final TK#. Unfortunately, the ASL player cannot supplement his tank's armor in the same manner as his World War Two counterparts could with field expedients. Since there is no question of actually increasing your AF, the best you can strive for is that any hit strikes the Aspect with the greatest AF. Except for very light or very heavy tanks, this will usually mean the front AF (D1.61). The task here, then, is to ensure that your frontal target facing or aspect is facing the enemy whenever possible.

Recall that the front target facing is the widest of the three. Since you will likely have your MA (meaning your TCA) facing the direction of the greatest threat, your VCA's front target facing will probably also be facing the greatest threat. At any rate, the turret's front AF will almost always be larger than the hull's side AF, so while moving in front of the enemy such that you present a possible side hit, remember to keep the turret facing the enemy so that a turret hit would use the turret's front AF rather than the (usually) inferior turret-side AF. A good rule of thumb is to always maintain the turret's front aspect towards the enemy. Besides its added protection, you can bring fire to bear immediately without having to pay TH Case A for changing CA.

Certainly you must always try to avoid being struck from the rear target facing. Even though the side and rear AF are identical (D1.62), the enemy's basic TK# is increased by one if he strikes you in the rear (which is really the same as reducing your rear AF by one). If the enemy is at a range from you that is about half of his movement allotment, he will likely be able to get behind you if you allow him to do so.

The most vulnerable part of your tank is its belly, and it is possible for the enemy to score an underbelly hit (D4.3) under the right set of circumstances. As you cross a wall/bocage or exit a stream/gully, an enemy that is within six hexes and within your VCA, and is at the same level or lower than you, could possibly score an underbelly hit. Quite simply, under such conditions a hit which would otherwise be considered to impact your turret strikes instead the underbelly of your tank, which would then use the aerial AF (C7.12) to resolve that hit.

The LOS for such a shot is controlled by the ATTACKER, since the firer's LOS in this case must be drawn to a specific vertex of the ATTACKER's choice (C.5C). If the firer does not have LOS to the selected vertex, the shot is assumed to have missed (A6.11). Remember that once this vertex is chosen, it may not be changed for subsequent shots, so remain alert to any enemy in the area and take care to select the proper vertex.

It was stated earlier that a tank's armor protects its crew from small-arms fire, but a crew becomes vulnerable to Collateral Attacks (D.8) by declaring CE status (D5.3). Certainly the greatest risk to a CE tank is the threat of a Recall (D5.341), which occurs when a Vulnerable crew suffers a K/KIA or Casualty MC, or when an already Stunned crew (as indicated by a +1 counter) suffers a second Stun result (D5.342).

Even if not Recalled, a vulnerable crew which fails a MC becomes Stunned (D5.34), which forces the crew to immediately BU and utterly incapacitates the tank until the end of the current player turn. Thereafter it must add +1 to any TH, MG/IFE/FT IFT, CC, TC/MC, Crew Survival, or OVR DR it makes. This is in addition to the Case I DRM for being BU, though it may become CE again if it wishes to further jeopardize itself. Note that a 1MT AFV is Recalled as a result of any Stun result.

Being CE does provide certain advantages, however, the primary of which is the ability to use the one-half MP road rate (B3.41). And of course, a tank must be CE in order to use its AAMG (D1.83). In addition to the To Hit DRM of Case I, a BU AFV must add +1 to its HD Maneuver dr (D4.22), so being CE will in effect negate those penalties. Also, an AFV must be CE to assist another vehicle's unbogging attempt (D8.3).

There are no special penalties for remaining BU other than those already mentioned (for instance, the DRM for any Armor Leader [D3.44] would still apply), although a BU AFV would be unable to Interdict routing enemy units if it could only use armament penalized by Case I (A10.532), and a crew may not remain CE while entering or exiting a building (D5.3). Finally, keep in mind that a tank with either a RST or IMT MA Type may fire neither its MA nor its CMG while CE.

Whether or not to remain CE may come down to personal preference, though the primary consideration involves any hazards invited by doing so. A CE counter may be voluntarily placed or removed during both the MPh and AP, but may not be both placed and removed during the same phase. During the MPh, CE/BU status may not be changed if the vehicle has already fired during that player turn.

Final TH DR

Clearly, from the discussion so far it should be evident that the armor on a tank does not offer complete protection. Rather than hoping that your steel plate can withstand a hit, perhaps the best protection lies in avoiding being hit altogether. Avoiding fire successfully means, in the final analysis, that the enemy's Final TH DR is greater than his Modified TH#, thus resulting in a Miss (C3.3). Recall that the Modified TH# is determined by accumulating the various C4 Gun & Ammo Type modifications found on the C3 To Hit Table (C4.1-.5). These C4 modifications are a function of range, as is the Basic TH# which they modify.

To begin, it may appear that the first step in decreasing your odds of being hit is to maintain a greater range from the enemy and thus reduce his Modified TH#. Unfortunately this works both ways, since the same modifiers (but not necessarily the same Basic TH#) apply to both sides. Even if the combination of Basic TH# and C4 modifiers favors one side, the other side will naturally try to offset that advantage by reducing the range of the Engagement. As a means of avoiding fire, using range alone will likely not prove very practicable.

A more practical way to avoid fire is to influence which of the TH DRM the enemy must apply to his shot. As already mentioned, the To Hit modifiers are divided into two types: the C5 (Firer Based) and the C6 (Target Based). By definition, one might expect that a target will have more influence over which C6 DRM may apply,

a brief look at the To Hit DRM which a target can use to avoid fire. Again, for simplicity they will be presented in the order they appear on the table.

Case A: Fire Outside CA

A Gun which changes its CA to fire at a target outside its current CA must add the Case A DRM to that shot, which is a minimum of +1 (C5.1). Naturally the enemy will try to avoid Case A when firing, so it naturally follows that you should try to approach that enemy from outside his CA to take advantage of this penalty. Remaining outside the enemy's CA may prove easier in principle than in practice. The primary difficulty here is that the area within a CA expands as LOS is traced outward from the firing unit (see the C3.2 EX). The farther you are from the enemy, the more you will have to travel laterally to escape his CA, a problem compounded by the fact that he will do everything he can to keep you in his sights.

One way to reduce the enemy's field of fire is to position yourself among a group of obstacles so that, even though you may be within his CA per se, his LOS may be blocked as you move from cover to cover. This could result in a relative loss of mobility as you expend extra MP to negotiate the terrain (preferably by going around rather than through any obstacle). Another way to avoid the enemy's CA is to try to remain in a hex that lies within one of the two diagonal rows of hexes that converge on the enemy's hex. Hex E9 in the C3.2 example would be one such; a move to F8 would put your AFV immediately outside the enemy's CA in this case.

Once the Engagement is well under way, Case A will rarely apply. At any rate, since both you and the enemy will always try to keep the other in your respective CA, you will seldom be able to force Case A on him.

Case G: Deliberate Immobilization Attempt

Even though not a threat to your survival as such, if you must exit units to win, and especially if the enemy possesses inferior armament, he may be just as satisfied to try for Deliberate Immobilization (C5.7). If your lowest hull AF is greater than his Basic TK#, then you need not worry about this possibility. Otherwise, be wary if the enemy has markedly inferior weapons, or if you must exit the board. The only real way to protect yourself from Deliberate Immobilization is to remain at least seven hexes from the enemy threat.

Case I: Buttoned Up

"Any BU, CT AFV must add the +1 DRM of Case I to its To Hit DR" (C5.9). The decision regarding whether to remain CE or BU has already been discussed, and is mentioned again here only in the context of forcing the most possible DRM upon the enemy.

An enemy CE inherent crew should be considered an important target in-and-of itself, albeit subordinate to the destruction of the AFV. The primary object of firing at a CE crew is to force it to BU and use Case I. Further incentive is pro-

At the very least you should fire your CMG at a CE crew of a tank you are currently engaging, since firing the CMG at a different target would cause you to lose Acquisition. If possible, combine the BMG and CMG into one attack, because Mandatory FG (A7.55) applies to vehicular MG fire (D3.5). You might further encourage him to BU by using HE rather than AP for a shot or two. Once the Engagement gets under way, the enemy will usually take the prudent course and BU anyway (just as you will).

Case J: Moving/Motion Vehicle

The +2 DRM of Case J applies to fire directed at a vehicle "which has entered a new hex or used VBM (D2.3) during that Player Turn, or is/was in Motion status during that Player Turn" (C6.1). More than that, a vehicle is considered moving for To Hit purposes and thus eligible for Case J, namely, "... if during the current Player Turn it has entered a new hex, or used VBM (D2.3), or began its MPh in Motion (D2.4), or is currently in Motion" (C.8).

The first thing to note is that Case J does not apply simply due to the target having expended a Starting MP (D2.12) or for changing VCA. Furthermore, once a vehicle becomes eligible for Case J during its player turn, the +2 would apply whether the vehicle is Stopped or Non-Stopped. "Non-Stopped" is just another way of saying "in Motion during the friendly MPh"; and, of course, a "Stopped" vehicle is one which has expended a Stopping MP (D2.13) and has not yet expended another Starting MP.

When you do decide to move (and you will have to move at some point in the battle), be sure to take full advantage of subcases J1 and J2 (C6.11 and C6.12). These cases "both deal with a moving (C.8) vehicular target's expenditure of time in the LOS of a firer since the last hex occupied by that target out of the firer's LOS. A target that begins its MPh ... in the firer's LOS is unaffected by these Cases until it is out of that LOS after entering a new Location/vertex..." (C6.15). In dense, built-up areas you should have plenty of obstacles to obstruct enemy LOS, but this may prove more difficult in relatively open areas (and virtually impossible in the desert). Just remember that "the subcases of J apply only to Defensive First Fire shots" (C6.16).

Case K: Concealed Target

"Ordnance firing at a hidden/concealed target ... must add the +2 DRM of Case K to its TH DR vs that target" (C6.2). Even though this is one of the shortest and seemingly most straightforward paragraphs in the entire ASL rulebook, its implications for tank combat are considerable. Foremost among these is the restriction that a target may not become Acquired using the Vehicle Target Type unless that shot causes loss of concealment (C6.57), which means that it must be hit by that shot (Case A of the Concealment Loss/Gain Table). Since Target Acquisition forms the basis for the entire concept of the Engagement, it can be seen how important it becomes to gain and retain concealment.

a vehicle loses concealment so easily. Referring to the Concealment Loss/Gain Table, we find that a vehicle loses "?" immediately when in enemy LOS and not in concealment terrain (Case H). If in concealment terrain, a vehicle would lose "?" if hit by ordnance (Case A), if it fires or expends MP, or if it successfully fires a Smoke Discharger (Case B), or changes CA (Case D).

Notice that the "rules of concealment apply equally to vehicles" (A12.2). This means that a vehicle may gain "?" in the same manner as Infantry if there are no unbroken enemy units in LOS (A12.1). Specifically, the "?" gain is automatic if the vehicle is in concealment terrain and in Good Order (which means that the Inherent crew is neither Stunned nor Shocked), and if not in concealment terrain it may make a "?" Growth dr (Case K of the Concealment Loss/Gain Table). A typical vehicle has a US# of 4 (A1.6), which would require a "?" Growth dr of 1. A large or very large vehicle has a US# of 5, which would make "?" impossible in Open Ground. The "?" Growth dr is modified by any in-hex TEM or hindrance DRM, however, which could include SMOKE and wreck(s) and which might then allow that large tank to gain concealment after all.

The latter method of "?" gain may seem a waste of time, since if not in concealment terrain when in enemy LOS a vehicle would lose its "?" automatically. This is certainly true, but the effect to be gained by this is perhaps psychological. Since a lot of information is freely given away to the ASL opponent in any case, concealing a vehicle in this manner will at least cause him to mentally keep track of your units. If there are many such counters cluttering up an area, in the heat of battle your opponent may forget whether that "?" counter moving about behind your lines is a tank or a truck. This possibility is admittedly rather remote against an experienced player, but why deny yourself an opportunity to deceive the enemy?

Case L: Point Blank Fire

Case L (C6.3) is one of the Target Based DRM which are actually detrimental to the target. The firer is entitled to a -1 DRM if the target is at two-hex range, or a -2 DRM if the target is at one-hex range. Certainly you would rather not increase the enemy's odds of hitting you. Your desire to remain > two hexes from the enemy does not preclude him from moving that close himself, though presumably you would get the first benefit from Case L if he initiated the move (note, however, that Case L applies only if both the firer and the target are Non-Stopped). Generally, only a desperate or invulnerable tanker would move that close to engage the enemy. Exceptions can occur in those situations where the moving tank could win a Gun Duel, have markedly superior odds in the PFPh, is in difficult terrain, or at night where the two sides must be in such close proximity simply to gain LOS to each other.

Case P: Target Size

"All vehicles (D1.7)... are rated for size, based on their height and bulk. Ordnance firing on such

a target...must add the applicable Target Size DRM of that target...to its TH DR" (C6.7). The appropriate DRM is determined by the color of the target's AF. Of course, a tanker has no control over the size of his tank. The only thing you can do is compensate for any Target Size DRM by adjusting your actions in relation to the other Target Based DRM.

For instance, a (Very) Large target (D1.71-.72) should especially strive for the extra -1 of Case J1 and J2 or for any available TEM, whereas a (Very) Small target (D1.74-.75) might be more prone to risk movement across the enemy's LOS. For a concealed vehicle, any Target Size DRM is revealed only if it turns a miss into a hit, or a hit into a miss (A12.2). A revealed Target Size DRM which turns a hit into a miss does not itself cause that target to lose its concealment.

Case Q: TEM

"TEM applicable to the target must be added as a DRM to the TH DR of a shot taken on the Vehicle...Target Type..." (C6.8). Any positive DRM to the TH DR should be viewed as beneficial to the target, so it may seem that TEM should be sought whenever possible. Even the relatively low +1 of some of these will serve to reduce or negate Case N, and every little bit helps. Unfortunately, the more beneficial TEM (Building and Rubble) also happen to be Bog hexes (D8.2), and even the minimal protection of Woods can only be gained after risking a Bog Check. For these, the trade-off involves the possibility of losing your mobility or gaining extra protection.

In a fluid battle, where maintaining your mobility becomes even more important than might usually be the case, the TEM likely to be used most often is Height Advantage, where there is no risk involved in gaining the cover. It is simply not usually worth the chance of bogging your AFV just to gain a few extra DRM, especially in view of the restrictions for changing CA discussed earlier.

Related to TEM, but distinct from it, is a defensive tactic called Hull Down (HD), which is used to describe "any situation where-in the LOF to the bottom half of a vehicle is blocked by terrain, making that portion of the target incapable of being hit by Direct or Small Arms/non-ordnance fire" (D4.2). Such a vehicle would be considered hit only if struck on the turret/upper superstructure (C3.9). The odds of striking a HD vehicle for any given Modified TH# are reduced by more than half, since the colored die of the TH DR must be less than the white die. This is a significant advantage, so rather than seeking TEM for protection, a survival-minded tanker might be better served to search out a HD position instead.

The first HD position to consider is that formed by a hill Crest-Line hex. Simply being in the higher-elevation hex does not automatically bestow HD status; but, during the MPh, a vehicle may attempt to gain HD status by declaring a HD Maneuver Attempt (D4.22), either upon entering the Crest-Line hex or after changing VCA while in that hex.

A HD Maneuver Attempt costs two MP, and this is in addition to any cost for entering the hex or changing VCA. The number of HD hexsides that result is determined by a Final dr. A Final dr of 3 or less is required to receive any HD protection, and the only non-setup DRM that apply are +2 for a CT Russian AFV, +1 if BU, and any Armor Leader modifier. For Russian tanks in particular, a successful HD Maneuver Attempt without the benefit of an Armor Leader would prove virtually impossible. Remember that regardless of the outcome of the HD Maneuver Attempt, the vehicle must then immediately end its MPh by expending a Stop MP if still Mobile.

If successful, a HD counter is placed beneath the vehicle to indicate which hexside(s) are affected. Any Direct Fire from at least one full level lower that crosses an affected hexside is treated as occurring against a HD target. Such a HD tank may freely change its TCA, but if the vehicle changes VCA, Starts (without Stalling), or goes into Motion, the HD counter is immediately removed.

Becoming HD in a Crest-Line hex provides a very fine tactical position, first because of the HD status itself, and second because a sufficient elevation will afford excellent LOS over any obstacles/hindrances in the area. Unfortunately, relatively few boards offer any form of elevation overlooking countryside that is also good tank country. This means that such positions are usually limited in most scenarios.

Not so with Walls, however. Many boards have at least one wall, and in most cases to become HD behind one requires only that the vehicle be placed in a hex that has a wall hexside. Any Direct Fire which would otherwise receive Wall TEM would instead bestow HD status upon the target (D4.21). A Roadblock is considered a wall for TEM purposes (B29.2), and so will also bestow HD status.

If the hex contains other TEM, you must decide whether to use the in-hex TEM, or use the Wall to receive HD status. Remember also that an AFV may not claim WA if eligible for in-hex TEM (B9.32) [EXC: Height Advantage, Cactus Patch and Olive Grove].

Case R: Hindrance

"Each applicable Hindrance DRM must be added directly to the TH DR of any shot" (C6.9). For our purposes there are two types of Hindrances, those which occur naturally (terrain and Low Visibility), and those that are artificial (such as SMOKE).

Hindrance hexes are unbiased, affecting both sides equally, and so are strictly defensive features. On most boards, the Hindrances typically consist of Brush, Orchard and Grain. Brush hexes are usually scattered about, but you may be able to find larger clusters of orchards or grain fields which offer admirable protection in some scenarios. Since a total Hindrance of +6 will block LOS completely (B.10), some of the sprawling grain fields (in particular) will totally impede LOS. Many Hindrance hexes also happen to be Concealment Terrain, so you could park your AFV in one of the outer-hexes of a

grain field, thereby possibly gaining concealment and having the unguarded flank covered by significant Hindrance.

Some tanks carry an inherent source of LOS Hindrance in the form of a Smoke Dispenser (D13.1), or as Special Ammunition in the form of a SMOKE round (C8.5). SMOKE creates a LOS Hindrance (A24.2), but applies to all fire that is traced into, through, or out of the hex. SMOKE is more effective as a hindrance to fire originating from *within* the SMOKE hex, since such fire must add an additional +1 to the normal effects of that SMOKE (A24.8).

Smoke rounds (C8.5) may be fired at the start of the owner's PFPh/DFPh, and WP (C8.6) may be fired at the start of any friendly fire phase; but in both cases SMOKE must be fired before any unit makes a non-SMOKE attack, and may be placed with full effect only during the PFPh. If placed during any other phase, it is Dispersed (which means it will be removed at the start of the next friendly PFPh). SMOKE is governed by Depletion Numbers, and that will play a role in your usage of it. However, using SMOKE adds +2 to your Basic TH# at 0-12 hexes, so your odds of successfully placing it are pretty good.

During an Engagement, you will rarely use a SMOKE round since once you fire you may not move. A SMOKE round is more of a support weapon used to mask friendly movement or to protect a friendly unit engaged in unfavorable circumstances. To protect your tank, a Smoke Dispenser may prove to be more effective.

There are four types of Smoke Dispensers (D13.1). The basic rules governing their use are the same for all of them, though each has certain characteristics unique to its type. A player fires a smoke dispenser by making a Final DR less-than or equal-to the Usage Number printed on the back of the counter. The Usage Number for a smoke dispenser is treated differently than a Depletion Number, because a Final DR > the Usage Number means only that it has failed to fire during that one player turn. You may make further attempts during a subsequent player turn. The only DRM which applies is that for being BU, which, as usual, is +1.

You may attempt to fire a Smoke Dispenser only once per player turn during the MPh. Such an attempt during the friendly MPh (if successful) costs one MP. During the opponent's MPh, an attempt can be made after any MP/MF expenditure by enemy units in LOS as if intervening with Defensive First Fire. In neither case may an attempt be made if your AFV has already fired any weapon during that player turn.

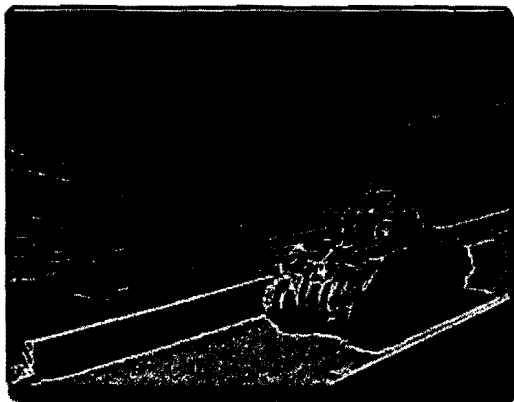
The tactical use of each type of smoke dispenser is dictated by its effect. Smoke Pots (sP), Smoke Dischargers (sD), and Nahverteidigungswaffe (sN) each place dispersed smoke in the AFV's own hex. This means, first of all, that such usage will greatly hinder the tank's own return fire should it remain in the hex. Second, these smoke dispensers are only marginally effective in masking the tank's movement since it will have entered enemy LOS initially before firing it. Note that this refers to the firing tank's

own movement, since placing smoke in this manner will certainly mask the movement of any other friendly units in the area. During a tank battle, these three types of weapons will be used primarily when one wishes to attempt to escape rather than engage the enemy.

A Smoke Mortar (sM) offers more flexibility, since it places smoke in any hex that is 1-3 hexes from the AFV and in LOS (D13.32). An attempt from a moving/Motion AFV (i.e., one eligible for Case J) must add +2 to the DR; and since the target hex must lie within your TCA, the Case A DRM also applies if the CA must be changed. Finally, any Hindrance between the AFV's hex and the target are also added to the usage DR.

Any vehicle with a MA may also avail itself of a fifth type of "smoke dispenser" - the Vehicular Smoke Grenade (D13.35). Crews can place a 1/2" Smoke counter in their own Location by making a $dr \leq 2$, provided they are CE.

Avoiding fire is your primary means of surviving an Engagement, all the time while the enemy is doing everything he can to increase his odds by positioning himself to strike you on your weakest spot. Tank combat is a cat-and-mouse game, which perhaps highlights the most important element, and the third principle, of the tank: *Mobility*.



Heinz Guderian, regarded as the founder of the German *Panzerwaffe*, once stated that the engine of a tank is no less a weapon than its gun. He knew that it was a tank's mobility which allowed it to bring its firepower to bear at the time and place of the commander's choosing, and that it was through movement that the enemy's weak points could be discovered, and a breakthrough achieved. Once the front had been pierced, tanks advanced into the enemy's rear to spread destruction and confusion, and it was the tank's mobility which afforded it the best protection when behind enemy lines.

Even though Guderian's statement may refer more to the strategic or grand tactical level of war, his comment is also pertinent to the lower tactical levels such as that simulated by ASL. The tank's relatively high MP allotment allows it to position itself quickly at the crisis point of the battle. Indeed, for some players this mobility may be the most enjoyable aspect of ASL tank warfare. Certainly it adds to the game's dynamic nature.

Mobility refers to more than just a tank's speed (MP allotment), although speed is an important

element. A masterful understanding of Mobility in ASL includes how to best take advantage of a vehicle's movement options, and how to maintain that mobility throughout the battle. A tank which fails to remain Mobile (D.7) becomes much more vulnerable to attack from enemy AFV. A corollary to winning the Engagement, then, is to protect and maintain your tank's freedom of movement.

Movement takes place during the MPh, naturally, and a "vehicle may expend up to its full MP allotment...during its own MPh in accordance with the COT entered, as listed on the pertinent MP Entrance Cost column of the Terrain Chart" (D2.1). A vehicle is also not prohibited from expending more MP to enter a hex than the minimum required (D2.18). Aside from the distinction that vehicles expend MP rather than MF, the "mechanics of vehicular movement are the same as for Infantry (A4.2 & A8.1)." The most important part of A4.2 is this statement: "The player is not allowed to take the unit back to a previously occupied hex and begin again." This is one of the few rules which preserves something of the spontaneity of combat, and helps lend a "snap decision" nature to the game. A real-life tanker would have no opportunity to correct an oversight by beginning his move all over again.

Once the decision to actually move your tank has been made, a "vehicle not under a Motion counter must expend one MP to start movement before entering a new hex or changing its VCA during the MPh" (D2.12). Furthermore, a "vehicle must expend one additional MP in its current hex to stop movement, unless it is ending its MPh under a Motion counter (2.4)" (D2.13). A vehicle may stop and start as often as it wishes during a single MPh providing it has sufficient MP to do so.

Since a vehicle "must move within its current VCA as it enters each hex" (D2.11), and since most ASL map boards are strewn with various obstacles, figure on having to change your vehicular CA at least once during the MPh. VCA can be changed at the cost of one MP per hexspine, which is doubled if you occupy a woods, building, or rubble hex.

Taking into account these costs for starting, stopping and changing VCA, a tank may end up with only about three-quarters of its printed MP available for actually moving - that is, for entering new hexes. Depending on the terrain, this number may be lower still, but this is not as bad as it may seem. Most tank Engagements will take place within 12 hexes, over terrain not generally conducive to far-reaching moves. Once the battle begins in earnest, movement will probably consist of small adjustments as both sides jockey for position.

A unique feature of vehicles is their ability to remain in Motion (D2.4) at the end of its MPh. This occurs when a "Mobile vehicle...has used its entire printed MP allotment during its MPh, without expending a MP to Stop or Delay at the end of that MPh..." (D2.4). There are three advantages of remaining in Motion.

First, an in-Motion vehicle does not have to expend a Start MP to begin movement in its next MP, a particularly useful point for vehicles with a red MP number (D2.51). Second, a vehicle in Motion receives that useful Case J To Hit DRM for any shots taken against it, regardless of phase (C6.1). Third, Point-Blank Fire (Case L) does not apply versus a Motion vehicle (C6.3). These advantages may be considered defensive in nature, since they decrease the enemy's odds of hitting you, and may provide you with the opportunity of entering a new hex before the enemy can intervene with Defensive First Fire.

However, a moving vehicle is virtually powerless to strike back at the enemy, since an in-Motion vehicle must use the To Hit Case C4 (which is at least +4) with a doubling of the lower dr. Because only a Stabilized Gun can claim Case N (C6.55) while in Motion, and since an AFV in Motion may not use Prep Fire, the enemy may get two decent shots at your moving tank before you can effectively return fire.

For these reasons, it may not be a good idea to remain in Motion if the enemy is in LOS or is within movement range. Of course, at times the two sides will be widely separated and it will be clear that the first few turns will be spent advancing to contact. Then, a vehicle commander might elect to remain in Motion to use those extra MP which would otherwise be spent to stop and start movement. A hopelessly outclassed tank may even wish to remain in Motion in order to avoid combat altogether, as might also a tank with red MP that risks Immobilization upon Starting. But if the tanker's objective truly is to engage and defeat the enemy's armor, then Motion status will probably defeat that purpose. Besides, if you find it desirable to be in Motion, there is yet another option available.

A DEFENDER's Mobile AFV may attempt to gain Motion status during the enemy MP (D2.401). Such a Motion Attempt is successful if the DEFENDER makes a $dr \leq$ the number of MF/MP expended in its LOS by an enemy unit during its MP. The enemy unit must be one that had not been in the vehicle's LOS during that Player Turn prior to entering it during that MP. Note that if a qualifying ATTACKER unit expends six or more MF/MP in LOS, the Motion Attempt automatically succeeds. Also note that a vehicle may not make such an attempt if it is already marked with any sort of Fire counter, and that "a vehicle in Motion may make a Motion Attempt dr in this manner so as to freely change its VCA/TCA at that time."

Keep in mind that Motion status may be attempted as a result of *any* enemy movement, not just vehicular [EXC: *Tank-Hunter Hero; GI.423*]. The enemy may believe that he has cleverly maneuvered himself into an excellent position, only to find that your Motion status becomes automatic as a result of some careless movement of his halfway across the board. Of course, you must be alert to such opportunities if your intention is to gain Motion status.

This leads to the next decision you face: When is it best to make a Motion attempt rather than

fight it out? The answer is usually clear, if you keep in mind some of our earlier stated objectives for winning the Engagement. If your position is favorable, sit tight. If you are outnumbered or in an unfavorable position, it may be time to bug out. The timing of a Motion attempt is important, because the enemy can use that Motion status as an opportunity to approach you with impunity. A Smoke Dispenser used in concert with gaining Motion status can prove effective in helping you escape, since there is nothing to prevent you from attempting to gain Motion status *after* firing a Smoke Dispenser. The dispersed smoke you place will be removed at the start of your next PFP, but the whole idea is to survive the enemy's AFPh. Providing it has made optimum use of terrain, an in-Motion vehicle should be able to make good its escape during the next MP.

"Keep in mind that Motion status may be attempted as a result of any enemy movement, not just vehicular... The enemy may believe that he has cleverly maneuvered himself into an excellent position, only to find that your Motion status becomes automatic as a result of some careless movement of his halfway across the board. Of course, you must be alert to such opportunities if your intention is to gain Motion status."

In addition to traveling forward, a vehicle may also use Reverse Movement (D2.2), namely when it "may wish to leave its present hex without directly entering a hex within its VCA." This will usually occur when an AFV is unwilling to present an inferior side or rear armor facing to the enemy, yet does not wish to engage the enemy at that time. Reverse Movement is much slower than forward movement, being *quadruple* the normal MP cost. This is slow going indeed, and a tank will not get very far going in reverse. However, a vehicle may combine forward and reverse movement in the same MP (D2.23), with all that implies for maneuver. Most of the time a tank will use Reverse Movement as a defensive measure, as one of those small adjustments of position referred to earlier.

If insufficient MP are available to reach a desired position, a tracked vehicle may attempt to exceed its MP allotment by risking ESB (D2.5). Using ESB, an AFV may gain up to an additional one-fourth (FRD) of its allotment by passing an ESB DR, which is modified by the number of MP gained and by a nationality DRM. Failure of the ESB DR results in Immobilization, which is irreversible.

Perhaps a common mis-use of ESB occurs when a vehicle finds itself with one MP remaining, but has its VCA facing the wrong way and also wishes to stop in its present hex. In this case, a tank could expend that last MP to change VCA,

then attempt ESB to gain one extra MP to stop. This particular application of ESB could be avoided by keeping in mind when VCA can be changed. Remember that your VCA can be changed "at the end of any fire phase in which it is still eligible to fire a turret/bow-mounted weapon (3.12 and C3.22)" (D2.11). Thus you could change VCA to face the appropriate direction in the AFPh and avoid ESB entirely.

A tank may also expend MP by doing nothing. Such expenditure, only possible when Stopped, is termed Delay (D2.17), and there are a few instances where it might come in quite handy. Besides using Delay "in LOS of its target during that MP before firing (so as to use To Hit Case C instead of C1 or C2)," Delay might also be used while out of enemy LOS just before entering view. The idea here is to discourage Defensive First Fire by expending as few MP in enemy LOS as possible, thus incurring one of the subcases of Case J. This can be accomplished by "hiding" behind an obstacle while using Delay, then expending the final two MP to move to an adjacent hex and Stop.

Because a "moving vehicle that ends its MP with MP remaining is assumed to expend all those MP in its present hex (D2.1)" (C6.16), an ordnance weapon may Defensive First Fire at a target as many times as the number of MP expended by that target in that Location (C6.17), so you should reduce the number of MP spent in the final hex. Another benefit of this Delay tactic is that the enemy will have lower odds of making a successful Motion Attempt, thus possibly giving you a chance to shoot at him during the ensuing enemy MP without Case J should he choose to move rather than engage you.

Because a tank is classified as Fully Tracked for movement purposes, there are few terrain features which totally impede a tank's movement. A tank may travel just about anywhere it wants, and usually at a lower cost than for other vehicles. For instance, you may feel inclined to enter an obstacle (building/woods/rubble) hex in order to benefit from its TEM. To do so, however, requires a Bog Check DR (D8.2), failure of which results in the vehicle bogging in its current hex (thus becoming Immobile) and the immediate ending of the vehicle's MP (D8.21). Since preserving your tank's mobility is a relatively high priority, the actual benefit of entering the obstacle should be weighed carefully against this possibility. But the option of such movement is one not available to most other types of vehicles.

If the tactical situation is such that the risk is deemed acceptable, then all that remains is to ensure that your tank has sufficient MP available ($\frac{1}{2}$ its MP allotment, though Woods may be entered at a cost of all MP, with a reduced chance of Bog). If entering a building, the Bog Check DR may result in the AFV falling into the Cellar (B23.41), or in the building becoming rubble and possibly requiring yet another Bog Check due to Falling Rubble (B24.121). Bogging is the only concern for entering a woods hex, but if successfully traversed a fully-tracked vehicle will place a Trail Break (B13.421) across the

hexsides of its path of movement; thereafter any fully-tracked vehicle may use the TB without the threat of Bog. A Bog Check is also required for a vehicle leaving a stream hex via a higher elevation hexside (B20.46), and for crossing a bocage hexside (B9.54). Movement itself may prove a weapon of sorts; a Fully Tracked vehicle will remove a Wire counter by passing a Bog Check in that hex if the colored dr is a 1.

Provided it has not fired during the PFP, a Bugged vehicle may attempt to recover its mobility by making a Bog Removal DR (D8.3). A Bugged vehicle expends, as a Start MP, an amount of MP equal to the colored dr times the white dr, and is freed on a Final colored dr of 1-4. It may then continue to move normally with any remaining MP. If the Final colored dr is 5, the vehicle becomes Mired (D8.31), which adds +1 to the colored dr of any subsequent Bog Removal DR. A Final colored dr of 6 immobilizes the vehicle. Any armor leader modifier would apply to the colored dr.

Similar to Infantry, a vehicle may move through a building or woods hex using a form of movement known as Vehicular Bypass (VBM) (D2.3). Using VBM, a vehicle may travel around the obstacle along the hexside, and may even end its MP in Bypass of that obstacle (D2.34). The most important point to remember is that "the interior of each hexside traversed must be clear of any obstacle depiction to the depth of an edge of a unit counter for VBM to be usable," and that the "hexside clearance measurement cannot be made until the VBM and all applicable MP costs are announced." Care should be taken to ensure sufficient clearance before claiming VBM, and if the enemy uses VBM, be alert and challenge the clearance measurement if necessary.

The obvious advantage of VBM is that a vehicle may traverse a woods or building obstacle without the threat of Bog, and usually at a lower MP cost. In a village or city, the main avenues of enemy fire might be avoided by staying off the roads and using VBM. On the other hand, VBM imposes certain restrictions and penalties upon VCA or TCA changes. In particular, Bypass VCA cannot be changed as a result of a successful Motion Attempt (D2.33). Also, Bypass presents a more restrictive VCA (D2.32) than usual, which makes the vehicle more likely to be hit in the side than the front or rear. And finally, since LOS to or from a Bypass vehicle is drawn from the CAFD (D2.37), the field of vision of such a vehicle can be somewhat limited.

"Maintain your mobility." "Avoid fire." "Increase your chances of hitting the enemy first." These are all general precepts that a player will use to develop his own style of armored tactics. But no matter how carefully a player studies the rules, no matter how perfectly he executes his plan, there is one intangible element to armored warfare which plays a crucial role on our cardboard battlefield. Some might refer to it as "fate," or the "fortune of war." Whatever its true name, it is utterly impartial, and can strike with devastating effect any time that dice are involved: *Luck*.

Part IV: Dice Game

Some wargamers have referred to ASL tank battles as "dice games," no doubt owing to the propensity of solid hits resulting in no effect to the target. No doubt AFV combat is straightforward: you either hit or not, and then you kill or not. There is very little variation within this simple To Hit and To Kill process. And every tanker has at least one horror story of a Critical Hit turning into a Dud at a pivotal point in a contest.

Dice come into play at two important moments during an Engagement: the To Hit process (C3.3) and the To Kill process (C7.1). Since you must hit the target before you can kill it, we'll first look at several possible outcomes of the TH DR.

As reviewed earlier, in order to hit your target, the Final TH DR must be \leq the Modified TH#. Once a hit is scored, you must then determine where it has struck that target in order to know which aspect is used to find the correct AF (C3.9). A hit on a vehicle strikes the turret/upper-structure if the colored dr of the Original TH DR is less than the white dr. Otherwise, it strikes the hull. Since the odds of striking the hull are greater than the odds of striking the turret, one can see how important a HD position becomes. Likewise, when moving laterally in front of the enemy, keep your turret facing him to ensure that your frontal AF will be used for a turret hit rather than the usually-inferior side AF.

When a small caliber Gun of 15mm to 40mm scores a non-CH while rolling an Original Doubles TH DR, it has achieved Multiple Hits (C3.8). The firer may then make two TK DR and choose which one to apply. The first To Kill DR of a Multiple Hit determines the location of the second hit as described above. Note that certain American AFVs with Guns greater than 40mm may also score Multiple Hits (U.S. Vehicle Note R), which is signified by the AFV's ROF being printed on a white background.

The possibility of multiple shots (ROF; C2.24) is represented by a number encased in a square on the front of the counter. If the colored dr of the Original TH DR is \leq this encased number, that Gun may fire again during that player turn. ROF for a vehicle is not allowed during the AFPh (C5.2), but is allowed during Bounding First Fire (D3.3). A Bounding First Firer must expend one MP between shots (even if just Delay), and may even fire from more than one hex if ROF is maintained (D3.51).

Every time the Gun fires, there is a chance that

it will Malfunction (D3.7). The tank's MA is assumed to have a B# of 12, otherwise the B# will be listed on the counter. An Original To Hit DR equal to the B# causes the gun to Malfunction, which is indicated by placing an appropriate Malfunction counter on the vehicle. Notice that the attack which caused the Malfunction is still resolved (A9.7), so you could conceivably still hit the target, including the resolution of Multiple Hits. Remember also that the B# is reduced by two when using Intensive Fire, and changes the original B# to an X#.

An AFV with a circled B# may possibly suffer a Low Ammo result (D3.71). Such a vehicle's Gun still malfunctions with an Original 12 To Hit DR, but any other Original To Hit DR \geq the circled B# suffers from Low Ammo (and is marked with a Low Ammo counter). The original B# then becomes an X#, and creates a new B# that is one less than the original.

Any weapon that malfunctions is subject to possible repair during the RPh. Provided the crew is not shocked or stunned, a dr of 1 during the RPh will repair the malfunctioned gun. A dr of 6 will Disable it. Any other result has no effect. An AFV whose MA and Secondary Armament (SA) are all Disabled is immediately Recalled – unless it also has Passenger/Towing capability.

When using the Vehicle Target Type, an Original 2 TH DR results in a CH (C3.7), which doubles the Basic TK# for the ammunition type used. Note that a CH versus a HD target will always strike the turret. If only the lowest possible Final TH DR would yield a hit, a CH can still occur with a subsequent dr of 1; otherwise it is considered a normal hull hit (or a normal turret hit versus a HD target). If the lowest possible Final TH DR would still be a miss (Improbable Hit), a hit just might occur with an Original TH DR of 2. A subsequent dr of 1 is a CH, a 2 is a turret hit, and a 3 is a hull hit (C3.6). Any other result has no effect.

Once a hit is scored, a DR $<$ the Final TK# will destroy the target, and if \leq half of the Final TK# will create a burning wreck (C7.6). If the DR = the Final TK#, a hull hit would result in an Immobilization, which causes an automatic Crew TC (D5.5); a turret hit would Shock the AFV (C7.41).

A Shocked AFV must immediately BU and comes to an automatic halt (without need of a MP expenditure), and may do absolutely nothing until the end of the next RPh, when it may roll for recuperation. On a dr of 1 or 2, the Shock counter is removed and the AFV is again fully functional. On a dr of 3-6, the Shock counter is flipped to its UK (Unconfirmed Kill) side. The AFV is still utterly incapacitated in every way until the end of the next RPh, when it must again roll for recuperation. This time a dr of 1-3 will remove the UK counter and restore the AFV to its full capabilities. However, a dr greater than 3 would eliminate the AFV with no possibility of Crew Survival.

A Shock may also possibly occur if a non-HE To Kill DR is one greater than the Final TK#. In this case, the AFV must take a NTC, failure of which results in a Shock.

Finally, any Original TK DR of 12 results in a Dud (C7.35), which has no effect whatsoever on the AFV. As a point of interest, notice that only a TK DR of 12 has no effect and is considered a Dud. An Effects DR of 12 on the IFT following a hit would still be resolved normally.

During this entire To Hit/To Kill process, the dice are in the attacker's hands. All the target can do is sit and hope for the best, and is not given even the illusion of controlling its own fate the same way an infantry unit may roll its own MC. In this sense tank combat may be considered boring to some, but there is plenty of tension and drama for both sides in the firing of the gun, in waiting to see if your armor can withstand a hit. And there is immense pleasure for the attacker when a lucky hit sends that tank and its crew blazing into oblivion!

Conclusion

Great emphasis has been placed throughout this article on "increasing one's odds" in order to "win the Engagement." A detailed and thorough understanding of the ASL armor rules will certainly help one do that; and of course there is no better teacher than experience. However, knowledge of the rules alone will not guarantee success during a tank battle. A certain amount of preparation must be done before play begins in order to take full advantage of what you have learned.

First, know your own forces. Be intimately familiar with the special characteristics of each of your tanks going into the scenario. Second, know the enemy's forces. Determine what you are up against. In both cases, take the time to consult the Chapter H listing for each AFV in play. Learn the respective strengths and weaknesses for each. The tactics you should apply will be directly related to the capabilities of your tanks and to those of the enemy.

Familiarize yourself with the terrain. Where do you (and your opponent) have to go, and what is the best way to get there? Keep an eye out for terrain "choke points" and armor "killing zones." Is this good "tank country," or will there be close-in fighting? Where are the Hindrances? Lay out the boards and take a few moments to consider HD positions. You have an advantage a WW2 tanker never enjoyed: a leisurely bird's-eye view of the land. Use it wisely.

At set-up, look for positions which allow a HD Maneuver Attempt. A -1 drm applies during setup placement; but once the attempt is made, the vehicle may not be "re-set-up" in another hex (D4.221).

The Scenario Defender may choose one Bore Sighted Location within 16 hexes for each vehicle's gun during set-up (C6.4). A gun firing at a target in a bore-sighted hex receives the -2 DRM of Case M, though if Case N can also apply the firer must choose one or the other. Bore Sighting is permanently lost if the vehicle leaves its initial location or changes its VCA.

After your placement is complete, conceal your tank (A12.12). If one side begins with no forces on board, the other side may completely conceal all of his units before his opponent may look at the board. During set up, terrain is irrelevant to Concealment if the unit is out of LOS of all unbroken enemy ground units within 16 hexes of it. Also, half-inch Dummy "?" counters provided in the OB may be freely exchanged for the larger "?" counters, allowing you to create stacks of Dummy vehicles.

Once play begins, follow the Rules of Engagement: Take the first shot. Take the first shot of the Engagement. Take more shots than the enemy. Integrate these rules into the phased sequence of play, and you are ready for action.

But remember, keep your eye on the prize. Your goal ultimately is to win the scenario; so even though your stated object is to defeat the enemy's armor, do not let yourself become distracted from the Victory Conditions solely to engage his armor. Strategy is dictated by the Victory Conditions, though if tanks are involved on both sides they will almost inevitably come to grips with one another.

From the points raised throughout this article, it must seem that the successful tank commander adopts a primarily defensive posture during an armored battle. In fact, by following the Rules of Engagement and through judicious use of mobility, a tank tends to behave very much like a hunter stalking its prey. Depending upon the game being hunted, a hunter will either wait quietly for his quarry to cross his path, or he may try to flush the prey out from its cover. Either way, a good hunter uses stealth when necessary to approach and surprise his victim.

Likewise, the successful tank commander waits for the enemy to move into his sights, or carefully moves into an advantageous position to destroy the target. Bold and aggressive action could pay dividends against an inferior foe, but remember that the DEFENDER will almost always hold the initiative at the start of an Engagement. Whatever the case, allow the enemy to make the first mistake while you wait to take immediate advantage. Above all, patience may be the virtue which most distinguishes the successful tank commander.

Epilogue

...The minutes pass slowly as the enemy tank burns fiercely in the distance. The rest of the enemy platoon is nowhere in sight, but you know that they are there - behind those woods - and obviously intent on avoiding their comrade's fate.

Time is running out. You are under orders to wear the enemy down by attrition, and since the battle does not seem to be going well on the other sectors, that enemy platoon must be destroyed. Finally, you decide you can wait no longer, so you give the order: "Start up. Forward full speed."

Your tank tops the crest and churns down the other side of the hill. Only one route is available

to get at the enemy, though the choice is an uneasy one. A dirt road winds unevenly through the valley, flanked on both sides by short stretches of woods. Very little room for maneuver there; but still, you have no choice. "Along the road."

As you round the bend, an enemy tank comes into view. It occupies a small wooden farmhouse, but is facing the opposite direction. Quickly you duck down into the turret and dog the hatches. Even as the driver brings the machine to a halt, the loader slams in the next round. "Fire!" Your shell crashes harmlessly into the wooden structure.

For some reason the enemy AFV does not fire back, but rather revs its engine in a struggle to leave the building. No time to wonder. "Fire!" This time nothing! Your gun has jammed!

Suddenly, another enemy tank crashes through the woods to your right. "Driver, evasive measures!" But nothing happens quickly in a 20-ton vehicle, and the folly of stopping to fire becomes apparent. The enemy is right upon you. He fires!

Almost miraculously, his shot misses. There is still hope.

The gunner and loader both curse violently as they struggle to free the jammed mechanism, but to no avail. "Smoke dischargers!" With a "pop" the canister fires free, and quickly you are engulfed in smoke. "Driver, start up! Into the woods!"

Is the enemy firing? What is happening?

Slowly your tank grinds into the dense underbrush of the woods, engine and treads screaming their protest. With a high-pitched wail, all forward movement suddenly stops. The tank will no longer respond to the driver's urgings.

Before you even have time to react to this latest disaster, a jarring thud rattles your teeth. At the speed of thought you are aware that you have taken a serious hit to the engine. Your arm moves in surreal slow motion as you instinctively grab for the hatch overhead. Another thud. A terrific bang! An orange flash... heat... flames!

Mercifully, the blackness follows quickly...

TIPS FROM THE TRENCHES

When playing scenario OA32 **The Riley Shuffle**, remember that the Passenger squad (or two HS, at the owner's option) in the American M3(MMG) ht can Remove one or both of the secondary .30-cal. MGs (as dm MMGs) when it unloads from the ht. The MA MG may also be Removed as a dm .50-cal. MG, but only by the vehicle's crew when it Abandons the ht per D6.631.

