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Chapter Z ASL 2000 - Modern Combat

(25.Jan.1999)

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Z1. Introduction:

ASL 2000 is a close adaption of the popular **Advanced Squad Leader** Game system for modern warfare. It features modern Infantry with lots of new SW, and fast moving tanks equipped with Laser Range Finders and Thermal Sights. Reactive Armor is covered as well as Firing Ports and Rear Ramps for Infantry Fighting Vehicles. The incorporation of Strategic Warfare such as Nuclear and Chemical strikes are offered as a option for some fictionnary scenarios. Wire-Guided Anti-Tank Missiles are a very helpful and dangerous asset to the modern combat forces.

And, last not least, ASL 2000 introduces the combat force number one - the helicopter- to the world of the ASL cardboard squads and Heros.

Eventhough a lot of new rules are provided, there is **NO** rule that must be unlearned, since ASL 2000 uses the same game system and characteristics as the Original **ASL** game.

Z2. New Hexsize:

The Original ASL game uses 40 meter hexes. Due to increased ranges (and the ease of calculation) the hexsize in ASL 2000 is increased to 50 meters.

This change itself already has a major impact in the capabilities of many weapons and squads. Considering a WWII squad with a range of 5 hexes fires on a range of 200 meters in ASL, while the same squad fires on a range of 250 meters in ASL 2000.

Z3. Modern Infantry:

ASL 2000 provides new Infantry counters for the game. These were necessary due to the increased range and firepower.

Surprisingly the changes weren't all that great, since the basics of small arms did not change within

the last 50 years: It's still X amount of bullets fired by X amount of soldiers.

Most modern infantry organisations work with 9 men squads compared to the WWII 12 men squad.



Calibersize of small arms remained pretty much the same (it's still mostly 7.62mm, while the US M16 series Assault rifle uses 5.56mm bullets), but the ROF increased. The Elite squads of the US Army and the former USSR Army are represented as 7-5-7 and 6-4-7 respectively (Depending on the Theater of Operations (ToO) you may encounter Russian 6-5-8 Elite squads and 3-3-6 Green squads).

Z4. Random Events:

The incorporation of Strategic Warfare required the introduction of a Random Events dr, since the Command Structure of Strategic Warfare is at a much higher level than represented in ASL.

Chemical and Nuclear Warfare however could be of importance and would probably be used in a global war (fortunately we did not see these weapons in Desert Storm), so it was decided to introduce it to ASL 2000 anyhow, by utilizing the Random Events dr. Strategic Warfare is offered only as a option during fictionnary scenarios, but is a interesting variant to Dessert Storm and Campaign Game scenarios.

Z5. Helicopter & Air Support:

Helicopters are the most versalite and probably the most lethal combat force on the modern battlefield.

They can deliver troops to "hot spots", evacuate personnel as well as they deliver a heavy load of precisely guided weapons to the major combat zones. The combination of manouverability and speed together with the heavy armament make the helicopter a real Quick-Strike weapon. In ASL 2000

ASL2000 ‘Modern Combat - from the ‘50s to the ‘90s’



helicopter fly on two different flightlevels and spend
MP per hex traversed.



1. Infantry

1. Theater of Operations: Most Nationalities had different units for the different ToO's. So it is possible to have a US 7-6-8 during Desert Storm, but only a US 7-5-7 during the Vietnam War.

Not only Firepower and Range are dependent on the ToO, but also the Inherent SW and special Capabilities of that unit. Therefore each ToO will have a set of SSR (like CG SR) that are valid for that ToO.

1.1 Movement: Movement Factors (MF) and the expenditure of such remained the same as in the Original ASL game, but due to the new hexsize, infantry can now move 200 meters (MPH) plus 50 meters (APh) during one turn. The terrain costs listed in Chapter B and the Chapter B divider remain valid.

1.2 Firepower: As mentioned in the Introduction, a modern squad carries only 9 men, of which 7 are armed with AK-47/M16 Assault Rifles. The remaining 2 men are armed with a Assault Machine Gun such as the US SAW, which are not real LMG's yet.

Considering the decreased manpower and the increased ROF the FP of most squads remained the same as in ASL.

All modern Elite, 1st Line, and 2nd Line squads are capable of Spraying Fire (A 7.34). Most Elite and 1st Line units are also capable of Assault Fire (A 7.36). The FP is still the leftmost number of the Strength Factor.

In addition to the regular FP, most Elite units carry Inherent Grenade Launchers. These are covered later in this rule section (1.51).

The numerical exponent listed above the FP is the Smoke Placement Exponent (A 24.1).

1.3 Range: The middle number of the Strength Factor is the number of hexes that unit can reach with its FP under normal conditions (Normal Range). Long range fire is halved and possible up to double the normal range.

Since the hexsize changed the range of most modern units did not drastically change. The average range for a US squad is still 6 to 7 hexes, while it is 5 to 6 hexes for a USSR squad, due to the limited long-range capabilities of the AK-47 Assault Rifle.

1.4 Morale: The third number of the Strength Factor is the relative rating of the units ability to withstand punishment before "breaking". The morale factor consists of motivation, training, unit cohesion and the ability to withstand enemy fire.

The criteria for the morale also didn't change within the last 50 years, so a unit with a morale of 8 is still a highly motivated, top-of-the-notch, sometimes even fanatic unit.

These heroes of today, carrying a morale of 8 are only found in special units such as NAVY SEALs,



MARINES, SPEZNAZ, RANGERS, and KGB units. If the morale factor is underlined, the unit is given an ELR of 5 (A 19.13).

1.5 Inherent Support Weapons: Many modern infantry units have inherent SW, such as:

1.51 The GP-25/M203 Grenade Launcher: The GP-25/M203 is a Inherent, rifle mounted grenade launcher possessed by most modern squad/HS. The GP-25/M203 utilizes its own TH Table shown on the ORD TH chart.

1.512 Usage: All Good Order squad/HS which can

still fire during their current fire phase can possibly fire a M203/GP-25. A squad attempts to use its grenade launcher by making a GL Check dr (^). If the dr is =< 4 the unit has an opportunity to fire its GL and must attempt a TH DR. If the GL Check dr is 5 the unit has no opportunity to fire a GL during this fire phase. On a dr =>6 a "Hot Dud" occurs and the using unit is Pinned.

The following drm apply to the GL Check dr:

+1 if HS

+1 if CX

+1 2nd Line, USMC 5-4-6

The GL can only be fired once per fire phase.

1.513 Range: The GL has a maximum effective range of 6 hexes and **no** Long Range Fire capabilities.

***1.514 TK:** The GL fires on the 4FP column of the IFT or uses the M203/GP-25 column of the ASL 2000 TK Table. If used against Infantry in woods, the GL receives the -1 DRM for Airbursts just like a Mortar.

***1.514.1 CH:** A Critical Hit doubles the TK #, or if used against Infantry, the GL attacks with 8FP and *all* TEM of the target Location are reversed [Exc: The -1 Airbursts DRM remains].

1.515 Leadership: A leader stacked with a unit firing a GL can apply his leadership modifier to the TH DR of one GL, but such would constitute his sole fire direction of that fire phase.



1.516 Malfunction: A GL has a B# of 11 and a X# of 12. Normal repair rules for SW apply with a R# of 1 and a X# of 6.

Place a appropriate Disabled/Malfunction ctr on the unit, or note the units ID on a piece of paper.

***1.52 Inherent LATW:** Most modern squads, as well as SSR defined units carry a inherent LATW. US units carry the AT-4/M72 LAW while USSR units carry the RPG-18/RPG-7, depending on ToO.

1.521 Usage: Any above defined unit, still capable of firing during this fire phase may attempt to fire their inherent LATW. To do so the unit must make a LATW Check dr (^). On a dr 1-3 the unit has an LATW available as well as the opportunity to fire it. On a dr of 4 the unit has a LATW but no opportunity to fire it.

If the dr results in a 5 the unit has no LATW and may not attempt to use a LATW for the remainder of the Game Turn. A dr =>6 results in the unit being Pinned, if allready Pinned the unit breaks instead.

The following drm apply to the LATW Check dr:

- +1 if HS
- +2 if Pinned
- +1 if CX
- +1 if used vs Infantry
- +1 ELR ≤ 3

All further usage and TH rules are found in the Special Weapons section of this rule set.

1.6 Deployment: During any RPh a Good Order squad stacked together with a Good Order leader may attempt to split into two equal HS by having that squad passing a leader-assisted NTC. A leader may attempt to Deploy only one squad per RPh, and a squad may be subject to only one such Deployment attempt. Regardless of the outcome of the Deployment attempt, neither leader nor squad may attempt any other actions during that RPh.

Some units, depending on the ToO do not require a leader to deploy, they must simply pass a NTC.

The following DRM apply to a Deployment NTC:

- 2 US Elite
- 1 USSR Elite
- +1 2nd Line (all)
- +2 Reserve/Green (all)

1.61 Recombine: Any two Good Order HS of the same nationality and Strength Factors in the same Location may automatically Recombine into a squad of the same Class and type as their sole action in that RPh. Neither a leader nor any TC is required to recombine these HS.

1.7 Leader Creation: Leader Creation during play may occur in either two ways:

1.71 Self-Rally: The first MMC Rally attempt of a players **own** RPh may be performed as a Self-Rally, regardless of Self-Rally capabilities (A 10.63), provided there is no Good Order leader in the same Location and the unit is not Disrupted. If this Self-Rally attempt results in an Original 2 DR, the MMC is rallied and in addition the owner may roll on the ASL 2000 Leader Creation Table.

Any Original DR other than 2 is handeled as a normal Self-Rally attempt, so the unit can still rally, even if it is normally not capable of Self-Rally.

1.72 CCPh: Anytime a MMC attacking in CC rolls an Original 2 DR, the owning player may roll on the ASL 2000 Leader Creation Table. If this dr results in the creation of a leader, that leader **must** add his leadership modifier to the Original 2 CC DR that created him (even if the created modifier is a +1) and possibly changing odds due to its inherent 1FP (1.9).

1.73 ASL 2000 Leader Creation Table: The quality of the leader created is based on a dr on the Leader Creation Table (LCT) plus any cumulative drm for nationality, unit type, and unit status. If more than one MMC made the CC attack which created the leader, the unit with the highest BPV involved is used to determine the Leader Creation drm. A created leader can **not** be refused. The creation of a leader does not harm the base unit from which it was derived.

Leader Creation Table

dr	Created Leader	drm	Cause
≥7	None	-2	USMC*
6	6+1	-1	US*
5	7-0	-1	CC vs AFV per odds column <1:1
4-3	8-0	-1	Base units Morale ≥8
2	8-1	+1	Base units Morale ≤6
≤1	9-1	+1	Base unit was broken

*Barring contrary SSR/ToO

1.8 Doctrine Status: Many WARSAW PACT units are restricted by their nationalities Doctrine. If a SSR states that a specific, or all units of that nationality are on doctrine status, the following rules apply:

1.81 Unit Concentration: All Infantry type units must set up in platoon size (3 squads or equivalent).

1.82 AFV Movement: All AFV must set up as platoons (4 AFV) and use Platoon Movement (D 14.2) while under Doctrine Status. If mounted PRC wish to dismount, the entire platoon must



dismount [**EXC.: The highest ranking leader of the platoon may remain with his AFV**]. If a AFV of a platoon is bogged, the entire platoon must stop and remain stationary for the remainder of that turn. If a AFV gets Immobilized, either through Bog or enemy fire, the AFV must immediately be abandoned and the Bailed-Out crew must mount another AFV of the same platoon as PRC. The platoon of a Bogged AFV may not move, until the AFV is either freed or immobilized and abandoned or the other AFV gain freedom of movement by passing a NTC, with a -1 DRM per AFV still in the platoon.

1.83 AFV Fire: If a AFV platoon under Doctrine Status (DS) engages a target, all AFV of that platoon **must** fire during that fire phase. The AFV may fire at the same target or at different targets, but must fire, even if all targets currently in LOS are already destroyed.

1.84 Command Control: During dismounted actions the dismounted units must remain within 4 hexes of their respective AFV. If the AFV of the dismounted unit is destroyed the unit must immediately take a 1TC (after any Collateral attack, but before any (F)Defensive/Prep Fire) and if it fails, the unit is subject to ELR Substitution. After that, the squad must attempt to move with the platoon or attempt to gain non-platoon movement by passing a (^)NTC.

1.85 Infantry Movement: Infantry platoons can either move as combined stacks, or as individual units Adjacent to each other. If a platoon moves as individual units, it must use Impulse Movement (A 25.231). A unit under DS may attempt to gain non-platoon movement at the beginning of its MPh by passing a NTC.

1.86 Infantry Initiative: Units under DS may never Deploy, but **must** Recombine, whenever two HS of the same Quality and Class occupy the same Location during any RPh. Doctrine platoons must, wherever possible, use Fire Groups.

Whenever a member of such a platoon breaks, it must rout normally, but no leader may voluntarily rout with it [**ECX.: A leader may voluntarily break**]. Broken units under DS may never attempt to Self-Rally, regardless of Self-Rally capabilities, and any leader within the same Location is treated as Commisar for Rally purposes.

1.87 Leadership Modifiers: Members of DS restricted platoon **always** use the leadership modifier of a accompanying leader, even if the units are Adjacent (1.85).

Multi-Location Fire Groups of the same platoon must use the leadership modifier of accompanying leader.

Doctrine Status is the ONLY situation in which leadership modifiers can be used this way!

***1.9 Leader Firepower:** All modern leaders (including Commisars and 6+1) have 1 inherrent FP. Depending on nationality, the normal range of this FP is four hexes. A leader may never modify his own FP performance.

Whenever a leader uses his FP this use is his sole action for that fire phase



*2. Theater of Operations -

Vietnam

1965-1975

The rules in this ToO Section supercede (regardless of numerical listing) all other/contrary rules of ASL2000.

Ray: Could you check the above wording?

Vietnam, America's longest war, is still America's most controversial war. Lots of things have been said, but as South-east Asian correspondent Robert Shaplen wrote: „Vietnam, Vietnam...There are no sure answers“¹

Vietnam did cost the US more than 58,000 lives and more than \$150 billion, but because of lacking clearly defined goals and political bragging, the Vietnam war never came to a clear end. Was the US defeated or did it accomplish its goals and was therefore vicious? There are no clear answers.

Lots of people still think Vietnam was a minor war, but for those on either side involved in fighting it, Vietnam was not a minor war. During the Vietnam War the 1st Cavalry Division suffered some 30,253 troopers killed or wounded in action during the Vietnam War - half as many as the combined casualties it suffered during WWII and the Korean War.

Vietnam surely was the dawn of helicopter warfare. In Vietnam the US introduced a whole new concept of warfare - Airmobile operations. Nearly six thousand helicopter pilots and crewmen were killed in aircraft losses over Vietnam.

In Vietnam one of the worlds finest light infantry of the world was pitched against the huge war machinery of the US².

With ASL2000 - Vietnam, we express our respect and tribute to the men who fought and died in Vietnam.

The following special rules are in effect during *all* ASL2000 - Vietnam Scenarios.

2.1 Terrain and EC: During all ToO Vietnam operations PTO terrain is in effect.

South Vietnams outer coasts are washed by the Pacific Ocean, and its interior mosaic of mountains, jungles, plains, and swamps are hedged in by the Chaine Annamitique, a western mountain range, which fades south into a vast alluvial plain created by the delta of the Mekong River.

Tropical monsoons allowed only two seasons; hot and dry and hot and rainy, and the alternation of the

monsoons and dry seasons determined the pattern of life - and war. During the monsoons in the high mountains, ground mist can be encountered quite frequently.



2.11 Tropical Climate: Tropical Climate (G16) is in effect in all ToO Vietnam scenarios.

The following chart is used in lieu of the E3 Temperate Weather Chart to determine the weather of a Tropical DYO scenario.

Tropical Weather Chart

Final DR	Weather	DR M	Cause
≤ 2	Heavy Rain & Mud	-2	Sept - October
3	Heavy Rain	-1	Nov - December ^a
4	Mud & Overcast	+3	April - June ^b
5	Mud	+1	July - August ^a
6	Overcast		
7	Overcast		
8	Clear & Gusty		
≥ 9	Clear		

^a: Only in Northern Provinces (2.12)

^b: NA in Northern Provinces (2.12)

The following chart is used in lieu of the B25.5 EC Chart to determine the EC of a Tropical DYO scenario

Tropical EC Chart

Final dr	EC	EC DRM/ dr	drm	Cause
≤ 1	Mud	-3	-2	Sept - October
2	Wet	-2	-1	Nov - December ^a
3	Wet & Fog	-2	+3	April - June ^b

¹ Robert Shaplen, *The Road from War: Vietnam, 1965-1970* (New York, 1970), p.283

² Shelby L. Stanton, *Rise & Fall of an American Army* (Presidio Press, 1985), p.178



4	Moist	-1	+1	July - August ^a
5	Moist & Mist	-1		
6-7	Moderate	0		
≥ 8	Dry	+1		

^a: Only in Northern Provinces (2.12)

^b: NA in Northern Provinces (2.12)

The following table is used in lieu of the B25.63 Wind Force Table to determine the initial Wind Force of a Tropical DYO scenario.

Tropical Wind Force Table

Final dr	Wind Force	Result
≤ 3	Mild Breeze	Wind Direction DRM and Dispersed SMOKE
4	Heavy Wind	Automatic Spread Downwind
≥ 5	No Wind	No Wind Direction DRM

The following table is used in lieu of the E3.31/3.311 Fog Level/Density Charts to determine the Fog level and density in a Tropical DYO scenario

Tropical Fog Level/Density Chart

dr	Level affected
1	Level -1 and lower
2	Level 0 and lower
3	Level 1 and lower
4	Level 2 and lower
5	Level 3 and lower
6	Level 4 and lower

Fog Density dr		drm
≤1	+1 per hex	+1 Early Morning
2-3	+2 per hex	-1 PM scenario
≥4	+3 per hex	-2 EC Dry

2.12 Northern Provinces: The five northern provinces called I Corps Tactical Zone, are directly beneath the DMZ and separated from the rest of South Vietnam by a series of ridges extending from the western border mountain ranges to the sea. This natural barrier reversed the monsoon seasons from what the rest of Vietnam experienced. Summers were mainly hot and dry, but the winters were warm and rainy (hence the drm). These provinces are Quang Tri, Quang Ngai, Quang Tin, Thua Thien, and Quang Nam.

2.2 Nationality Distinctions :

2.21 The US : The United States rushed its units into a war, that most politicians considered a minor war against guerrillas. Despite escalating casualties and enormous unit build up, the Reserves were never activated and most units suffered from various shortness, which included a lack of able leaders and units operating at 2/3 of their manpower. The one universal troop factor throughout the Vietnam War was the fixed „hostile fire area“ tour, the combat zone service requirement for one year. Many argued that just as a soldier was becoming a skilled tropical warrior he was yanked out, to be replaced by a green soldier who had to learn it all from the beginning. A popular military adage summed it up: the United States never fought in Vietnam ten years, it fought in Vietnam one year ten times over.³

For the individual soldier this meant, that barring death or serious injury he knew his exact departure date as soon as he stepped on Vietnamese soil. His primary purpose became simply to reach his personal DEROS (date expected to return from overseas) intact. The fixed length of the hostile fire tour, for all its drawbacks, had undeniably overwhelming morale value.

2.21.1 US Marines: The US Marines were, besides the Special Forces advisors, the first combat troops to be stationed in Vietnam. Most Marine units were stationed in the Northern Provinces around Da Nang.

The US Marine Corps suffered less than the US Army from leader shortness and war weariness in the later years of the war, but the one year battle tour system was applied too. So it is rather common to find a USMC Order of Battle containing 8-5-8 and 5-4-6 MMC.

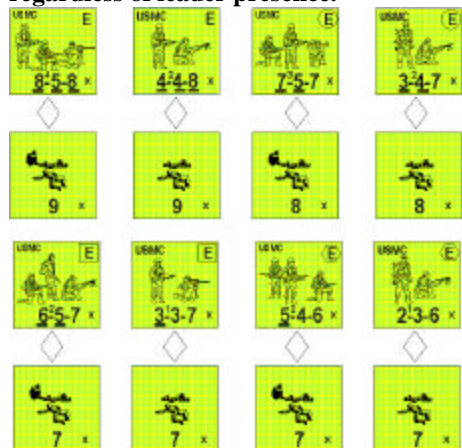
2.21.10 All US Marine MMC are Elite and do not Disrupt. Neither HoB nor ELR replacement can transform a USMC MMC into a US Army MMC or vice versa.

2.21.11 All USMC MMC may freely Deploy during setup (i.e. the normal 10% limit does not apply). During play all USMC MMC may freely Deploy/Recombine by passing a NTC. USMC whose ELR is ≤2 may only Deploy if they pass a 1TC in the presence of a leader and may not Recombine,

³ Shelby L. Stanton, *Rise & Fall of an American Army*, (Presidio Press, 1985), p.27



regardless of leader presence.



Contrary to A25.3 the broken-side Morale Level of some USMC squads is not one > than that on their Good Order side. Contrary to G17.1 the Vietnam era USMC MMC do not have an ELR of 5 [Exc: 8-5-8 and 4-4-8].

2.21.12 All USMC may place WP or conventional Smoke as per A24.3.

2.21.13 During the 1965-1971 period all USMC MMC are Stealthy and the 8-5-8 and 4-4-8 are not subject to Covering.

2.21.14 All USMC MMC have a Inherent Grenade Launcher (1.51) and the 8-5-8, 4-4-8, 7-5-7, and 4-3-7 have a Inherent LATW (1.52), with the following exceptions to the basic rules:

During 1965-1968 the GL is a M79 40mm Grenade Launcher which has a maximum range of 4 hexes.

After 1968 the GL is the M203. All other rules, TH, TK Tables remain unchanged.

The USMC Inherent LATW is the M72 LAW.

2.21.15 All scenarios in which USMC squads defend, should allow Claymore Mines (5.3). The usual ratio should be one Claymore per squad equivalent.

2.21.16 The 2-2-8 is the USMC infantry-crew, while the USMC vehicle-crews are represented by 1-2-8 crews. SMC are represented by the pertinent ASL2000 US SMC counters, to which they are equivalent in all respects.

2.21.17 Regardless of its former state, any Unarmed USMC squad/ HS that becomes re-armed (A20.551-552) is exchanged for a USMC 5-4-6 squad or 2-3-6 HS respectively.

2.21.18 During the course of the war the ELR of the USMC should be set as follows

Year	65-66	67-69	70-71	72-73
ELR	5	4	3	3
Ldr Creation drm	-1	0	+1	+2

During the entire course of the war, USMC personnel are entited to the -1 HoB DRM for being Elite.

2.21.19 USMC Assault Engineers should be represented by 8-5-8 and 4-4-8 which possess Inherent DC instead of the LATW.

2.21.20 Barring contrary SSR all USMC OBA is assumed to have Plentiful Ammunition.

2.21.2 US Army: The first US Army division to enter the Vietnam War was the 1st Cavalry Division (Airmobile) stationed in Pleiku.

2.21.21 US Army MMC may freely deploy during setup. During play all Elite and 1st Line MMC may freely Deploy by passing a NTC. US Army MMC whose ELR is ≤ 2 may only Deploy by passing a 1TC in the presence of a leader, and may not Recombine regardless of leader presence.

2.21.22 All US Army MMC may place WP or conventional Smoke as per A24.3.

2.21.23 All US Army MMC have a Inherent Grenade Launcher (1.51) and the Elite MMC have a Inherent LATW (1.52), with the following exceptions to the basic rules:

During 1965-1969 the GL is a M79 40mm

Grenade Launcher, which has a maximum range of 4 hexes. After 1969 the GL is the M203. All other rules, TH, TK tables remain unchanged.

The US Army Inherent LATW is the M72 LAW.

2.21.24 All scenarios in which US Army MMC defend, should allow Claymore Mines (5.3). The US Army ratio should be one Claymore per every 1.5 squad equivalents.

2.21.25 US Army infantry-crews are represented by 2-2-8, while vehicle crews are represented by 1-2-7. SMC are represented by the pertinent ASL2000 US SMC counters to which they are equivalent in all respects.

Regardless of their former state, any Unarmed US Army squad/HS that becomes re-armed (A20.551-.552) is exchanged for a US Army 5-4-6 squad or 2-3-6 HS respectively.

2.21.26 During the course of the war the ELR of the US Army should be set as follows:

Year	65-66	67-69	70-71	72-73
ELR	4	3	2 ^a	1 ^a
Ldr Creation drm	-1	+1	+2	+3 ^a
HoB DRM	-1	0	0	+1

^a: Barring contrary SSR

In the last two years of the war (1972-73) many US Army units experienced lowered troop morale and discipline which manifested in increased crime, racial clashes, mutinous disregard of orders, war protests, and drug use. Thus, barring contrary SSR, any US Army unit that conducts any other action than



Assault Move or Defensive (First) Fire must pass a NTC. Failure of the NTC results in a Pin.

US Army leader that suffer a CR, must add a +1 in '72 and a +2 in '73 to their wound severity dr⁴.

2.21.26 US Army Assault Engineers should be represented by 7-5-7 and 3-4-7 which possess Inherent DC instead of the LATW and have a ELR of 5, regardless of timeframe.

2.21.27 Barring contrary SSR all US Army OBA is assumed to have Plentiful Ammunition.

2.21.3 US LRRPs/Rangers: Despite of the glorious past of US Ranger units, none of the fifteen US Army divisions and separate brigades that saw action in Vietnam, arrived in-country with any Ranger/LRRP (Long Range Reconnaissance Patrol) units attached. The reasons for this were multifold. The primary reason was the deactivation of all Ranger units in July 1951, due to the static kind of battle encountered in the final stages of the Korean War, which prevented successful behind-the-lines operations. Another reason was the October 1951 established „Ranger Training“ directive. This direction by army chief of staff General Collins authorized the Infantry School to establish a Ranger Department capable of training and maintaining one Ranger-qualified officer per infantry company and one Ranger-qualified NCO per platoon.

Another reason may be the Army's reluctance to establish elite units, which drained desperately needed elite soldiers from other units, as well as they tend to be too independent, preferring to do things their way rather than following the orders of higher commands.

However, when General William C. Westmoreland assumed command of MACV (Military Assistance Command-Vietnam) in June 1964 he became aware of the need for LRRPs „shortly after (he) arrived in Vietnam“. At the same time the TO&E 7-157 called for an organization of two hundred enlisted men and nine officers organized into a company headquarters and three patrol platoons capable of fielding a total of twenty-four teams of five men each.

But in every case, units arrived in-country, recognized the need for reconnaissance groups, and formed them to meet the need the ground commanders observed. All of this occurred with a

complete lack of guidance from the Department of the Army, MACV, or from the headquarters of the US Army, Vietnam (USARV) beyond that found in FM 31-18⁵. Which resulted in units experimenting with recon teams attached at various levels as far down as battalion and brigade with few consolidating LRRPs at the division. Size ranged from small detachments to large companies. Since no formal unit designations had been allocated for the LRRPs, they were attached as provisional units at various headquarters. A few units placed their LRRPs with the Cavalry troop or squadron that had the traditional responsibility for reconnaissance. As much as the size and make-up of the LRRPs varied, so did their missions.

For example, the 4th Division's LRRP mission, was to observe and/or conduct harassing activities. This included observing and reporting enemy activities, analyzing terrain for future operations, checking enemy activity around potential LZs, serving as stay-behinds near abandoned forward bases, conducting hit and run ambushes of small enemy bases, directing artillery and/or air strikes on enemy locations, serving as surveillance force to screen front or flanks of an Area of Operations (AO) and causing the enemy to disclose himself or draw him to a given area.



2.21.31 LRRP teams are represented by 4-3-8 HS, with an ELR of 5. LRRPs are Elite and do neither Disrupt nor does their fire cover. The 4-3-8 are always stealthy and receive a -1 drm to their concealment dr.

2.21.32 Whenever LRRPs setup on board, they are HIP. Instead of the normal -1 HoB DRM for Elite status, all LRRP units are eligible for a -2 HoB DRM. LRRPs may place WP or conventional Smoke as per A24.3.

2.21.33 LRRPs have a Inherent Grenade Launcher, which is the M203⁶, without the +1 usage drm for HS. LRRPs do not possess any Inherent LATW.

2.21.34 LRRPs may always declare HtH CC as well as they may conduct massacres⁷.

⁴ After the Battle of Ap Bia Mountain (commonly known as „Hamburger Hill“), disgruntled soldiers placed a \$10,000 reward offer in an underground division newspaper for the assassination (fragging) of officers giving [unnecessarily dangerous] orders. Shelby L. Stanton, *Rise & Fall of an American Army*, (Presidio Press, 1985), p.301

⁵ Michael Lee Lanning, „*Inside the LRRPs - Rangers in Vietnam*“, Ivy Books 1988, p.55

⁶ In 1965 the M203 was still experimental and type classified as XM-148, but widely used by all Ranger formations.

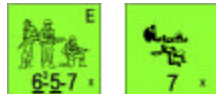
⁷ In December 1965 near Ben Cat one LRRP team used their totem (hatchet) to „whack off a few heads“



2.21.35 Scenarios in which LRRPs are in a Defender/ambush role, should allow Claymore Mines (5.3) with a ratio of one Claymore per LRRP Team.

2.21.36 When LRRPs are used as Forward Artillery/ Air Observers they receive a -1 Radio Contact/ Maintenance DRM.

2.22 The South Vietnamese:



Ray: I will fill the historical stuff as soon as they are available to me. So here are just the rules.

2.22.10 The ARVN units are divided into two categories, pre 1969 and post 1968. Barring contrary SSR all ARVN units must use the Red TH#.

2.22.11 All ARVN MMC may place WP or conventional Smoke as per A24.3.

2.22.12 2nd Line ARVN MMC may not Deploy, all other ARVN MMC may deploy in presence of a leader by passing a NTC. During play all post 1968 ARVN MMC may freely recombine by passing a NTC. Pre 1969 ARVN MMC must pass a TC equal to their class, i.e. a 1st Line MMC must pass a 1TC, a Elite MMC must pass a NTC and a 2nd Line MMC a 2TC, in order to recombine.

2.22.13 ARVN units may not attempt escape and Surrender on a HoB DR ≥ 10 . ARVN units attacking a AFV must pass a 1PAATC.

2.22.14 All ARVN 0 and +1 leader have their broken morale one lower than their GO morale.

2.22.15 Pre 1969 ARVN units suffer a +2 Leader Creation drm and HoB DRM. Post 1968 ARVN units suffer a +1 LC drm and HoB DRM⁸.

2.22.16 Pre 1969 ARVN Elite MMC posses a Inherent Grenade Launcher (1.51), with the following exceptions to the basic rules:

The GL is a M79 40mm Grenade Launcher, which has a maximum range of 4 hexes. All other rules of 1.51, TH, TK tables remain unchanged.

All post 1968 ARVN Elite and 1st Line MMC also possess the above M79 Grenade Launcher. Post 1968 Elite MMC also posses the M72 LAW (see 2.21.23).

2.22.17 ARVN Infantry crews are represented by 2-2-7, while vehicle crews are represented by 1-2-6 crews.

Michael Lee Lanning, „Inside the LRRPS - Rangers in Vietnam“, Ivy Books, 1988, p.54

⁸ The South Vietnamese Army was plagued with grave desertion and leadership problems. Shelby L. Stanton, *Rise & Fall of an American Army*, (Presidio Press, 1985), p.139

2.22.18 Regardless of their former state, any unarmed ARVN squad/HS is exchanged for a ARVN 3-3-6 squad or 1-2-6 HS respectively.

2.22.19 ARVN Assault Engineers should be represented by 5-4-7 and 2-3-7 which posses a Inherent DC instead of their GL and have their Smoke Exponent raised by 1.

2.22.20 Barring Contrary SSR ARVN OBA is assumed to have normal Ammunition. If supported by US OBA (by SSR, instead of ARVN OBA) the ARVN player may exchange one Red Chit for a Black Chit of his OBA pile.

2.23 CIDG and Montagnard Forces



Ray: s.a.

2.23.10 CIDG/Montagnard (hereafter CIDG) MMC are represented by 5-3-7 and 2-2-7 counters. CIDG have no own Leaders and are accompanied by US leaders. US leaders/heroes accompanying CIDG MMC modify those MMC capabilities just as if it were a CIDG leader and benefit from the CIDG benefits⁹.

2.23.11 CIDG units are always Stealthy and receive a -2 drm to their Concealment dr. CIDG may declare HtH CC and may conduct massacres. CIDG units are always (even in Melee) entitled to a -1 CC DRM vs. Infantry/Cavalry.

2.23.12 CIDG units moving through Woods/Jungle receive one extra MF to their basic MF allowance. **2.23.13** CIDG may assist regular units in establishing an Ambush in which they take part, and if moving together as a combined stack may endow regular US units (**not ARVN units**¹⁰) with their movement and concealment advantages they have.

2.23.14 CIDG suffer a +2 HoB DRM. Any Leader Creation results in Battle Hardening instead. CIDG MMC do not surrender and become Berserk instead.

⁹ Shelby L. Stanton, *Rise & Fall of an American Army*, (Presidio Press, 1985), p.11

¹⁰ The Americans experienced the ARVN's unwillingness to lead CIDG soldiers in battle, and the racial animosity and distrust the Vietnamese expressed towards the Montagnards and other tribal minorities. Shelby L. Stanton, *Rise & Fall of an American Army*, (Presidio Press, 1985), p.11



2.23.15 Ordonance used by CIDG always uses the red TH Numbers (EXC: non-captured ATR and MG counters).

2.24 The North Vietnamese Army (NVA)



Ray: s.a.

These are actually just the reworded AH Jap Rules - will we run into Copyright problems?

2.24.10 A NVA squad has no broken side. Instead it has a Full Strength side and a Reduced Strength side, both of which are normally in Good Order. The Reduced Strength side is distinguished by a horizontal red stripe.

2.24.11 Whenever a armed, non-berserk NVA squad fails an IFT/Collateral-Attack/Bombardment/FPF MC or suffers a "1" Sniper attack, it undergoes Step Reduction (EXC: If Conscript and it exceeds ELR, it suffers Casualty Reduction). Unless it becomes broken, a unit that undergoes Step Reduction retains any pinned/TI/CX status it has, and also maintains any Fire-Lane/Target-Acquisition it can currently claim. Only NVA squads and Infantry crews can suffer Step Reduction.

2.24.12 An armed, non-berserk NVA squad that fails an IFT/Collateral-Attack/Bombardment/FPF MC (but does not suffer Casualty Reduction) or suffers a "1" Sniper attack is always affected in one of the following ways:

If Full Strength it is Step Reduced - it's flipped over to its Reduced Strength side, which is still considered an unbroken squad.

If Reduced Strength it is Step-Reduced - it's exchanged for one of its unbroken HS.

If non-Conscript, Full Strength and exceeds its ELR it is replaced (due to ELR failure) by a Full Strength squad of the next lower Class which is then Step Reduced (due to MC failure).

If Conscript (regardless if Full Strength or Reduced Strength) and it exceeds its ELR, it is replaced by one of its broken HS.

2.24.13 An armed, non-berserk NVA squad that suffers a break result directly due to a cause other than those listed in 2.24.11 (i.e. due to Bailing Out, voluntarily breaking, Wreck Check, para landing, OVR Prevention MC, or Panji MC) is always affected in \geq one of the following ways (unless it suffers Casualty Reduction):

If Full Strength it is exchanged for its two broken HS.

If Reduced Strength it is exchanged for one of its broken HS.

In addition, if it breaks by an amount $>$ its ELR (but does not roll an Original 12), the one or two broken HS for which it is exchanged will be the next-lower Class unless the squad is a Conscript.

2.24.14 All Casualty Reduction results, regardless of how they were caused, apply in the normal manner to all types of NVA Personnel. A berserk or Unarmed NVA squad that suffers any type of break result suffers Casualty Reduction instead of Step Reduction.

2.24.15 A Full- or Reduced Strength NVA squad that becomes Unarmed is exchanged for a normal Unarmed squad. An Unarmed NVA squad that becomes re-armed is exchanged for a Full Strength Conscript squad. An unarmed, non-prisoner NVA unit may enter a Location that contains \geq one Known enemy unit, and can engage in CC vs. Personnel using its "(1)" FP factor, just as if it were armed. An Unarmed, non-prisoner NVA is an obstacle to enemy movement. All other rules for Unarmed units apply unchanged.

2.24.16 A NVA squad Deploys in the normal manner (EXC: if Reduced Strength, it would be exchanged for just one of its HS).

2.24.17 NVA Elite, 1st and 2nd Line squads may attempt to place Smoke as per A24.1.

2.24.18 All armed NVA HS break and rally in the normal manner, but do not Disrupt. Two Good Order, same-class NVA HS Recombine into a Full Strength squad of its class.

2.24.19 NVA infantry-crew counters have Full- and Reduced Strength sides like NVA squad counters. A Full Strength NVA infantry-crew that fails an IFT/ Collateral Attack/Bombardment/FPF MC or suffers a "1" Sniper attack is Step reduced in the same manner as a Full Strength NVA squad. A Reduced Strength infantry-crew that suffers such a result is likewise Step Reduced - but to a broken vehicle-crew. A Full- or Reduced Strength infantry-crew that suffers a break result as per 2.24.13 is exchanged for a broken vehicle-crew. No crew may Deploy or Recombine.

A NVA vehicle-crew breaks and rallies in the normal manner. A NVA vehicle-crew counter that did not setup/enter as Inherent crew is considered a (low Class) infantry-crew for purposes of A21.22; therefore an Inherent NVA vehicle-crew that becomes an onboard personnel unit should have its ID recorded on paper if A21.22 could come into effect during the scenario. NVA Inherent crews function in the standard manner.

2.24.20 NVA SMC have no broken side, and cannot break voluntarily. A NVA SMC (including a wounded



leader) who suffers a break result due to any cause is instead wounded (EXC: an already wounded heroic SMC is eliminated, as is a leader who suffers a Casualty MC). If he passes his Wound Severity dr he is flipped over to his Wounded side (unless he was already wounded) to indicate the effects on his morale, movement and leadership. NVA SMC do not take PTC (incl. LLTC) and do not Pin (EXC: Collapsed Hut PTC/Pin), however any PTC/Pin result vs. a concealed NVA SMC can cause the loss of his concealment. Even a lone NVA SMC may conduct an Infantry OVR.

2.24.21 The rank structure of unwounded NVA leaders is as follows:

10-2, 10-1, 10-0, 9-2, 9-1, 9-0, 8-1, 8-0, 8+1. A NVA leader who fails a MC by an amount > his ELR is not subject to Replacement. A NVA leader who suffers Casualty Reduction is eliminated. A NVA Infantry leader increases the morale of all other non-berserk, non-leader Infantry units in his Location by one. A NVA leader is equivalent to a Commisar for all rally and berserk purposes.

2.24.22

Ray: What do think of Heroes? Should the NVA have "normal" heroes or "Jap style" heroes? I didn't find any evidence for Jap style NVA heroes.

2.24.23 A Banzai Charge is the NVA version of a Human Wave (A25.23), and uses all applicable Human Wave rules, except as stated otherwise. Any Good Order NVA Infantry unit (even one SMC) may declare a Banzai Charge, even if ADJACENT to an enemy unit. Hence a Banzai Charge does not require multiple MMC in \geq three ADJACENT hexes. However, units in different hexes wishing to participate in the same Banzai Charge must still be ADJACENT to \geq one other such unit in order to be part of that chain. A leader must participate in each Banzai Charge that includes \geq one MMC. Each unit/stack that performs a Banzai Charge should be marked as Lax at the end of its MPh if its in (or able to advance into) an enemy occupied Location.

2.24.24 Good Order Elite and 1st Line NVA Infantry (incl. crews) are Stealthy.

2.24.25 Any NVA MMC that declared to be a Sapper unit and in possession of a DC, may exchange the DC against a Bangalore Torpedo (B26.51).

2.24.26 Prior to his setup, the NVA player may always (barring contrary SSR) convert any/all available A-T mine factors to Daisy Chains (B28.531). In addition all scenarios in which the NVA defends, it receives Booby Trap Level B.

2.24.27 NVA are exempt from taking PAATC and the NTC for an Infantry OVR. If Encircled, NVA units do not have their Morale level lowered by one. In addition any broken NVA unit that is confronted with

only ARVN units has its broken Morale raised by one.

2.24.28 Step Reduction from Full Strength to Reduced Strength never affects the current NVA Casualty Tally. A Full- or Reduced Strength infantry-crew that is for any reason exchanged for a vehicle-crew is treated for Casualty Tally purposes like a squad being reduced to a HS. The NVA side may always add a -2 DRM to its Integrity Check DR. Otherwise, Battlefield Integrity applies unchanged when in effect.

2.24.29 NVA Infantry receive a -2 drm to their Concealment dr. A Search dr made by the opponent of the NVA receives a +2 drm unless the only Concealment Terrain he is attempting to Search is building/rubble terrain or if assisted by a War Dog (2.3).

2.24.30 The NVA player in a daytime scenario may always use HIP for \leq 5% (FRU) of the MMC squad equivalents in his onboard-setup OB and any SMC/SW that set(s) up stacked with them. In a night scenario the NVA player may always use HIP for \leq 15% of his onboard setup MMC squad equivalents, even if he's not the Scenario Defender. Otherwise E1.2 applies unchanged. These HIP capabilities are in addition to HIP granted for any other reasons (EXC:E1.2).

2.24.31 Any Fortification set up in concealment terrain by the NVA player may always use HIP, and is revealed as if it were set up in jungle. The use of HIP includes the Fortification occupants, and is in addition to the percentage of units otherwise allowed to use HIP.

In addition NVA units are entitled to a -1 DRM when entrenching. This DRM does not apply to prisoners of any nationality.

2.24.32 Whenever \geq one unbroken NVA Infantry unit is the ATTACKER in CC/Melee or ambushes the enemy in CC, that CC/Melee automatically becomes HtH, unless every such NVA unit participating in it was Ambushed in that phase and/or is Withdrawing/pinned. However HtH CC can never be used by/vs any vehicle/PRC/Pillbox-occupants. Each NVA HtH CC attack receives an extra -1 DRM unless every NVA Infantry unit participating in that attack is pinned/unarmed. A Reduced Strength NVA squad retains its Full Strength CCV.

2.25 Vietnamese Irregulars (VietCong)



Ray: s.a.



2.25.10 Viet Cong units are considered Partisans (A25.24) for all purposes. VC are always stealthy.

2.25.11 During a daytime scenario the VC units may use HIP for $\leq 10\%$ (FRU) of the MMC squad equivalents allocated for its onboard-setup OB and any SMC/SW stacked with them. In a Night scenario this allocation is increased to $\leq 25\%$ (FRD), even if he's not the scenario defender. These HIP capabilities are in addition to HIP granted for any other reasons.

2.25.12 During his pregame setup the VC player may designate $\leq 10\%$ (FRU) of the *squads* (only) in his scenario OB as Dare Death Squads (G18.6) by secretly recording their IDs on paper.

2.25.13 VC Infantry receive a -2 drm to their concealment dr. A Search dr made by the opponent receives a +2 drm unless the only concealment terrain he is attempting to Search is building/rubble terrain or if assisted by a War Dog (2.3).

2.25.14 Any Fortification set up in concealment terrain by the VC player may always use HIP, and is revealed as if it were setup in jungle. The use of HIP includes the fortification occupants, and is in addition to the percentage of units otherwise allowed to use HIP.

In addition VC units are entitled to a -2 DRM when entrenching. This DRM does not apply to prisoners of any nationality.

2.25.15 VC Sniper attack in a slightly different manner as other nationalities Snipers. A VC Sniper attack is resolved on a "1", "2" and a "3" dr¹¹. VC Sniper attacks are resolved as follows:

dr 1: Eliminates SMC, Dummy Stack, or (as per 14.4) Sniper; Stuns and Recalls CE crews; breaks MMC (or Reduces MMC that does not break); breaks Inherent crew of unarmored-vehicle/Partially-Armored-AFV; immobilizes unarmored vehicle.

dr 2: Eliminated Dummy stack; Wounds SMC; lowers Opponents SAN (Sniper Check), Stuns CE crew; TI MMC, Inherent crew of unarmored-vehicle/Partially-Armored-AFV.

dr 3: Eliminates Dummy stack; breaks SMC; forces BU on CE AFV; Pins MMC not immune to Pin results, Inherent crews of unarmored-vehicle/Partially-Armored AFV, or Sniper

¹¹ Viet Cong Snipers capitalized on the American habit of immediately goin to the aid of injured comrades by deliberately wounding a soldier and then killing several would-be rescuers. Shelby L. Stanton, *Rise & Fall of an American Army*, (Presidio Press, 1985), p.87

All other Sniper rules (i.e.: Sniper Check, vs CC etc.) apply unchanged.

2.25.16 VC units may always declare Banzai Charges (2.24.23).

2.25.17 VC units moving through woods/jungle receive one extra MF to their basic MF allowance.

2.25.18 VC units suffer a +2 Leader Creation drm and a +1 HoB drm. However, if accompanied by a NVA leader, the NVA leader modifies those MMC just as if it were a VC leader, but NVA HoB/LC drm/DRM apply.

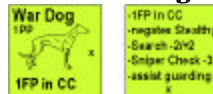
2.25.19 VC units may assist NVA units in establishing an Ambush in which they take part, and if moving together as a combined stack may endow NVA units with their movement and concealment advantages they have.

2.25.20 During play all VC MMC may deploy in the presence of a leader by passing a NTC. VC MMC may freely recombine by passing a NTC regardless of leader presence.

2.25.21 Whenever \geq one unbroken VC Infantry unit is the ATTACKER in CC/Melee or ambushes the enemy in CC, that CC/Melee automatically becomes HtH, unless every such VC unit participating in it was ambushed in that phase and/or is Withdrawing/pinned. However HtH CC can never be used by/vs any Vehicle/PRC/Pillbox-occupants.

VC units may always conduct massacres.

2.3 War Dogs: Historical Notes



2.3.1 War Dogs are a SW only available to US Army and USMC units in Vietnam. War Dogs (hereafter WD) were introduced to counter the effective NVA/ VC concealment techniques. Except as amended below, the WD is considered a SW for all purposes and may not be deliberately malfunctioned.

2.3.2 Starting April 1966 the WD may be used, by SSR, in any Vietnam Scenario. Only one WD counter may be added to the US force for every six squad equivalents.

2.3.3 Any US MMC/SMC can portage a WD at 1PP. NVA/VC use and/or recovery of a WD is NA.

Recovery of a WD does not suffer the penalties of G.5.

2.3.4 Since the WD is a SW, it doesn't have any MF of itself and Movement of a WD is that of a portaged SW if possessed by a US MMC/SMC. If unportaged/unpossessed, a WD will move one hex in the APH in direction of the closest friendly GO unit in its LOS. If no friendly GO unit is in ist LOS the WD will move one hex in random direction. A WD is unaffected by the CX status of ist possessing unit. A WD may not climb.



2.3.5 A WD does not count against the PP total of a unit conducting Advance vs. Difficult Terrain.

2.3.6 WD have no FP (Exc: CC) and are unaffected by all fire attacks against them, except KIA, K, Sniper Attacks, SW Destruction, and Random Selection. A WD is a eligible Sniper Target. A WD affected by any of above attacks is removed from play. A WD has no VP value.

2.3.7 WD suffer no effects from MC against their possessing unit. If a unit possessing a WD breaks, they must pass a NTC to maintain possession of a WD. If the NTC is failed, the WD remains in the present hex, becomes unpossessed and can advance (3.3.4) if it is the US player turn. If a WD is selected as a "2" Sniper Attack target, the WD becomes automatically unpossessed and must, regardless of Phase, move one hex in random direction (Opponents choice).

2.3.8 WD are treated as SMC in CC. A NVA/VC unit advancing into CC vs. a unpossessed WD has its Stealthy drm negated, but attacks at its doubled FP. A possessed WD may add 1FP to it's owners CC value and negates the Opponents Stealthy drm.

2.3.9 WD cannot aid in infiltration, or CC vs. an AFV. The WD may not withdraw, attempt Capture, or conduct attacks vs. PRC if unpossessed. Unpossessed WD may attack any NVA/VC unit in its hex in CC. Unpossessed WD have a -2 drm to their ambush dr and negate the Opponents Stealthy drm. A unpossessed WD must attack HtH.

2.3.10 WD share the Concealment status of their possessing unit. Unpossessed WD may not gain Concealment. Use of a WD, even to drop possession, is a concealment loss activity.

2.3.11 WD modify a Search dr by -2. Both the possessor and the WD become TI. A WD modifies the Casualty dr by +2.

2.3.12 WD share the status of their possessing unit. If a HIP WD has a NVA/VC unit, unconcealed, in its LOS, the possessing unit must make a secret NTC. If the NTC is failed, all units in that hex loose HIP status and are placed on the board concealed.

2.3.13 WD negate G.4 in their hex during any phase.

2.3.14 WD modify Sniper Checks by -3 and become TI with their possessing unit. If a unit possessing a WD suffers any kind of Sniper attack (even Pin), the WD becomes unpossessed.

2.3.15 A WD assisting in Prisoner Guarding raises the US# the guard can handle by 2. Any Prisoner unit guarded by a unit assisted by a WD must pass a 2TC before it can attack its Guard.

Ray: Most of these rules are from Jeff Harris and were printed in VFTT. Jeff gave his permission to use.

2.4 Riverine Warfare

Ray: Didn't you say you allready had some rules on this?

2.5 Helicopter Capabilities in Vietnam

Ray: Could you please check on the red, underlined stuff? I'm not sure about these.

2.5.1 UH-1A "Huey": The first version of the airborne workhorse. Available from 1965 through 1969.

Due to its limited lift- and portage capacity the UH-1A was soon replaced by the UH-1C. Armament consisted of two pintle mounted M60 MGs mounted in the side doors. UH-1A's can be used in Light Mist through Fog Level 1(?), and during Night.

2.5.2 UH-1B Gunship: Before the introduction of the "Cobra" the UH-1B was the primary gunship of the Vietnam War. Available from 1965 through 1972.

The UH-1B has no IPC. Normal Armament consisted of a 7.62 Minigun nose-mounted (BMG - 3 TK DR), two door-mounted M60 MGs (2FP ea), one nose-mounted 40mm Grenade Launcher (ROF 3, B 10), plus two wing-mounted 2.75" Rocket Pods.

The UH-1B can be used in Light Mist through Fog Level 1(?), and during Night.

2.5.3 UH-1C "Huey": THE workhorse of the Vietnam War. The Huey was used by all Allied Forces from 1967(?) through 1972 in all combat zones.

The UH-1C has a IPC of 13PP and may transport the M102 ART Gun as external load (8.14.3). Armament consisted of two pintle mounted M60 MGs mounted in the side doors (2FP ea). The UH-1C can be used in Light Mist through Fog Level 1(?), and during Night.

2.5.4 OH-13S "Sioux": The light Observation Helicopter OH-13S was of Korean vintage and actually obsolete when it entered the Vietnam theater. Nevertheless it was used from 1965 through 1969.

The Sioux has no IPC, and is mostly used for Aerial Observation.

The OH-13S may only be used in Clear through Light Mist weather during Day sceannrios.

By SSR the Sioux may be equipped with one 2FP M60 MG mounted in the right (VCA) door.

2.5.5 OH-6A "Cayuse": This second generation Observation Helicopter entered the Vietnam theater in early 1966(?) and was used throughout the war. The OH-6A has no IPC and is mostly used for Aerial Observation. The Cayuse is armed with a 7.62 Minigun (3 TK DR) mounted on the left side (BMG: Left VCA only).



The OH-6A can be used in any Daytime scenario with LV Hindrances up to **Fog Level 1**(?).

2.5.6 OH-58 "Kiowa": The third Observation Helicopter of the Vietnam War entered the Theater in late **1969(?)** and remained in Service ever since. The basic OH-58 is armed with a 7.62 Minigun (3 TK DR) mounted on the left side (BMG: Left VCA only). Variations of the OH-58 included 2.75" Rocket Pods, and 40mm Grenade Launchers - these should only be available by SSR.

The OH-58 can be used during Day and Night scenarios with LV Hindrance up to **Fog Level 1**(?).

2.5.7 AH-1G "Cobra": The Cobra is the first purpose-built attack helicopter of the world. This sharklike helicopter was first employed in Vietnam during July 1969, and remained (with various modifications) ever since. Even the early AH-1G was capable of 140 Knots (**xxx km/h**) which makes it still one of the fastest helicopters of the world.

The AH-1Gs armament consists of a nose-mounted 7.62 Minigun (4 TK DR), a nose-mounted 40mm Grenade Launcher (ROF 3, B 10), and four hardpoints on the stubby wings, which could carry 2.75" Rocket Pods, M39 20mm Cannons, or additional 7.62 Miniguns. The usual configuration would be:

1 x 7.62 BMG
1 x 40mm
4 x 2.75" RP

The AH-1G can be used during Day and Night scenarios with LV Hindrance up to **Fog Level 1**(?).

2.5.7 AH-1G-20: When mounting the XM-35 20mm Cannon, pilots experienced various mishaps, such as busted Canopies, material stress of the mountings, and violent flight reactions. This gun was a gaint version of the Minigun mounted in the chin turret, firing a much larger projectile with an explosive warhead. Deliciously accurate, the massive gun was so powerful that the Cobra airframe had to be strengthened to stand the recoil. Long, tapered ammunition canisters were strapped to the skids like saddlebags to feed the monster gun's 3.000 rounds per minute appetite.¹²

Therefore only one Cobra (max) per platoon was a AH-1G-20 to augment the total firepower of the team.

The -20 carried one nose-mounted 7.62 minigun (4 TK DR), one XM-35 20LL Canon (ROF 3, 4 TK DR, APCR 8), plus a maximum of three 2.75" Rocket Pods.

The AH-1G-20 has the same weather limitations as the AH-1G.

2.5.8 CH-47 "Chinook": Probably

2.5.9 CH-46 "Sea-Knight": The smaller Marine version

2.5.10 CH-53 "Sea-Stallion": bla

2.6 Air Support

Capabilities/Configuration in Vietnam

The armament configuration in these pages show the maximum armaments possible for each aircraft type. Usually JAS available in a scenario will have its exact configuration listed in the SSR.

2.6.1 A-1 "Skyraider": (1957-74)

The typical "Spade or Sandy", as the Close Air Support aircraft were called. The A-1 Skyraider was designed as a single-seat aircraft to replace the less attractive BTB, and was much simpler and lighter. It was too late for WWII, but much used in Korea and later in Vietnam. The Skyraider was a very effective attack aircraft, but exhausting for the pilot. Some of the 3180 Skyraiders built were still in combat service 1979.



Armament consisted of

4x 20mm (4 TK DR)
2x Napalm
4x Iron Bomb
2x Smoke Bomb
2x Cluster Bomb

2.6.2 A-6 "Intruder" (1963-):

All-weather attack aircraft, entered service in 1963. The A-6 is an ugly mid-wing aircraft, with side-by-side seating in a blunt nose. The subsonic A-6 is a true all-weather aircraft; it has good range and carries a heavier load than any previous USN attack aircraft.

-A-6A (1963-71)



6x Cluster Bomb
6x Iron Bomb
6x Smoke Bomb
or

¹² Bob Rosenburgh, *Snake Driver! Cobras in Vietnam*, (Ivy Books, 1993), p.116



4x Napalm Bomb

-A-6E (1972-77)



4x Napalm Bomb
6x Cluster Bomb
6x Iron Bomb
6x Smoke Bomb

2.6.3 A-7 „Corsair II“ (1967-98)

The A-7 was a very capable attack aircraft, bought by both USN and USAF. The design used F-8 Crusader experience in a smaller, subsonic airframe.

-A-7A (1967-69)



2x 20LL
4x Iron Bomb
4x Cluster Bomb
4x Smoke Bomb
-A-7E (1970-78)
1x Vulcan
4x Iron Bomb
4x Cluster Bomb
4x Smoke Bomb

2.6.4 F-8 „Crusader“ (1960-66)

It originally was a fast dayfighter, but later models were capable of all-weather operations. The problem of putting a powerful, heavy supersonic fighter on a carrier deck was solved by giving the F-8 a variable incidence wing, and it could operate even from smaller carriers. The F-8 enjoyed a long and distinguished career, and was still very effective in Vietnam.

-F-8E (1960-66)

1x 20mm
8x 5" Rocket Pods (21FP/20TK)

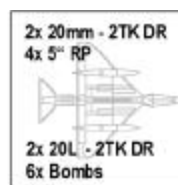
-F-8U (1967-77)

1x 20mm
2x Iron Bomb
2x Cluster Bomb

2.6.5 A-4 „Skyhawk II“ (1959-83)

This small and simple tailed delta jet, originally designed as carrier-based (nuclear) bomber, later enjoyed a long career as an extremely versatile attack aircraft.

-A-4C (1959-68)



2x 20mm
4x 5" Rocket Pods

-A-4CS (1959-68)

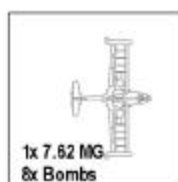
2x 20L
4x Iron Bomb
2x Cluster Bomb

-A-4F (1969-83)



2x 20mm
4x 70mm Rocket Pods

2.6.6 A-37 „Dragonfly“ (1960-69)



The little T-37 jet trainer was developed into the A-37 attack aircraft, with more powerful engines and carrying an impressive weapons load for such a small aircraft.

1x 7.62 MG
6x Iron Bomb
2x Cluster Bomb



2.6.7 F-100 „Super Sabre“ (1963-72)

First operational supersonic fighter. The F-100 had a long and distinguished career, but was not without problems. It was very big for a fighter aircraft when it was first flown. As an interceptor, it was soon



overtaken by newer designs; the F-100 was used mostly as a fighter-bomber.

Armament consisted of

4x 20L

4x 70mm Rocket Pods

2.6.8 F-105 „Thunderchief“ (1959-74)

The F-105 was a large fighter-bomber. Development was slow, with numerous teething problems. Many modifications were needed to make the aircraft combat-ready, but then the F-105 proved a very effective aircraft.

It was used a lot in Vietnam. Intensive use resulted in heavy losses; of the 610 F-105Ds built about half were lost in combat.

1x Vulcan Gun

4x 70mm Rocket Pods

4x Iron Bomb

2x Cluster Bomb

or

1x Vulcan

4x 70mm Rocket Pods

3x Napalm

The swing-wing F-111 was designed as a multi-role aircraft, but ended as an attack/strike aircraft. It was the result of an unwise and unhappy attempt to fulfill different USAF and Navy requirements with a single aircraft. The F-111B shipboard fighter was a complete failure. The F-111 strike fighter itself had a difficult start, but accumulated a good service and combat record in later years.

1x 20L

4x Cluster Bomb

4x Iron Bomb

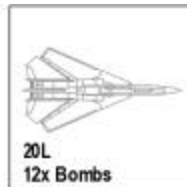
4x Smoke Bomb

2.6.10 F-4 Phantom (1962-)

-F-4B (1962-66)

4x Cluster Bomb

-F-4J (1967-73)



4x Smoke Bomb

4x Iron Bomb

4x Cluster Bomb

or

4x Napalm



ASL2000 ‘Modern Combat - from the ‘50s to the ‘90s’





3. Modern Vehicles

3.1 The system of ASL vehicle rules remained, with minor rule changes and new rules. Most data pertaining to the vehicle is still found on the vehicle counter itself, with additional information being provided on the AFV Data Cards.

[AFV Data Cards will be provided later]

3.2 Movement Points: For movement purposes ASL 2000 has only three types of vehicles: Fully-tracked, Armored-Cars, and Truck-type vehicles.

The MP allotment is printed in the upper right corner of the counter atop a white background. The white background depiction behind the MP identifies the AFV as Armored-Car (D 1.12), Fully-tracked (D 1.13), or as Truck-type (D 1.15).

3.3 Gun Type: Any vehicle with an inherent Gun is readily identified by a number representing the MA Gun Caliber Size (C 2.21) in the lower left corner of the AFV counter. A second name separated only by a dash indicates, that the MA can fire two different weapons (i.e. a T-80 can fire either 125mm Ammo or AT-8 ATGMs with its MA). Another number/name printed above the MA indicates a Secondary Armament (SA). However, the Gun type can be one of 5 sub-types. Turret Traverse types are defined even for vehicles without ORD weapons. A new turret type is the Turret-Ring (3.29), which is indicated by a solid white circle as background.

3.4 Vehicular MG Armament: A AFV with inherent MG armament is identified by the MG FP factors printed in the lower right corner of the counter in the left-to-right configuration Bow MG, Coax MG, AAMG.

3.41 Bow MG (BMG): The BMG has a range of **eight hexes** and may be used only when firing through the VCA. If the AFV is in a HD position the BMG may not be fired.

3.42 Coax MG (CMG): The CMG has a range of **twelve hexes** and may be used only when firing through the TCA.

3.43 Anti-Air MG (AAMG): The AAMG has a range of **ten hexes** and may be used either within or outside its vehicular VCA/TCA at no penalty. Unlike the CMG/BMG it must be manned by a CE crew member or Hero in order to be used. If the AAMG FP factor consists of two numbers (i.e. M1 series tanks) the AFV is equipped with two AAMGs which can either be fired together as a FG or individually. However, if both AAMGs are fired in the same fire phase the MA ROF is reduced to 0 and it may not Intensive Fire.



3.431 Turreted AAMG (AAMG[t]): Some AFV have their AAMG mounted in a special turret for the tank commander.

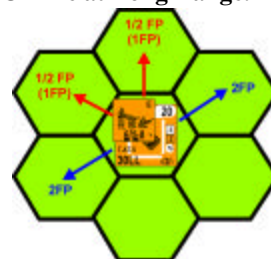
A AAMG(t) may be fired just like any other AAMG, but also while BU at full FP. The range of a AAMG(t) is reduced to **seven hexes**. AAMG(t) may be used in CC, but only at half its FP.

3.5 Firing Ports (Fp): Some modern AFV, mostly Infantry Fighting Vehicles (IFV), are equipped with Fp, which enable BU passengers to fire at enemy units without becoming CE.

3.51 Fp Firepower: A AFV equipped with Fp is marked with a white dot, overprinted by a Fp symbol beneath the AF. The exact FP however is found on the AFV counters back, which lists the FP in the left-rear-right configuration (i.e. 2-1-2 indicates 2FP through the left side, 1FP through the RVCA, and 2FP through the right side).

3.52 Usage: Fp can only be used while Passengers are loaded in the vehicle. The Fp can be fired into a **ADJACENT** hex covered by the appropriate Fp (i.e. a left-side Fp can only be fired into a Adjacent Location on the left VCA side), however this FP is not doubled for firing at a adjacent hex. When firing at a target IN the same hex, all Fp FP is totalled

Fp can **never** fire at Long Range.



Example: The BMP-2 has the following Fp configuration: 2-1-2. Therefore the mounted 65-8 squad can fire 2FP into each of the side hexes plus either 1/2 FP in each of the rear hexes or 1FP in one of the rear hexes. Would a enemy squad be in the



same hex as the BMP, the 5-5-6 could fire 5FP at the enemy unit.

3.53 CC: During CC the Fp FP factors are added together and then halved. This halved FP can be added to the CMG FP factors for CC odds calculation.

3.54 B#: Fp have a B# of 12 and whenever a breakdown occurs, all Fp FP factors malfunction. Normal repair rules apply with a R# of 1-2 and a X# of 6.

3.6 Two-Weapon Turrets: Some AFV have MA and SA mounted in/on the same turret. The MA



and SA, however may never be fired together in the same fire phase [**Exc:** as FPF in which the TH DR is also a NMC for the AFV crew]. ROF applies only to the MA.

3.61 Same Gun SA: Some ATGM are fired from the same Gun as the MA. These ATGM are treated as Special Ammunition rather than SA, and normal Ammo Depletion (3.9) applies.

3.7 Rate of Fire (ROF): Guns normally fire only once per player turn, however a number enclosed in a square (printed on the left side of the counter) indicates a multiple ROF equal to that number. A Gun with a multiple ROF may conceivably fire many times during a fire phase. If the Original colored dr of each TH DR is \leq its printed ROF, the Gun may be fired again during that fire phase, without Intensive Fire penalty.

3.8 Ammunition Depletion: The number following a special Ammo symbol, is the depletion number which defines its availability to the firer. This Depl.# is found on the wreck side of the counter. The Depl.# is applicable, if the firer announces his intention to use that ammunition prior to a TH DR. If the Original TH or Placement DR is $<$ the Depl.#, the firer uses that ammunition. If the TH/Placement DR is equal the Depl.# the firer uses that ammunition, but no further shot with that ammunition is possible. If the Original TH/Placement DR is $>$ the Depl.#, the firer has no such ammunition and is considered not to have fired at all. The firer is free to fire again with another ammunition at the same or at a different target with a new TH DR or may refrain from firing at all.

However if the TH DR was \Rightarrow the Depl.# the firer is out of that ammo and the AFV is marked for being in this status.

***3.81 Ammo Transfer:** If a player has more than one AFV with the same special ammunition he may decide to transfer this ammo to one AFV during set-up.

In doing so, the spending AFV has no more such ammunition, and the receiving AFV Depl.# is raised by 1 per spending AFV (i.e. if the USSR player has three T-80 in his OB, he may decide that T-80 A and B transfer their AT-8s to T-80 C. Therefore T-80 C has its Depl.# raised by two, while A and B do not have AT-8s available at all).

3.9 Reloading Requirements

(Optional): If a weapon-system is marked with a reloading note (i.e. M2A2's TOW II) the weapon must be reloaded after the indicated shot with that weapon.

***3.91 Reloading:** After the above indicated shot is fired the weapon is marked with a "Launcher Empty" counter, thus indicating that the weapon-system is momentarily out of ammunition.

If the owner wishes to reload this weapon-system, he must convert the Launcher Empty counter to its **Reloading** side during the RPh. To reload the AFV may neither move nor fire for one complete turn and must be CE during this time. Whenever a AFV marked with a Reloading counter conducts any other action, the marker is flipped back to its Launcher Empty side.

***3.92 Available Reloads:** Most AFV have only limited Reloads available. The number of Reloads available is indicated either on the AFV wreck side or in the AFV Data Card. Once out of Reloads the AFV may not fire that weapon-system again and the weapon should be marked with a Disabled counter.

To keep track of the remaining Reloads, it is recommended to use Residual FP counters on the AFV Data Card.

3.10 Stabilized Armaments (G): A AFV equipped with a Stabilizer is indicated by the letter **G** on the wreck side of its counter. If a AFV is equipped with a Stabilizer, all weapons of that turret, but no ATGM, are stabilized.

3.101 A stopped Stabilized Gun using Bounding First Fire uses Case B (+2) of the ASL 2000 TH DRM Table. A Stabilized Gun using Bounding First Fire while non-stopped must use case C4.

3.102 A Stabilized Gun firing while non-stopped can claim Target Acquisition benefits (even during Bounding First Fire) as long as it does not move out



of LOS of that target (or vice versa) and fulfills all other requirements of Target Acquisition.

3.103 The CMG of a Stabilized Gun is not halved for Bounding (first)/Motion Fire, if it is firing at a target currently acquired by that Gun.

3.11 Laser range Finder (LRF): A LRF enables the Gun crew to exactly measure the distance to the target and index this range into its ballistic computer of the Fire Control, thus making the TH process a lot easier (and faster). Depending on the LRF itself the firer is eligible for a -1 or -2 TH DRM. The DRM is found on the wreck side of the AFV. LRF do not malfunction [EXC.: during EMP (6.7)].

3.12 Thermal Sights (TS): Thermal Sights pick up the heat signature of objects and make them visible in the sights. Since TS already detect temperature differences of one degree (Celsius), they make targets visible even during daylight. Depending on the TS itself the firer is eligible for a -1 or -2 TH DRM. The DRM is found on the wreck side of the AFV/Weapon. A TS does not malfunction [EXC.: during EMP (6.7)].

During a night scenario a AFV/Weapon equipped with a TS has *unlimited NVR.

*Ray: I'm not sure about this. Some Input?

3.13 Barrel Length: Weapon accuracy increases with the barrel length at longer ranges. Therefore all Guns are rated for their relative tube length as being either Short (*), Normal, Long(L), or Extra Long (LL). Normal length Gun tubes have no effect on the Basic TH# of that Gun, but all other types are subject to TH modifications at ranges > 11 hexes.

3.131 *Guns: Short barreled Guns must subtract one from its Basic TH# when firing at ranges > 12 hexes.

3.132 L Guns: Long barreled Guns must add one to their Basic TH# when firing at a range > 12, or must add 2 to their Basic TH# when firing at a range > 24 hexes.

3.133 LL Guns: Extra long barreled Guns must add 1 to their Basic TH# when firing at a range > 12 hexes, or must add 2 at ranges > 24 hexes, or must add 3 to the Basic TH# at ranges > 30 hexes.

3.134 Auto Cannons: Auto Cannons fire at such a high rate of fire, that their fire can virtually be "walked onto target", but have only limited accuracy at long ranges.

Auto Cannons must add 2 to their Basic TH# if firing at ranges < 5, or must add 1 to their Basic TH# at ranges < 12 hexes, or must subtract 1 from their

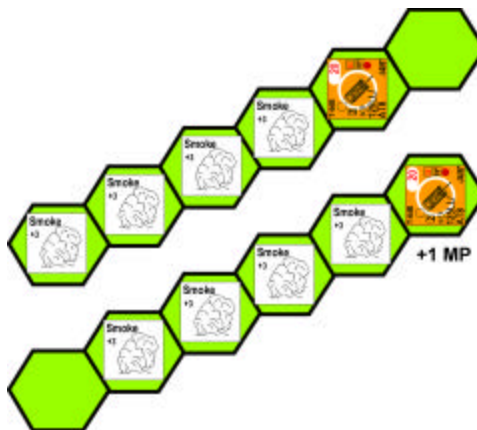
Basic TH# at ranges > 20, or must subtract 2 from their Basic TH# at ranges > 30 hexes.

3.135 Modified TH#: All these Gun types Plus the Ammo type modifications are cumulative and transform the Basic TH# to the Modified TH#. All other factors affecting the TH process are DRM which affect the TH DR, not the TH#.

3.14 Smoke Grenades (SG): Most modern AFV are equipped with Smoke Launchers, which have a range up to 150 meters. An AFV Smoke Launcher (SG) may attempt to place Smoke once per player turn and no more that five times per game. Firing the SG cost one MP during the MPH. To use the SG, the player must make a usage DR =< the Usage#. If the DR was successful place a 5/8" White Smoke counter in any two hexes within the TCA at a range of 1-3 hexes.

There is no effect if the Usage DR is failed.

3.15 Smoke Screens: Every Tank may place a Smoke Screen by injecting raw fuel into its exhaust system. A Tank must pay one additional MP per hex traversed to place a Smoke Screen. If he does so, a 5/8" Dispersed White Smoke counter is placed



immediately at the base level of the hex just traversed. A Tank can create up to four continuous Smoke hexes. Whenever a new Smoke counter is placed, the last (now 5th) Smoke counter is removed.

***3.16 MA Scrounging:** Some MA (i.e. ATGM(H), ATGM, AGL, MGs) may be scrounged and used in its ground-mount role. The MA is scrounged in its dm state and may be assembled normally. MA capable of being scrounged are listed on the AFV Counter. All other Scrounging rules apply normally.

3.17 Target Size: The AFV Data Card, as well as the artwork on the counter itself indicates the relative size of the AFV, which applies to any TH DR vs that AFV.



There are five different sub-types.

3.171 Very-small target-size: A vehicle whose target size is Very-small is eligible for a +2TH DRM. It is identified by both AF (or *) being printed on a white background.

3.172 Small target-size: A vehicle whose target-size is small is eligible for a +1 TH DRM. It is identified by its upper AF (or *) being printed on a white background.

1.173 Average target-size: A vehicle whose target-size is average is not subject to a TH DRM. Its AF have no background.

1.174 Large target-size: A vehicle whose target-size is large is subject to a -1 TH DRM. It is identified by its upper AF being printed in red.

1.175 Very-large target-size: A vehicle whose target-size is very-large is subject to a -2 TH DRM. It is identified by both its AF being printed in red.

3.18 Armor Factors (AF): Every AFV is rated as to the quality of its armor protection for both its front and side/rear target facings, as well as the relative strength of its hull and turret superstructure. The armor is given a rating called AF. The different ASL 2000 AF are:

0, 1, 2, 3, 4, 6, 8, 11, 14, 18, 20, 25, 28, 30, 33, 35, 38, 41, 44, 47, 50, 53, 56, 59, and 62

3.181 Front Armor: The upper printed AF is the AFV's front hull AF and, unless enceased in a box or circle, it is also its front turret/upper superstructure AF.

3.182 Side/Rear Armor: The lower printed AF is the AFV's side/rear hull AF, and unless enceased in a box or a circle, it is also its side/rear turret-/ upper-superstructure AF.

3.183 Superior Turret: A printed AF enceased in a box indicates that the AFV's turret/upper- superstructure AF for that target facing is > that hull AF. The Superior-Turret AF is calculated by increasing that printed AF to the next higher AF value given in 3.19.

3.184 Inferior Turret: A printed AF enceased in a circle indicates that the AFV's turret/upper-superstructure AF for that target facing is < that hull AF. The Inferior-Turret AF is calculated by decreasing that printed AF to the next lower AF value given in 3.19.

3.185 Rear AF: If struck through the rear target facing the basic TK# is increased by one.

***3.186 Aerial AF:** Whenever Aerial AF are used, consult the ASL2000 Armor Factor Chart and find the appropriate Aerial AF, based on the AFVs lowest printed AF.

3.19 Reactive (RA): Some AFV may be equipped with RA. RA mounted in little boxes on the outside of the AFV turret and hull explodes upon the impact of a round/missile into the direction of the incoming round/missile attempting to cancel out the penetrating power of that round/missile.

RA is very effective against HEAT rounds, but less effective against AP/APDS rounds. In game terms RA provides the so equipped AFV with a +1 TK DRM vs AP/APDS round and with a +5 TK DRM vs HEP/HEAT/ATGM rounds. A AFV originally equipped with RA is indicated by a red dot beneath its lower AF. AFV's equipped with RA by SSR/DYO must pay an additional +1 TH DRM for the first hexspine changed, regardless of Gun type. The weight of such a DYO equipped AFV also increases by 1 ton.

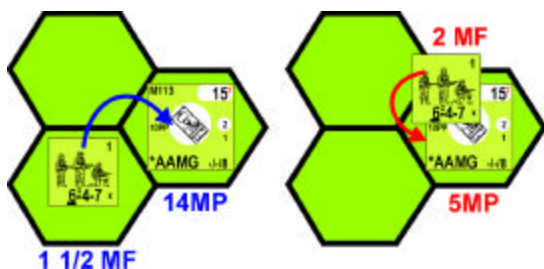
3.20 Track Skirts: Some AFV are equipped with Track Skirts, as indicated by a * behind the side/ rear AF. These are armor plates mounted on the side of the AFV hull, covering the upper half of the tracks. A so equipped AFV is eligible for a +3 TK DRM vs HEAT/ATGM flank hull hits (cumulative with RA, if applicable). Track Skirts make Deliberate Immo-bilization impossible.

Track Skirts also provide a -1 DRM on Bog Check DRs. They impair the AFV in no other way.

3.21 Crew Survival (CS): The inherent crew of an AFV may survive the elimination of its vehicle and take counter form by passing a CS DR, unless the vehicle was destroyed in CC or turned into a flaming wreck. A AFV's crew Morale is always equal to that of its nationality's best unbroken MMC.

If Passengers are transported in the AFV the CS# also applies, and the owner must pass a separate CS DR for each transported unit, unless the AFV was turned into a flaming wreck or destroyed in CC.

3.22 Rear Ramps: Some AFV capable of transporting Passengers have Rear Ramps. Such Rear Ramps ease the process of (dis)mounting the AFV so much that it must be considered for game purposes.



3.221 Loading: A vehicle equipped with a Rear Ramp (here a M113) must be stopped to embark Passengers. It may move in the same MP after they load, but not prior during that MP. The AFV retains 1/4 of its MP allotment (here 4 MP) for use in that MP. It costs the Infantry 1/2MF to mount the AFV from the same hex.

Only AFVs equipped with Rear Ramps may be embarked during the APH from within the same hex.

3.222 Unloading: A AFV disembarks its Passengers at a cost of 1/4 of its MP allotment (here 5MP), but only if stopped. Disembarking personnel must expend 1/2 of its MF to be placed beneath the AFV and are additionally considered to have already expended 1MF for every 1/4 of the MP allotment (FRU) used by their vehicle during that MP prior to unloading. AFV with Rear Ramps may unload Passengers during the APH into the same hex.

3.233: If a AFV equipped with a Rear Ramp (un)loads any Passengers, utilizing the Rear Ramp MF/MP, during the MP (only) its rear target facing is considered unarmored vs all Defensive First Fire until the AFV spends another MP to start, and thus raising the Ramp again.

3.23 Armored Recovery Vehicles (ARV): This family of especially designed AFVs are of enormous use on the modern battlefield, however only of limited use for game purposes.

For game purposes ARVs can be used in assisting Bugged/Mired/Immobilized vehicles as well as it can assist in clearing attempts.

3.231 Bog Removal: If a ARV assists in a Bog Removal attempt, a -2 drm applies to the colored dr. To assist a ARV must be in the same Location (thus overstacking the hex) with the Bugged/ Mired vehicle and remain there for one MP CE spending all MP in Delay.

3.232 Towing: A ARV may tow a Immobilized AFV after rolling a Towing dr ≤ 3 and spending one MP CE and adjacent to the Immobilized vehicle.

If the Towing dr was successful both AFV may move as one stack (thus Overstacking) during the next MP receiving 1/2 the ARVs MP allotment.

3.233 Clearance: A ARV may assist in Roadblock- and Rubble-Clearance attempts. Whenever a ARV uses all its MP to enter the hex it is

eligible for a -3 DRM to the Clearance DR. However, if the ARV is also equipped with a Dozerblade (3.25) **this DRM is not cumulative with the Dozerblade DRM for Clearance attempts**, only one DRM can be used.

3.24 Dozerblades: AFVs equipped with Dozerblades may attempt to clear Rubble, Wire and Roadblocks as of B 24.7-76.

Dozerblades may also be used to create Defilate Positions (3.28). The additional hull-AF are already calculated into the AF printed on the counter.

3.25 Combat Engineer Vehicles (CEV) [US only]:

US Combat Engineers use a special CEV based on a M60A2 tank, the M728.

The M728 incorporates a 165mm Demolition Gun as MA. The Guns maximum range is 18 hexes and can be used to destroy heavy concrete obstacles such as pillboxes and walls as well as it may be used to clear minefields.

3.251 vs Minefields: To clear a minefield the CEV owner must claim to do so and fire into the minefield-hex he wishes to clear using Area Fire.

The TH DR is made on the *Gun column with no target based TH DRM and the TK DR is made on the 31FP column of the IFT. A KIA result clears all mine factors in that hex and creates a shellhole.

A K result clears half the mines in that hex (FRU).

If a mix of A-P and A-T mines is in the target hex they are all affected.

3.252 vs Pillboxes and Buildings: To eliminate a Pillbox the MA must fire at Known infantry in the pillbox using Area Fire. A Original KIA result destroys the Pillbox and all its contents. A K result breaches the Pillbox and all units inside must take a 3MC.

Vs a Building the CEV utilizes the same rules as vs a Pillbox except that a KIA result breaches the wall and all units in the same Location must take a 2MC, while on a K result only the wall is breached and the units in the same Location are not affected. A result ≤ 2 KIA creates Rubble in that Location.

3.253 vs AFV: A CEV Gun may not be used vs AFVs and always uses Area Fire.

3.26 Artillery Observer Vehicles (AOV/OP-Tanks): The BMP-75 and the FIST-V are considered AOV, while some command versions of MBTs are considered OP-Tanks.

3.261 AOV: AOV may only be used for OBA \Rightarrow 105mm. Each AOV carries an Inherent OBA

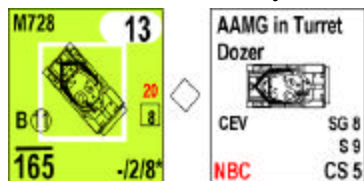


Observer and a Inherent radio (with a contact value of 9), which cannot be removed.

The Inherent Observer may leave the AOV, taking form of a x=0 leader, with x being the Morale of its nationality's best Infantry unit. When the Observer leaves the AOV for any reason, that AOV cannot be used for OBA purposes and is immediately Recalled.

Due to the advanced optical sights in a AOV, it may spot for OBA being BU without any penalties. However if the AOV is also equipped with a GLLD (Ground Locating Laser Device) it is eligible for a -1 Accuracy drm.

All other rules pertaining OBA/Observer remain in effect unchanged. A AOV is **not** recalled if its weapons (AAMG/CMG) disable, but is immediately Recalled if its Observer is unable to theoretically call in any OBA missions (i.e. radio disabled,



Battery Access etc.).

3.262 OP-Tanks: OP-Tanks are command versions of regular MBT with additional radios and may spot for BN MTR OBA only. A OP-Tank carries a Inherent radio (Cont. Value 8) and a Inherent Observer. Neither Observer nor radio may be removed.

A OP-Tank has all its regular weapons and may fire those normally, however if spotting for OBA all TH DR must add a +1 DRM as well as the (one) AAMG may not be used.

All other rules pertaining the use of AOV/OBA/Observer (H 1.46) remain in effect. However a OP-Tank is Recalled if its MA is Disabled, but not Recalled if it is no longer able to call in a OBA mission.

3.27 Defilate Positions: These are Dug-In Positions for AFVs which can either be SSR given, DYO purchased or created during play. Defilate Positions are treated exactly like a Dug-In AFV, with the exception that a AFV in a Defilate Position may leave it, spending 5MP in Reverse Movement.

3.271 Creation: A AFV equipped with a Dozerblade, a CEV, or a Eartmover (ACE, BMT) which spends all its MP and is marked with a TI counter for three consecutive turns in a hex may create a Defilate Position.

3.272 Size: No AFV of bigger target-size than the creating AFV may use a Defilate Position. If DYO

purchased, it is always Very-large target-size, while a SSR will also state the size of the Defilate Position.

2.273 Non-HD Hexside: A Defilate Position always has 5 HD hexsides and 1 non-HD hexside. To keep track of the different hexsides, use a HD marker.

2.274 Entry/Exit: AFVs may enter a Defilate Position only through its Non-HD hexside by spending 2MP+COT. To exit a Defilate Position the AFV must spend 5 MP+COT (plus the MP required to start) in Reverse Movement to exit the Defilate Position through its Non-HD hexside. To exit a Defilate Position through a HD hexside, the AFV must spend 1/2 of its MP allotment (FRU) + COT and is eligible for Underbelly Hits (D 4.3).

3.28 Roof Mounted Turret Rings (BU FP NA):

Some NT AFV are equipped with roof-mounted turret-rings, which can mount RCL, Automatic Grenade Launchers and some ATGMs (VDM). These weapons may only be used while CE, as signified by the solid white circle as AFV background and the "BU FP NA" note on the AFV wreck side.

The crew/Passengers may also fire a LATW/ATGM/ATGM(H) through such a turret-ring if CE, without affecting other crewmembers/Passengers.

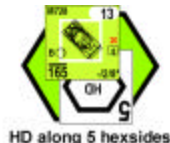
3.29 Self-Propelled ART Guns: Most modern SP-ART Guns are mounted in a turret. These



Guns, mostly 120mm and above, are especially designed for Long-Range Indirect fire, but also have a limited Direct Fire range.

The Direct Fire Range, with minimum and maximum range, is printed onto the AFV counter itself, while the Indirect Fire range is unlimited for game purposes. If using Direct Fire the Gun uses the ASL 2000 TH Table normally, and when using Indirect Fire it uses the Area Fire column of the TH Table.

SP-ART Guns may neither fire while moving, nor during the same phase they moved as indicated by the "Bndg Fire NA".



The path cleared by the Mine Plow is automatically cleared of all mines and should be marked with a appropriate path counter. The Mine Plow never interveres with the function of the AFVs MA/CMG/AAMG, however if Mired the AFV must add a +2 drmm to its colored dr.

If the bridgelayer is destroyed, place a scrounged M113 wreck.

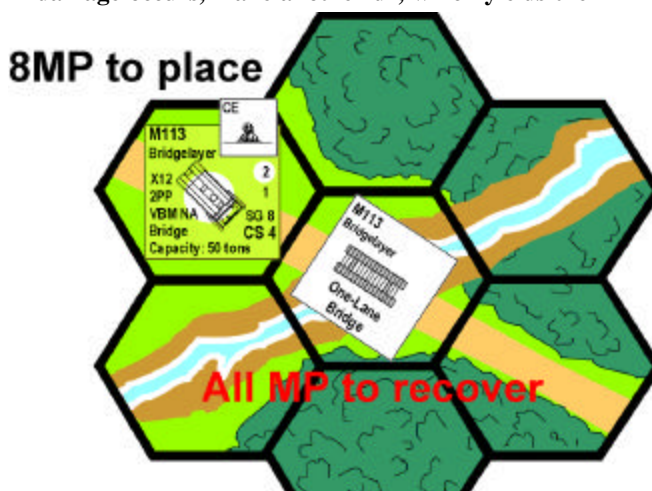
The bridge may be placed across a Trench, AT-Ditch, Canal, Shellholes, or a Gully/Stream - and only by a stopped bridgelayer (whose crew is neither stunned nor shocked) during its MP at a cost of 8 Delay MP (expended in one MP) while it is ADJACENT to the Location across which it wishes to place the bridge. This Location must be within the VCA of the bridgelayer. Only one bridge may be placed per hex,

To pick the bridge back up, the bridgelayer must spend all its MP CE in Delay, with the VCA aligned to the bridge. Again, the user must announce the pick up of the bridge and roll for X#.

Type of Hit	AP, HEAT, HE <57mm^a	HE 99mm^b, DC^c	HE 100mm^d, DC^e
Damaged on dr of:	1	1-2	1-3

^e: Optimally Positioned (only)

If damage occurs, make another dr, which yields the





+DRM that will modify the X# DR made when placement/pick-up is attempted. All such + DRM are cumulative even if caused \geq one hit. A hit (or placed DC) on the bridge can affect its carrying bridgelayar only via a Collateral Attack vs its CE crew [exc: any CH vs the bridge renders it unplaceable and Recalls the bridgelayar]. Types of attacks not listed herein cannot damage the bridge while it is on the bridgelayar - it can however affect the bridgelayar normally. Once the bridge is placed, B6.33 (with a +2 TEM for the bridge) and B6.332 apply to attacks vs it. The bridge can also collapse as per B6.42 if the weight of a vehicle on it exceeds 50 tons.



4. Special Weapons

4.1 Modern Infantry has a large variety of special weapons available, capable of successfully challenging armor or suppressing enemy Infantry. A lot of these new SW use their own TH Table, which is printed on the counter wreck side.

4.2 The AT-4/RPG-90 Light Anti-Tank Weapon (LATW):

This is a lightweight, shoulderfired, one-shot Anti-Tank rocket with a 76mm warhead for the RPG-90 and a 84mm warhead on the AT-4. Each RPG/AT-4 counter represents one LATW device and is removed after fire, regardless of its degree of success.

4.2.1 Range: Both LATW have their maximum range printed on the counter. Its 10 hexes and 13 hexes for the AT-4 and the RPG-90 respectively and may not be fired beyond that range. Both LATW may not fire within their own hex and have therefore a minimum range of 1.

4.2.2 To Hit: To secure a hit with the AT-4/RPG-90, check the TH Table printed on the counter wreck and add all applicable TH DRM.

4.2.3 To Kill: When a hit is secured consult the the ASL 2000 Special Weapons TK Table for the applicable TK# and add the targets appropriate AF to the DR.

4.2.4 Leadership: A leader can use a LATW at full effect provided he neither operates nor directs any other form of fire during that player turn. Otherwise a leader may add his leadership modifier to the TH DR.

***4.2.5 Usage:** A RPG-90/AT-4 counts as a LMG for stacking, IPC and FP-usage purposes. Therefore a squad may carry 3 LATW and fire 2 LATW without forfeiting their inherent FP. Under no circumstances could a squad fire more than 3 LATW in one player turn.

4.2.6 vs Infantry: If a RPG-90/AT-4 is used against Infantry, the IFT FP is found in the Special Weapons TK Table, however a Hit must be secured first. Once a Hit is secured the AT-4/RPG-90 attacks with the appropriate IFT FP, but all TEM apply as reversed DRM.

4.2.7 Usage Restrictions: A LATW may be fired from inside a ground level building Location without the C3 TH DRM. Any other shots from within a building must use the C3 TH DRM.

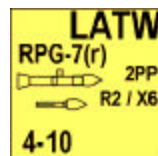
A LATW may **never** fire from within a bunker.

4.3 The Reloadable RPG-7 LATW: The RPG-7 utilizes the basic AT-4/RPG-90 rules with the following exceptions:



***4.3.1 Usage:** The RPG-7 is not removed from play after fired. Two SMC can fire the RPG-7 at full effect, a single SMC firing a RPG-7 must add a +2 TH DRM.

Since the RPG-7 has 2 PP a squad may not carry more than two RPG-7 without forfeiting MF's and may never fire more than 2 RPG-7 in one fire phase.



Range	TH#
0-1	9
2-4	8
5-6	7
7-8	6
9-10	5

4.3.2 Breakdown: On a Original TH DR of 12 the RPG-7 malfunctions and is flipped over to its reversed side. A RPG-7 can be repaired on a Repair dr =<2 and is permanently removed from play on a Repair dr =>6.

4.4 The RPG-18/M72 LAW LATW: These LATW also utilize the basic AT-4/RPG-90 rules with the exception of their lesser range and lesser weight of PP.

4.5 The SAGGER/Dragon Medium Wire-Guided Anti-Tank Missiles (ATGM):

These ATGM were the original replacements for the WWII era Recoilless Rifles and provide the single infantryman lethal firepower to challenge opposing armor. Each Dragon/Sagger counter represents one ATGM and is removed from play after its fire, regardless of its success [EXC: If vehicular mounted]

4.5.1 The Dragon/Sagger has a weight of 3PP and is treated as a MMG for Movement, Stacking, and squad FP.

4.5.2 Range: The Dragon has a minimum range of 2 hexes and a maximum range of 20 hexes, while the Sagger has a minimum range of 3 hexes and a maximum range of 60 hexes. Both ATGM may **never** fire beyond their maximum range.

4.5.3 Malfunction: On a Original TH DR =>11 the ATGM malfunctions and is removed from play. On a Original TH DR of 12 the ATGM explodes and attacks the firing unit with a 2FP IFT attack, using



the hex TEM as negative IFT DRM [EXC: If vehicular mounted the ATGM malfunctions].

4.5.4 To Hit: The Dragon/Sagger can only be fired in the PFPh and the D(f)FPh [EXC: If marked for Opportunity Fire]. The ATGM uses its own TH Table, printed on its reverse side. The TH **DRM J, J1, J2** and **A** do **not** apply.

To simulate the actual traveling (tracking) of the missile, the TK DR is delayed as follows:

4.5.41 During the PFPh the ATGM is fired as a normal SW, but after the TH DR all units currently in LOS and not marked with a First/Final Fire marker may attempt to suppress (Pin, Break or Kill) the firing squad by using a form of early Defensive First Fire. If, after such fire, the firing unit is still in Good Order the TK DR is resolved. All units that fired at the ATGM firer are marked with a **Final Fire** marker.

***4.5.42 During the D(f)FPh** the firer declares its target as it moves and both players check LOS of the firer to the target, to ensure that he was able to track the target for **2 hexes**. If the firer was unable to do so, the missile is lost. If the firer was able to track the target for at least 2 hexes, the TH DR is resolved. Once a Hit is scored the target may use Bounding First Fire to suppress the firer (and is marked with a Bounding Fire marker). If the firer survived the targets Bounding First Fire in Good Order, the TK DR is resolved.

4.5.43 During the DFPh the firer declares its target and if the target is Moving/In Motion, checks for tracking LOS. If tracking LOS is given, the TH DR is resolved. After the TH DR all units marked with Opportunity Fire and the target itself may attempt to suppress the firer using early Advancing/Bounding Fire. If the firer is after such fire still in Good Order the TK DR is resolved.

4.5.44 During the AFPh the ATGM may only be fired as Opportunity Fire and 4.541 applies.

4.5.45 Suppressed Firer: If a firing unit is suppressed due to a Pin, Break or Kill result the ATGM is lost and no TK DR is resolved.

4.5.5 vs. Infantry: If a Dragon/Sagger is used against Infantry a hit must be secured. It then attacks with 4 IFT FP and the TEM of the target Location applies as negative IFT DRM.

***4.5.6 Leadership:** Two SMC can use a ATGM at full effect provided they neither operate nor direct any other form of fire during that player turn. Otherwise a leader may add his leadership modifier to the TH DR.

***4.5.7 Restrictions:** A Dragon/Sagger may never be fired from a building/bunker/pillbox Location.

4.6 The TOW/AT-5/MILAN Heavy-

ATGM: These are reloadable, crew portable or vehicular mounted ATGM employed mostly at platoon level, capable of penetrating most modern armors.

4.6.1 Range: These heavy ATGM (ATGM-H) have a minimum range of 3 hexes and fire on a maximum range of 75 hexes (3.750 meters!).

4.6.2 Usage: The ATGM-H counter represents one missile launcher with several reloads. For stacking, movement and crew usage ATGM-H are treated as Guns. All ATGM-H have a M# of 11. For transport the ATGM-H can be dismated and moved at 3 PP.

4.6.3 Restrictions: The ATGM-H may setup and be fired from any non-building/pillbox Location. If vehicular mounted no other SA/MA may fire during that fire phase. CMG, BMG, AAMG and FP may still be fired during the same fire phase as a vehicular ATGM-H.

4.6.4 Breakdown: On a Original TH DR =>11 the ATGM-H malfunctions. On a Original TH DR of 12 the ATGM-H experiences a Hot-Dud and the crew (even vehicular) must take a PTC.

A ATGM-H may be repaired on a repair dr =< 2 and is permanently removed from play on a dr=> 6.

4.6.5 To Hit: When fired the ATGM-H uses the TOW TH Table. If used against a Moving/In Motion Vehicle the firer declares the target and both players check the firers tracking LOS according to the following chart:

<u>Range to Target</u>	<u>Tracking</u>
<u>LOS</u>	
2-20	1 hex
21-40	2 hexes
41-60	3 hexes
61-75	4 hexes

If the firer was unable to track the target at all times the missile is lost (a TH DR is still resolved for breakdown purposes).

If the firer was able to track the target a TH DR is resolved and all units currently in LOS and **not** marked with a Prep/First or Final Fire marker may attempt to suppress the firing unit (4.545). If the firing unit is in Good Order after all suppressive fire the TK DR is resolved.

4.6.6 Concealment/HIP: Just like a Gun a ATGM-H may setup Emplaced (C11.2) and may do so hidden as described in A12.34 [Exc: A ATGM/ATGM(H) is revealed if the colored dr is =>3].

4.6.7 vs. Infantry: A ATGM-H may never be used against Infantry [EXC: Collateral Attack].

***4.6.8 Leadership:** Two SMC can use a H ATGM at full effect provided they neither operate nor direct any other form of fire during that player turn.



Otherwise a leader may add his leadership modifier to the TH DR.

4.7 The AT-8 Radio-Controlled and SHILLELAGH IR-Controlled Heavy ATGM:

The USSR T80/64B tank is capable of firing the AT-8 ATGM-H, and the US M551/M60A2 tank is capable of firing the Shillelagh ATGM-H with their MA. Except as stated below these ATGM-H are treated as Special Ammunition in all cases.

4.7.1 Range: Both ATGM-H fire on a minimum range of 3 hexes and a maximum range of 50 hexes.

4.7.2 Usage: Both ATGM-H are treated as Special Ammunition, but use their own TH Table and the Case A, J, J1 and J2 TH DRM do not apply.

4.8 LATW and ATGM/ATGM-H vs Pillboxes:

LATW and ATGM may be deployed against pillboxes or caves.

4.8.1 To Hit: If a pillbox/cave is declared as target a TH DR is made with the pillbox/cave size being used a target size TH DRM.

Stacking Limit	TH
DRM	
1 squad	+ 2 TH
2 squads	+ 1 TH
=>3 squads	no TH DRM

4.8.2 To Kill: If a Hit is secured the LATW/ATGM uses its AFV TK# and adds the pillbox/caves NCA Defense Modifier as TK DRM, just as if it was a AF.

On a TK DR < the TK# the pillbox/cave is breached along that hexside and all units stacked within the attacked Location must undergo a 3MC.

On a TK =< half the TK# the pillbox/cave counter and all its contents are eliminated.

On a TK DR = TK# all units within that Location must undergo a NMC.

4.9 ATGM/ATGM-H and Water Obstacles:

If a ATGM is fired across a water obstacle, the water interferes with the guiding mechanism of the missile and the missile is in danger of being lost.

In game terms a ATGM must add a +1 TH DRM for every water hex crossed. All shots crossing => 5 water hexes are NA.

4.10 The AGS-17/M-19 Automatic Grenade Launchers (AGS):

These are heavy MG-style weapons of firing 30mm/40mm HE Grenades.



4.10.1 Usage: Though transportable at 6PP the AGS is in all respects a Gun. AGS have a M# 11 and can be dismated to be transported at 3PP.

4.10.2 To Hit: The AGS uses the ASL 2000 ORD TH Table and always fires as Area Fire.

4.10.3 Range: AGS have a minimum range of 1 hex (i.e. may **not** fire within own hex). The M-19 has a maximum range of 60 and the AGS-17 has a maximum range of 34 hexes. AGS may never fire Long Range.

***4.10.4 To Kill:** The IFT FP of the AGS is found in the 30/40mm column of the ASL TK Table and is not halved for Area Fire, however if used against Infantry in woods the AGS receives the -1 DRM for Air Bursts, just like a Mortar.

4.10.5 vs. AFV: The AGS uses its IFT FP against AFV. A Final KIA result destroys the AFV but allows normal Crew Survival. A Final TK DR =< half the highest KIA possibility results in a burning wreck and the elimination of all PRC.

A Final TK DR resulting in a K/# creates an **automatic** Shock, if Turret Hit, or Immobilization, if Hull Hit.

A MC/PTC has no effect on the AFV but effects all other occupants of the hex Collaterally.

The following cummulative DRM apply to AFVs:

AFV Type	DRM
All AF =< 4	-1
OT/CT	-1
All AF => 8	+1

***4.10.6 CH:** A Critical Hit doubles the IFT FP of the AGS, and if used against Infantry all TEM DRM are reversed.

4.11 The RPO Rocket Propelled Flamethrower:

The RPO is a special variant of the RPG-7 LATW, firing a rocket-propelled round filled with a napalm-like liquid - the RPO is a modern variant of the MOL-P. The RPO is used only by USSR Elite units, mostly Combat Engineers.

4.11.1 Range: The RPO has a minimum range of 2 hexes and a maximum range of 12 hexes. Long Range fire is not possible.

4.11.2 Usage: The RPO can be used by two SMC or a Russian crew without penalty, one SMC firing a RPO must pay a + 2 TH DRM. A squad can fire/carry one RPO without forfeiture of FP/MF, but may never fire more than two RPO during the same fire phase. Non-Elite Personnel must use the non-qualified SW X# penalty when firing a RPO.

4.11.3 Restrictions: A RPO may not be fired from a Building/Pillbox Location. Since a RPO places smoke upon a successfull attack, it must fire before the first weapon fires other than SMOKE in



the same fire phase; however this restriction does not apply to firing during the enemy MPh.

4.11.4 To Hit: The RPO uses its own TH Table printed on its counter back.

4.11.5 CH: A RPO achieves a CH on an Original 2 TH DR (C3.7).

4.11.6 vs. AFV: When used against AFV check the ASL 2000 Special Weapons TK Table and find the appropriate TK#. AF do not modify the TK#, but a CH doubles it.

The following cumulative DRM apply to the TK DR:

All AF =< 4	-1
OT/CE	-1
rear Tgt Facing	-1
All AF =>8	+1

All vulnerable PRC are subject to 15FP Specific Collateral Attack.

4.11.7 vs. Unarmored Vehicle: An unarmored vehicle hit by a RPO is attacked on the *Vehicle Line of the IFT using the Kill number of 24 FP. A CH is resolved with the Kill number of 36 FP.

4.11.8 vs. Infantry/Gun: A Infantry-target/non-vehicular-Gun hit by a RPO is affected exactly as if hit by a 24FP HE attack. A CH causes a 36FP attack with applicable TEM reversed.

4.11.9 vs. Terrain: A RPO hit can cause a Flame in Burnable Terrain as per A22.6111, but uses the colored dr of the TH DR.

4.11.10 Smoke: A RPO hit creates a *white* Dispersed Smoke counter as per C8.52.

4.11.11 Breakdown: The RPO malfunctions on a Original TH DR =>11, on a Original TH DR of 12 the RPO explodes and is permanently removed from play. Such an explosion creates a Flame in its Location if its Burnable Terrain and causes a 2MC on the firing unit.

A malfunctioned RPO may be repaired on a Repair dr =<2 and is permanently removed from play on a Repair dr =>6.

***4.11.12 Leadership:** A leader can use a RPO at full effect provided he neither operates nor directs any other form of fire during that player turn. Otherwise a leader may add his leadership modifier to the TH DR.

***4.12 Recoilless Rifles (RCL):** Modern RCL are, regardless of counter size (SW or ORD), considered Guns and use the ASL2000 ORD TH Table.

***4.121 Usage restrictions:** RCL are crew-served, but may be, by SSR, served without penalty by a HS. Two SMC may fire a RCL of their own nationality without penalty if they direct no other firing during that Player Turn,

***4.122 TH:** RCL use the ASL2000 TH Table, but Case A applies only to 5/8“ RCL.Vehicular mounted RCL [Exc: RCL on Jeep] may be fired as bounding fire/during the AFPh. A %RCL may fire during the AFPh/after movement by adding the +2 TH DRM for LATW firing during the AFPh.

A RCL (and the firing unit) may never retain concealment when it fires in the LOS of a Good Order enemy ground unit.

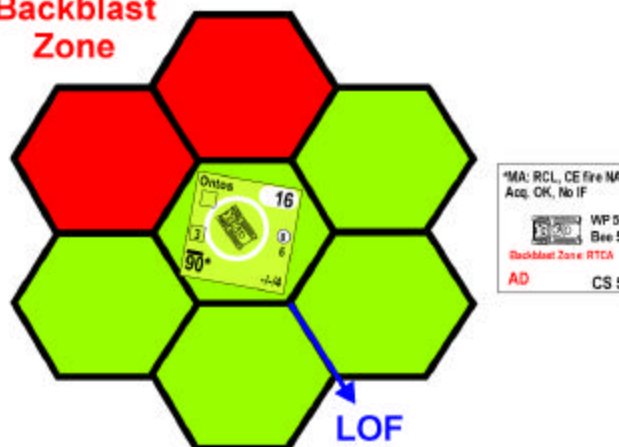
***4.123 Restrictions:** A RCL may never fire from inside an Emplacement, Building, rubble, entrenchment, or pillbox [Exc: A %RCL may fire as per C13.8 and ASL2000 3.28]. A Ground Mounted RCL may never Acquire a moving/Motion target or use previous acquisition against it. Only 5/8“ RCL may use Bore Sight.

***4.124 Backblast Zone:** The backblast zone of a RCL consists of the firing hex and the hex/hexes behind it in the opposite direction of the LOF. This zone is determined by extending the LOF of the firing weapon backward through the firing hex a distance of one hex. If this backward extension of the LOF lies exactly along a hexspine of the firing hex then both of those adjacent hexes are considered part of the backblast zone.

***4.1241 Backblast effects:** Any unarmored/CE unit in the backblast zone of the RCL when it fires, other than the manning unit which fired it, is TI for the remainder of that Player Turn. If those units have already fired/moved during that Player Turn they undergo a attack on the 1FP column of the IFT using the colored dr of the RCL’s TH DR as an IFT DR. No drm apply.

Any time a RCL rolls an Original 11 or a 6 on the colored die on its TH DR there is a chance that the backblast will start a Flame in the backblast zone of

Backblast Zone



the weapon. If the backblast zone contains Burnable Terrain, each hex must be rolled for separately on the Kindling Table (with applicable EC DRM) to determine if a Flame results.

ASL2000 ‘Modern Combat - from the ‘50s to the ‘90s’





5. Special Ammunitions

5.1 Special AFV Ammunitions: Most AFV have a variety of different ammunitions available, depending on their task.

Most Special Ammunitions use their own column on the TH Table, while others only modify the TH DR. The availability of such Special Ammunitions is marked on the AFV's counter back together with its depletion number.

5.11 SABOT: The standard AP round of modern AFV. Quite Accurate and with a penetration capacity of up to 250mm Armor. Available in calibres up to 125mm.

5.12 APCR: Some HMGs and AutoCannons fire a high-speed armor piercing round called APCR. This round is highly effective against Reactive Armor and is very accurate at short ranges, at longer ranges its low weight-diameter ratio results in low accuracy.

5.13 HEP: A development of the HEAT round resulted in this short range high-explosive round. Its limited armor penetration power makes useless against most modern tanks, but its enormous explosion results in a **automatic Shock** on every Turret Hit. HEP rounds are also very effective against Infantry/Guns.

5.14 FSAPDS: This **Finn-S**tabilized-**A**rmor-**P**iercing-**D**iscarding-**S**ABOT round is based on the standard SABOT round. It is Finn-Stabilized and discards its bore-housing during flight, increasing accuracy at long ranges.

5.15 White Star (WS): Some AFV fire a napalm filled round, called White Star. This round has only limited accuracy and is useless at ranges longer than 15 hexes. Upon impact however this round has devastating effect. Since it places SMOKE on a hit, it must fire before any weapon fires any other ammunition than Smoke during the same fire phase. The White Star uses the same TK# and procedures as the RPO. WS is only available by SSR or DYO purchase.

***5.16 MX546 Beehive (Bee):** Depending on ToO, some US units may fire the Beehive round.

To improve its Anti-Personnel capabilities during the jungle fights of the Vietnam War, the US fielded in 1966 the MX546 Beehive. This contained 8000 flechettes, small steel finned darts about the size of a one-inch nail.

The 152mm Beehive round quickly acquired a fearsome reputation; in one engagement no less than 36 of the enemy were killed in seconds by two such rounds¹³.

The Beehive is ineffective against armored targets, but not their vulnerable PRC. A TH DR is not required for the Beehive, but if the firing AFV has moved during the MPh (or if Infantry moved and manned a Gun during the MPh and then fires the Beehive during the AFPh), the IFP of the Beehive is halved for Area Fire. A Beehive attack is resolved on the IFT using the FP of the Beehive and adding any applicable DRM for TEM, LOS Hindrance, and/or hexspine changes in the CA.

The FP value of each Beehive round is as follows:

37mm	14FP
75/76mm	16FP
90mm	20FP
105mm	26FP
152mm	28FP
155mm	30FP

The IFT DR also serves as the Ammo Depletion and armament breakdown checks, usually resolved with the TH DR. If the Beehive Depletion Number has been exceeded, C8.9 applies. The Beehive is fired at a common vertex and elevation shared by three hexes which is two hexes distant (excluding the firing hex) and, barring obstacles in the first hex of the cluster, affects all occupants of all hexes of that elevation (and in the firers LOS) although the individual TEM/LOS Hindrance of each Location may vary the results in each hex. Instead of firing at a vertex, the Beehive can also be used to fire at any three contiguous levels of a building hex by firing at the middle level, provided it is two hexes away. See diagram of C 8.4 (Canister).

The Beehive has no effect on units in the firer's hex, but if firing at a same-level target it attacks units in the hex adjacent to the firer along the LOF as Area Fire with no doubling for PBF. If the LOF in the adjacent hex is traced exactly along a hexside, the fire affects both adjacent hexes but is quartered instead of halved.

Beehive fire cannot be used to rubble a building, set a Fire, or to clear Wire. A Beehive KIA result has the same chance of destroying a SW in the hex as a HE KIA result.

***5.161 ROF:** A Gun firing a Beehive round can retain its ROF. A non-vehicular Gun that fires a Beehive and retains ROF, however can use its ROF only to fire either another Beehive round or fire at a closer target (i.e. Adjacent)

***5.17 AA Guns firing Air Bursts:** Due to the nature of AA rounds and their fuse settings a AA Gun may fire Air Bursts.

A AA Gun may opt to use its fire as Area Fire and therefore receive the -1 Air Burst DRM/Aerial AF.

AA Guns firing Air Bursts lose their ROF and may not gain/use previous acquisition. If used against a AFV the AA Gun uses its halved IFT FP on the

¹³ Bryan Perret, *Iron Fist*, (Arms and Armour, 1995), p.191



vehicle column of the IFT, after a Hit is secured, modifying the TK DR only with the Aerial AF DRM.

5.2 Offboard Artillery (OBA): Modern Artillery is still one of the major forces of the battlefield, probably still the queen of the battlefield. Improvements in Ammunitions, Fire Control Systems and extensive training programmes resulted in the following rule additions for ASL2000:

***5.21 Accuracy:** Barring contrary SSR/ToO Rule, all modern OBA modules are accurate on a Accuracy dr ≤ 2 . If special spotting systems, like the GLLD, are used by the Spotter he is entitled to a -1 Accuracy drm.

5.22 USSR/Warsaw Pact OBA: Due to the command structure of Russian Artillery the first OBA mission in a scenario **must** be preregistered. In game terms this means that the Russian player secretly locate his first FFE and mission type before setup, and is resolved in his first fire phase once radio contact and battery access is established. This first FFE is always accurate.

After the first FFE the Russian player may freely place his AR's and FFE's.

5.23 Advanced Locating Equipment: All modern Armies use advanced locating devices after 1980 to support their OBA spotters. In game terms these locating devices are represented by the GLLD (Ground Located Laser Device). Whenever a unit possessing a GLLD (even vehicular mounted) spots for OBA its Accuracy dr receives a -1 drm. A GLLD has a maximum spotting range of 40 hexes and malfunctions on a Original Accuracy dr ≥ 6 . GLLD's can only spot for Rocket and 150mm+ OBA and may never support more than one module.

5.24 Rocket OBA: Modern Rocket OBA (US=MLRS, USSR=BM-21) is more accurate than WWII Rocket OBA and rolls for accuracy, but is still not subject to correction. Rocket OBA can fire only every 2 turns (i.e. Turn 1, 3, 5 etc).

Once Battery Access is gained the owner places his AR and rolls for accuracy. ROBA is accurate on a dr ≤ 1 . If the dr is not accurate the owner rolls for Extend and Direction of Error and places then his FFE which is immediately resolved.

ROBA has the same Blast Area as Harrassing Fire but is resolved with full FP.

ROBA cannot fire IR or SMOKE.

***5.25 Scatterable Mines:** 155mm OBA may opt to change one (only) Fire Mission for a Scatterable Mine Mission.

Such a Scatterable Mine Mission is resolved as any other OBA mission, with the exception that it can only place Mines within the hexes of a HE

Concentration, and after the misison, Battery access and Radio Contact must be reestablished.

A successful Scatterable Mine mission places a Known 4FP AP mine in every hex of the concentration Blast Area.

All other OBA rules (Battery Access, Radio Contact, LOS, correction) apply normally.

***5.3 Claymore Mines:** The Claymore mine is filled with 700 steel balls set in an explosive bed and is electrically fired either by a swith operated by an observer or by a trip-wire or other anemy-actuated device. On detonation, the explosive propels the steel balls outward in a 60° fan-shaped swathe which is lethal out to 50 meters.

***5.31** The Claymore is a one-shot device and only available by SSR to a US defender.

During a night scenario the Claymore is set up and activated like a Trip Flare (G.8).

During any other scenario the Claymore may either be activated like any other AP mine or it may deliberately be fired by the owner if he assigned a owning unit during set up, which is in Good Order, within two hexes of the Claymore and has LOS to it.

***5.32 Effect Zone:** The Claymore must be setup with a CA (which is secretly recorded), and affects any unit, even friendly, within its own hex with 12FP, as well as the two adjacent hexes within its CA with 6FP. No DRM apply.

On a Original 12 DR the Claymore malfunctions and is removed from play.



8. Air Support

8.1 Helicopter: Helicopter are the most versatile and probably most lethal combat force on the modern battlefield. They can quickly deliver - and evacuate - combat troops to battle areas and deliver a heavy load of precisely guided weapons. The maneuverability in combination with its great speed make the Helicopter a real Quick Strike weapon. During the Vietnam War the helicopter showed for the first time its real combat strength and later battles such as Grenada, Afghanistan and Desert Storm proved its worth time and again.

8.1.1 Armament: The exact combination of armaments and weapons are listed on the Helicopter counter itself. The available ATGMs and their ammunition stock is shown on the scenario card, and should be marked/used accordingly on the Helicopter Data Card. The different weapons and their use is covered later in this rule section.

8.1.2. Movement: Helicopter have their own basic MP allotment and pay these for each hex traversed according to the *Flightlevel* used.

8.1.3 Flightlevels: Helicopters are able to use two different Flightlevels, NOE - Nape of the Earth - and LOW.

If flying NOE the Helicopter is considered one Level above the ground terrain (i.e. a Helicopter flying over Level 1 Woods is considered on Level 3).

A Helicopter flying on LOW is always considered on Level 5.

8.1.4 Transport: Some Helicopter - mostly Utility Helicopter (UH) - are capable of transporting troops and equipment. The exact Transport Capacity is indicated by the PP# on the Helicopter counter.

8.1.5 Anti-Aircraft Fire: To protect the battlefield from the enormous threat of Helicopters and Aircraft a large variety of Air-Defense and Surface-to-Air weapons is provided to the player.

8.1.6 Availability: Air Support is only available if SSR granted or DYO/Campaign Game purchased. Helicopter support can be used during any weather/visibility condition.

8.12 Helicopter Movement: Helicopter enter the mapboard as the last combat unit moved during the owners MPh. Once on the mapboard, Helicopter are able to move during **both MPh**, however during the Opponents MPh only at half their MP allowance (FRD) and after all Attacker movements. A Helicopter may **always** enter a Aerial Location occupied by a non-aerial friendly/ enemy unit (*i.e. since the Helicopter is always above ground, it may enter a location that contains a friendly/enemy ground unit*).

Whenever two opposing Helicopter are in the playing area the Attacker moves first and Aerial Combat (AC) **must** be generated.

8.12.1 Movement Cost: Helicopter pay MP per hex traversed as they enter the hex. If flying LOW a helicopter pays **1MP** per hex traversed, while on NOE a Helicopter must pay **2MP** per hex traversed. If Heavy Winds are in effect the basic movement Cost is doubled for flying **against** the Wind Direction - flying with the wind however does not alter the MP costs.

If a Helicopter changes FL from NOE to LOW it must spend **15MP** to do so, while FL changing from LOW to NOE cost only **5MP**. A Helicopter must not spend MP to change its VCA

[**Exc:** TH DRM].

Whenever a Helicopter is used during Night, Fog, or Snow conditions the basic MP allowance is halved (FRD) and all movement must be conducted at LOW.

8.12.2 Mission Duration: A helicopter may remain on the mapboard to a maximum of 5 Game Turns, or until all main weapons (not MG/Cannon) are exhausted/malfunctioned, whichever occurs first. Once a Helicopter exits the mapboard it may not return [**Exc:** If a SSR allows a Transport to return on/after a certain Turn/Condition].

A Helicopter not landed is always in Motion and must expend **all MPs**, it may however spend some/all of its MP in Delay (called "hovering").

8.12.3 Landing and Take-off: Landing of Helicopter is only possible in Open Ground hexes. The Helicopter Target Size also identifies the size of the required Landing Zone(LZ).

8.12.3.1 Landing Zones (LZ): All Very-Small, Small, and Average Target Size Helicopter require a one hex LZ, but some large Transport Helicopter require a larger LZ. If the Helicopter is Large or Very-Large Target Size, the Helicopter requires a circular 3 hex cluster of Open Ground as LZ. Once the Helicopter is landed it is considered to be exactly on the hexspine junction of the 3 hex cluster for LOS/movement purposes. A Very-Small/Small Helicopter is able to land on a rooftop to embark/disembark Passengers. A Rooftop LZ must be on a Stone, Multi-Level, Multi-Hex building.

8.12.3.2 Landing: A Helicopter wishing to land must spend **30MP** in the LZ hex. Landing cannot be conducted as Minimum Move (thus a Helicopter with less than 60MP cannot land during the Opponents MPh).

8.12.3.3 Take-off: A Helicopter must spend **50MP** to lift off from its current LZ hex. Provided no other MP was spent during the current MPh, Take-off can be conducted as Minimum Move. Once a



Helicopter spent the 50MP to start it is automatically on NOE and in Motion.

8.13 Troop Transport: Only helicopter with a Transport Capability (TCP) $\geq 5PP$ may transport MMC.

8.13.1 Dismounting: Dismounting of Passengers can only be conducted during the Owners MPh - and of course the Helicopter must be landed.

To dismount the Passengers must spend half their MP allowance (FRU) and the Helicopter must spend **10MP** to unload. The now dismounted unit may immediately continue its MPh (provided it has sufficient MF left). Once the Helicopter unloaded its Passengers and spent the required MP it may Lift-off (provided it has sufficient MP left).

8.13.2 Mounting: To load Passengers the Helicopter must be landed and the unit(s) to be transported must move (MPh only) into the same hex as the Helicopter and end their MPh in their hex. During the APh the unit then advances INTO the Helicopter, which may Lift-off during the following MPh.

8.13.3 Rapeling: To dismount a non-landed helicopter by means of ropes (called rapeling) the helicopter must spend **10MP** hovering at NOE above a hex [**Exc.:** Rapeling may not be conducted over enemy occupied hexes or woods/jungle]

The transported personnel must then spend all their MF as well as the helicopter spending another **20MP**, which places the now dismounted unit TI at the highest accessible level of the hex. (*Thus a helicopter without Rooftop ability can dismount its passengers on top of a building, or a helicopter may dismount its passengers on a non-multi-hex, multi-level building or a unit may be dismounted in non-open ground hexes such as brush*)

8.14 Equipment Transport: Transport Helicopter equipped with a Ramp and a TCP $\geq 20PP$ may transport any combination of the following items, with the total indicated PP applying to the Helicopters TCP:

ITEM	PP Cost
AFV of ≤ 5 tons	15PP
AFV of > 5 but ≤ 10 tons	30PP
AFV of > 10 but ≤ 15 tons	35PP
Non-MTR Gun with $M\# \geq 10$	10PP
Gun with $M\#$ of 6-9	20PP
Gun with $M\# \leq 8$	30PP*
MTR of 76-107mm	5PP
Ammunition $\leq 99mm$	4PP *
Ammunition $\geq 100mm$	8PP *
All other Personnel/SW	normal *

* The PP cost of units/SW/ammo is reduced to zero if they are Passengers of a vehicle that is itself a Passenger

8.14.1 Transporting Vehicles: Unloading a Passenger Vehicle consists of opening the Helicopters ramp at a MP cost of **5MP** of the Helicopters MP allowance, driving the vehicle off the Helicopter at a cost of **1MP** for starting, plus **one-fourth** of the Passenger vehicles MP allotment, plus **COT**. There is no cost for entering the Helicopters Location (D2.14), but overstacking will apply.

Loading is the reverse of this procedure; i.e. *the vehicle first enters the Helicopters Location, if necessary (paying one extra MP; D2.14) and then expends one-fourth of its MP allotment plus 1 MP for COT to load INTO the Helicopter, plus 1MP to stop. And then 5MP to the Helicopters MP allowance to close the ramp.*

An allowed vehicle can (un)load while towing a Gun (unless using Reverse Movement; C10.1) by paying the extra MP for towing. A Passengers Vehicle/Gun may not change its VCA relative to that of its transporting Helicopter. Overstacking does not occur due to a vehicle's being Passenger in a Helicopter. A vehicle that is also Passenger cannot claim or retain Motion status independently of the Helicopter.

8.14.2 Transporting Guns: (Un)loading an **unhooked** Gun from/onto a Helicopter follows the same procedures as (un)hooking from/to a towing vehicle (C10.11 & .2). A Gun may be (un)hooked from/to an allowable vehicle while both are Passengers on the Helicopter (any resulting TI status does not apply to the Helicopter).

***8.14.3 External Transports (Slingloads):** Medium and Heavy Lift Transports are capable of very heavy weight, whereas their internal space is limited. Quite frequently the lift power of the helicopter is used for loads larger than their interior space, by transporting the load externally.

***8.14.31 Capacity:** A transport whose PP# is printed in red is capable of transporting internal loads up to small-vehicle size, MTR, and Guns with $M\# \geq 10$, while all other/larger equipment marked with a red AD (Air Deployable) note can be transported external. The transport may fill its PPC with any combination of internal/external PP. A helicopter transporting an external load must move on LOW, unless landing.

***8.13.32 Loading:** To load (or rather hook up) a external load the transporting helicopter must be



started, and on NOE expending **40MP** above the to be transported limbered/unmanned Gun/AFV aligned with its (V)CA, while a Good Order squad/HS/or crew spends all its MF in the same hex, immediately becoming TI. After the expenditure of the above MP/MF a dr is made to check if the loading was successfull. On a dr ≤ 5 the load is successfully hooked and is now considered to be at the same level as the helicopter.

A dr of 6 results in a faulty hook up and the same procedure must be repeated during the next owners MP/Ph, or may be aborted altogether and the helicopter may continue movement without the external load.

***8.13.33 Unloading:** To unload a external load, the transport must spend **30MP** at NOE in the „target“ hex, in which a Good Order squad/HS/or crew must be present, which spends all of its MF and becomes TI. After the expenditure of such MP/MF a DR is made to check if the unhooking was successfull. On a DR ≤ 9 the unhooking was successfull and the Gun/AFV is placed in its limbered/unmanned state in the target hex. A DR of 10 results in a faulty unhook and the helicopter/load and ground unit must remain in the same hex and repeat the procedure during the next MPH of the owner. A dr of ≥ 11 results in a fatal malfunction of the hooking mechanism and the load crashes. The unhooking DR is subject to a DRM equal to the number of damages received during Defensive Fire (8.13.35)

***8.13.34 Load Crash:** After a load crash, the AFV/Gun must be checked for damage by means of a DR. On a DR ≤ 10 the load is not damaged and may be manned/unlimbered normally. On a DR of 11 the load is malfunctioned/immobilized - a immobilized AFV cannot be repaired, whereas a malfunctioned Gun may be repaired after being unlimbered. A DR ≥ 12 results in a wreck/disabled Gun.

The damage DR is subject to a DRM equal to the number of damages the load received during defensive fire (see 8.13.35 Vulnerability).

The Ground unit must pass a IMC.

***8.13.35 Vulnerability:** A turret hit vs a helicopter that carries a external load is treated as a load hit instead. When such a hit is archived, a dr is made on the following table to see if damage occurs:

Type of Hit	MG	AP, HEAT, AP $\leq 57\text{mm}$	HE 58-99mm	HE $\geq 100\text{mm}$
Damaged on dr:	1 ^a	1	1-2	1-3

^a: NA to AFV with AF ≥ 3

Every such damage results in a +1DRM which is used on the unhooking/crash damage DR. Should a load

receive ≥ 10 damages, the load is eliminated and any further turret hits are achived vs the helicopter itself.

***8.13.36 CVP:** Any external load destroyed (disabled/wrecked) during flight or while unhooking counts toward the CVP. A AFV immobilized while unhooking does not yield CVP.

8.15 Ait-to-Ground Combat: Helicopters are not only able to transport troops and equipment, they also deliver a heavy load of Air-to-Ground weapons, which include Aerial ATGM, Rocket Pods and MG/AutoCannons.

8.15.1 Aerial LOS: Given its ability to fly anywhere over the mapboard, a Helicopter is theoretically able to see any non-hidden unit that is not completely surrounded by LOS Obstacles. But before a Helicopter can attack, it must move to a attack position from where it will announce its attack. Helicopter cannot cause loss of "?", or prevent gaining of "?" by just seeing an enemy unit; Helicopter cause "?" loss only by attacking concealed units and scoring at least a PTC result (provided the attacked unit is within LOS of a GO ground unit). However, a unit moving in OG would not be considered concealed to the Helicopter, although the helicopter may not inspect that stack unless it passes a Sighting TC. Should such a Sighting TC reveal only a Dummy unit, the Helicopter has the option of wether or not to count that Sighting TC. But is subject to AA fire, regardless of its choice.

8.15.2 Sighting TC: Before a Helicopter can make a Ground Attack it must pass a Sighting TC from its initial attack hex. The Helicopters morale for this purpose is indicated on the counter back. Failure of the Sighting TC results in the Helicopter being unable to make a ground attack - the Helicopter may however spend another MP to move to another hex and then attempt another Sighting TC.

The Sighting TC is based on the easiest target to spot in the target hex. Once a Helicopter has sighted its target it need not to make any further Sighting TC to attack other units along the same Strafing Run during that MPH.

The Sighting TC is subject to the following cumulative DRMs:

DRM	Condition/Cause
+X	SMOKE Hindrance as per E.6
+3	Target is in Building/Woods/Rubble/ Orchard in Season
+1	Target is in Brush/Grain/Marsh/Crag/ Graveyard
+1	Target is within 4 hexes of non-HIP AFV/ MMC friendly to and in LOS of Helicopter
+1	Mist*/Dust/Heat-Haze
-1	Target is AFV/ or boat in water



-1	Target has spent ≥1MP during this MPh
-1	Target has been attacked by a friendly Helicopter during this MPh
-2	Target is not entirely concealed
-1/2	Ace Pilot
+/- X	Target Size

*The Mist DRM depends on Mist Density:

Light Mist	+1
Moderate Mist	+2
Heavy Mist	+3
Very Hvy Mist	+4

A LOS Hindrance DRM ≥ 6 blocks LOS completely and makes a Sighting TC impossible.

An Original Sighting TC of 12 results in the immediate Recall of the Helicopter.

8.15.3 Aerial Range: Once the attacking hex is chosen, Sighting TC passed and the cost of firing the weapon is paid (8.15.4) the range to the target must be calculated and is subject to the following modifiers:

Flightlevel Modifier

NOE	Initial Range + the range (FRU)
LOW	Initial Range x2 (FRU)

8.15.4 Ace Pilots: Some Pilots have that much experience and knowledge in their deadly trade that they must be considered towards the Helicopters performance. Ace Pilots function in the same way as Armor Leaders, but provide DRM only in the following cases:

- **Sighting TC**
- **TH DRM**
- **Morale Checks**
- **Aerial Combat** (either Defense or Attack)

Ace Pilots cannot modify movement or TK DR.

Ace Pilots are depicted in counter form with Strength Factors ranging from 9-1 to 10-2.

8.15.5 Point Fire Resolution: Helicopter fire while moving and pay "Firing MP" before (or rather as) they fire. A Helicopter must spend the following MP to fire a weapon system:

MG Point Attack	5MP must be spend
*GL attack	5MP must be spend
Rocket Pod(RP)	10MP must be spend
ATGM	25MP must be spend

The MP cost simulate the actual aiming- and traveltime to successfully fire one of these weapon systems.

After the Helicopter spend the appropriate Firing MP and receiving all AA-Fire the TH DR is resolved.

8.15.51 To Hit: For the TH procedure, find the appropriate Weapon TH chart, the Range column and add the following cumulative TH DRM:

DRM	Condition/Cause
+X	SMOKE Hindrance as per E.6
+3	Target is in Building/Woods/Rubble/ Orchard in Season
+1	Target is in Brush/Grain/Marsh/Crag/ Graveyard
+1	Outside CA, per hexside changed
+1	Firer has moved to a new hex during this MPh
+1	Mist/Dust/Heat-Haze
+1	Target is in Motion (N/A to ATGM)
-1	Target is AFV/ or boat in water
-2	Target is using VBM
-1	Target has been attacked by a friendly Helicopter during this MPh
-1/2	Thermal Sight
-1/2	Ace Pilot
+/- X	Target Size

A Helicopter may fire all of its weapon systems once during a player turn, but in separate attacks (*i.e. new Sighting TC, new Firing MP, new TH DR*). Since Helicopter have only limited Ammunition Resources it may never fire more RPs/ATGMs than allocated (SSR or HDC). After all ATGM/RP are fired/malfunctioned the Helicopter is recalled.

Helicopter may either combine their MG FP in a Point Attack, make a separate Point Attack or use the MG FP in a Strafing Run vs. four hexes along a specified (alternate) hexgrain.

8.15.7 Strafing Fire Resolution: A Helicopter strafes by first moving to a attack hex, 4 hexes distant and along a (alternate) hex grain. Upon passing the Sighting TC and all AA-Fire the Helicopter fires its halved MG FP (Area Fire) on its initial attack hex. The Helicopter then moves to the next hex along the hex grain toward the target just fired upon, after all AA-Fire, may make another attack on the next target hex four hexes distant. The Helicopter repeats this procedure in every new hex moved into until it occupies the target hex of its initial target.

If attacking a building hex, each level of the building in that hex is attacked with the same IFT DR as a single attack vs. that hex. No TH DR is necessary [**Exc:** vs. an Armored target, in which a Hit must be secured. The TK DR is modified only by the Aerial



AF, Aerial Advantage, and target Facing]. Unlike all other MG TK attempts a Helicopter MG attack affects other unarmored targets in the same hex.

A Original MG attack ≥ 12 results in the permanent breakdown of that weapon. Mark the Helicopter of HDC with the appropriate MG Disabled counter.

8.16 Helicopter Armaments:

8.16.1 The 2.75" and 57mm Rocket

Pods(RP): These are versatile rocket systems employed in the Air-to-Ground role for Helicopter and Aircraft. The rockets are either fired as one combined volley per launcher at a particular target hex, or as a individual shot weapon. The TH process for a RP is based on the proximity to its target hex. After passing the Sighting TC and paying the required Firing MP consult the RP TH Table and add all applicable TH DRM (8.15.51).

8.16.11 Firing RPs as volley: Once a Hit is secured, roll an additional die. The resulting number is the number of IFT/TK DR allowed vs the target/target hex. If the target is hit use the RP TK column and add all appropriate modifiers. If a Infantry unit is the target use the 21FP column of the IFT (only TEM apply). Should both types of targets occur in that hex use the same DR on the different targets and tables.

If no hit was secured roll both dice for the Direction and Extend of Error, using the hexagonal grid reference of a AR counter placed in the target hex. The colored dr indicates the Direction of Error and the halved white dr (FRU) indicates the Extend of Error. The resulting target hex is now attacked with half FP/TK# (FRU), even if friendly units occupy that hex.

8.16.12 Firing RPs as Gun: If the helicopter owner wishes to fire its RPs as individual shot weapons, the same TH procedure applies and the RP receives a ROF of 3, but also a circled B# of 10. If a hit is secured, consult the appropriate TK table and resolve the TK DR. Infantry is attacked on the 8FP column, Soft Targets are killed on a 10 or less and the RP receives a TK# of 9. A miss is simply not resolved.

8.16.2 Airborne TOW/HOT/Spandrell

ATGM: These are the modified airborne versions of the representative ground ATGM of the same name and all ATGM(H) rules, except as stated below, apply. After passing the Sighting TC, spending the required Firing MP and surviving all resulting AA-Fire the TH# is determined according to the TOW/ Spandrell TH Table and all applicable TH DRM (8.15.51) are added.

The airborne ATGM(H) cannot be used against Infantry [**Exc:** Collateral Attack]. Once a Hit is secured find the appropriate TK# and modify it by Aerial AF, Aerial Advantage and AFV Target Facing. The airborne ATGM(H) is not effective past a 60 hex range.

On a Original TH DR of ≥ 11 the complete Launcher that fired is permanently disabled. On a Original TH DR of 12 the Launcher firing explodes and the Helicopter must undergo a 3MC. If passing the 3MC the Helicopter is immediately Recalled. Failing of the 3MC results in the immediate elimination of the Helicopter.

8.16.3 Airborne SAGGER ATGM: This is the airborne version of the USSR ground ATGM of the same name and all SAGGER rules, except as stated below, apply.

After passing the Sighting TC, payment of the Firing MP and surviving all applicable AA-Fire consult the SAGGER TH Table and add all applicable aerial TH DRM (8.15.51). The airborne SAGGER is not effective past a 45 hexes range.

The airborne SAGGER cannot be used against Infantry [**Exc:** Collateral Attack]. Once a Hit is secured consult the the SAGGER TK table and apply Aerial AF, Aerial Advantage and Target Facing as modifiers.

On a Original TH DR of 10 the firing Launcher malfunctions and is marked with a disabled marker. On a Original TH DR ≥ 11 the firing Launcher explodes, causing a 3MC. If the Helicopter passes the 3MC it is immediately Recalled, failing the 3MC results in the immediate elimination of the Helicopter.

8.16.4 Hellfire and Spiral AT-6 ATGM:

These airborne ATGM are guided by a laser seeker which homes on a laser spot projected by the firing Helicopter onto the target. The AT-6/HELLFIRE, which cannot be used against Infantry and/or Unarmored targets [**Exc:** Collateral Attack] has a minimum range of 5 hexes and a maximum range of 120 hexes.

After passing the Sighting TC, payment of Firing MP and all resulting AA-Fire, consult the HELLFIRE/AT-6 TH table and add all applicable TH DRM (8.15.51). Once a Hit is secured check the Hellfire TK table and add Aerial AF, Aerial Advantage and Target Facing as modifiers. On a Original TH DR of 12 the firing Launcher malfunctions and is marked with a Disabled counter.

***8.16.5 40mm Grenade Launcher (GL):**

This nose-mounted grenade Launcher was mounted



under the nose of the helicopter and used mainly during the Vietnam War.

The 40 GL has a maximum range of 20 hexes and cannot affect armored targets [Exc: Colatleal Attacks]. After passing the Sighting TC and payment of the appropriate Firing MP (and all resulting AA Fire) consult the Airborne Grenade Launcher TH Table and add all applicable DRM. Due to the limited traverse of the nose-mount, the 40 GL can only fire at targets within the VCA.

Once a Hit is secured, check the 40mm HEAT column to get the IFT FP of the 40 GL. If fired at infantry in woods, the 40 GL receives a -1 DRM for Air Bursts, just like a Mortar.

Due to the launchers tendency to jam during action, the 40 GL has a relatively low B#. On a TH DR of 12 the 40 GL permanently malfunctions and is Disabled.

***8.17 Doorgunners (Side MG):** Some Helicopter are equipped with side machineguns, mounted in the doors and operated by „Doorgunners“.

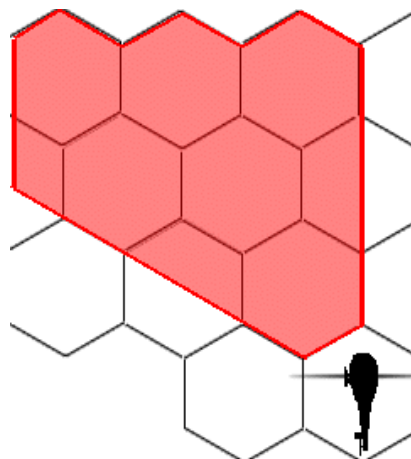
These MG (FP noted on the counter back) have limited traverse. Therefore, the helicopter may fire its side MGs twice in a fire phase, the port-side MG can fire once within the area to the left of the helicopter, and the star-board MG can fire once within the area to the right of the helicopter (See also German vehicle note 66 (SPW 151/16) and its Diagram).

The side MGs have a range of 4 hexes.

To fire the side MGs the helicopter must become CE (thus the crew and any transported passengers become vulnerable to Small Arms fire with a +2 DRM), but no Sighting TC must be passed. An Original Effects DR of 12 malfunctions the MG on the attacking side (i.e. if the port MG fires and rolls a 12, the port-side MG malfunctions), the owner has only **one** repair attempt to fix a Side MG. After that attempt the MG is either fixed or disabled.

Side MGs may never be scrounged.

***8.18 BMG left/right VCA only:** Some helicopter, mostly Observation and Transport helicopter, did mount a MG/Mini-Gun on either their port or starboard side. Due to their rigid mount, they did not have any traverse (hence the name BMG) and can fire only within a certain portion of the VCA.



A Side BMG can never fire within its own hex. The maximum range for the side BMG is 10 hexes and normal Breakdown rules apply.

***8.2 Jet Air-Support (JAS):** JAS is only available by SSR or DYO/Campaign Game purchase and has only limited duration. If available, the owning player will receive a radio, as well as a leader that acts as FO (Forward Observer). If the owning player has OBA as well as JAS available, he may call for both with the same radio, but only one OBA/JAS module may be called for during the same fire phase (i.e. the observer may call for OBA, and after finishing the first OBA mission he may then call for JAS or vice versa).

***8.2.1 Radio Contact:** To use JAS Radio Contact must be established (and maintained) during any PFPh/DFPh. Whenever Radio Contact is established and JAS use is requested the owning player must check for Forward Air Controller (FAC) access. Whenever Radio Contact is lost the mission is aborted and the owning player must reestablish Radio Contact and check for FAC access again.

***8.2.2 FAC Access:** Once radio Contact is established the owning player must check for FAC access by drawing chits of a prearranged pile. The pile assembly depends on owning nation and combat theater. If a black chit is drawn, FAC Access is granted and the player may continue his actions during this PFPh/DFPh. Whenever a red chit is drawn, no FAC Access is granted and the owning player must end his actions for that player turn.

JAS is permanently lost whenever the third red chit is drawn.

***8.2.3 Mission Configuration:** Once Radio Contact and FAC Access is established the owning player must roll on the Mission Configuration Table for the number of Aircraft, Aircraft armament, and mission

duration [EXC:a SSR may state the exact mission configuration, so no dr on the Configuration Table is



necessary]. The availability of Aircraft and Armament depends on nationality and combat theater.

***8.2.4 Placing a AR:** If Radio Contact, FAC Access

and Mission Configuration are resolved the owning player places a AR marker per aircraft available in its projected target hex, which ends his actions for this PFPh/DFPh (1).

The AR marker may be placed in any hex within the LOS of the FO that contains a Known enemy unit and must be aligned with the Northern board edge.

***8.2.5 JAS Accuracy:** During the next PFPh/DFPh (2) the owning player must maintain Radio Contact and may then roll one die, which indicates the entering direction of the aircraft(s) aligned with the AR. This ends the JAS actions for that PFPh/DFPh (2).

After maintaining Radio Contact the owning player may now (PFPh/DFPh -3) roll for accuracy - which is dependent on nationality and combat theater. The following cumulative drm apply to the accuracy check:

drm	Cause
-1	All units in target hex are non-Concealed
-1	≥1 unit in target hex has attacked a friendly unit in previous' turn(s)
-1	target hex contains Known Enemy fortification
-1	JAS has attacked in the previous Turn and Flight Direction is known.
+1	All units in target hex are Concealed
+1	No unit in target hex has yet performed <i>any</i> action since game start
+x	LOS Hindrance between FO and Target Hex

If the dr resulted in a accurate hit, the aircraft will attack the target hex and exit the mapboard in flight direction.

If the dr resulted in a miss, the owning player must roll for Direction and Extend of Error normally, using the OBA procedure. The Extend of Error is always halved (FRD) for JAS. The JAS will then attack the new target hex and exit the mapboard in flight direction.

If more than one aircraft is available, each aircraft must separately roll for accuracy.

***8.2.6 JAS Return:** After dropping a bomb the aircraft is normally removed from play, but if another bomb(s) is available, the aircraft will reenter the next DFPh/MPh (4) from the direction it exited the mapboard.

The owning player must however maintain Radio Contact and place another AR. After rolling for accuracy again, the aircraft attacks and then exits

the mapboard and ends JAS actions for that Player Turn.

***8.2.7 JAS Correction/Switching Targets:** As long as the FO is observing (calling fire) for the same aircraft, the owning player may freely correct his AR within 6 hexes (even if changing to a entirely different target) without the need to gain FAC access again.

Ex: A A-1 Skyraider just attacked a Known pillbox and a additional squad in hex 34Q5 and exits the mapboard(DFPh). The FO can now (PFPh) move his AR within 6 hexes of Q5, provided he has LOS to it, and the A-1 will attack the new target hex during its next attack (DFPh). If the FO would've instead left the AR and maintained Radio Contact, the A-1 would have attacked Q5 in the PFPh.

A correction/target change beyond 6 hexes requires another chit draw for FAC access, even if the same aircraft is attacking.

***8.2.8 JAS Armaments:** To ease the use of JAS the armaments are only available in their general categories.

***8.2.81 .50cal, 20/30mm Cannons (M39, Vulcan, GAU-8/A):** JAS equipped with 20/30mm Cannons may either attack with a Strafing Run or as part of a Bomb attack.

***8.2.81.1 Strafing** is conducted by placing the JAS counter to a attack hex, 4 hexes distant to the target hex and along a (alternate) hex grain. A JAS Strafing Run does not have to pass a Sighting TC, but is subject to AA fire as soon as the jet declares its Strafing Run and is placed in the attack hex (4 hexes distant to the target hex). Upon passing any applicable AA fire the JAS attacks its initial target hex with either halved IFT FP or, if used vs an Armored Target after passing a TH DR, with the appropriate TK#. The JAS then moves to the next hex along the (alternate) hex grain toward the initial target hex, and after all AA fire, attacks the next target hex four hexes distant. The JAS repeats this procedure in every new hex moved into until it occupies the initial target hex, after which it exits the mapboard in flight direction.

A JAS Strafing Run vs an AFV has a Basic TH# of 10 and is modified by the following cumulative TH DRM:

DRM	Condition/Cause
+X	SMOKE Hindrance as per E.6
+3	Target is in Building/Woods/Rubble/ Orchard in Season
+1	Target is in Brush/Grain/Marsh/Crag/ Graveyard



+1	Mist/Dust/Heat-Haze
+1	Target is in Motion
-1	Target is AFV/ or boat in water
-2	Target is using VBM
-1	Target has been attacked by a friendly Helicopter/JAS during this MPh
+/- X	Target Size

After a Hit is secured, the TK DR is modified only by the Aerial AF, Aerial Advantage, and target Facing. If attacking a hex that contains both, unarmored and armored targets, the JAS must first secure a hit against the armored target and then attacks the armored target as well as the unarmored one with the same DR - if the Strafing Run misses the armored target, the attack is still resolved against the unarmored target. A Original ≥ 12 DR results in the permanent breakdown of that weapon.

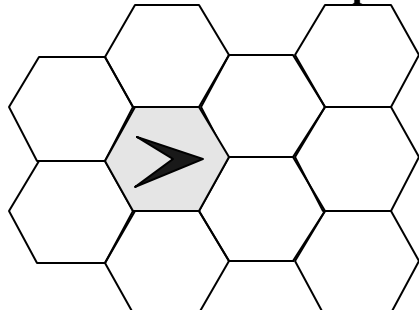
***8.2.81.2 Combined** with a Bomb attack, the Cannon may attack all targets in the impact hex with full FP/TK# - TEM applies normally - before the bomb attack is resolved. No TH DR is necessary. A Original ≥ 12 DR results in the permanent breakdown of that weapon..

***8.2.82 Iron Bombs:** JAS equipped with Iron Bombs attack the target hex plus one hex in flight direction. All targets are attacked with one IFT/TK DR per hex - TEM apply normally. A Iron Bomb attacks on the 36FP column.

8.2.83 Napalm Bombs: JAS equipped with Napalm Bombs attack the target hex plus 3 hexes in flight direction. All targets are attacked with one IFT/TK DR per hex - TEM apply normally. A Napalm bomb attacks on the 24 FP column and creates an *automatic* Blaze in each attacked hex.

***8.2.84 Cluster Bombs:** Jas equipped with Cluster Bombs attack the target hex plus all adjacent hexes plus the 3 hexes that are 2 hexes distant in flight direction. Cluster Bombs attack all targets with one TK/IFT DR on the 30FP column per hex.

8.2.84 Cluster Bomb Impact Diagramm:



= **Impact hex/
flight direction**

8.2.85 SMOKE Bombs: JAS equipped with SMOKE Bombs attack the target hex plus two hexes in flight direction. A SMOKE Bomb places a white SMOKE counter (+3) in every hex. All other SMOKE rules apply normally.

8.3 Air-to-Air Combat: Aerial Combat occurs automatically when two or more opposing Helicopters (only) are on the battlefield (even if one is damaged). During the first Mph the Helicopters oppose each other the Attacker must announce the Aerial Combat (AC) and the AC is then resolved sequentially.

First the Attacker may attempt to destroy/damage the opposing Helicopter with its MG/AutoCannon FP on the *column of the IFT. On a KIA result the target Helicopter is immediately eliminated and may not fire back. A K result damages the target Helicopter, which may withdraw from AC and exit the mapboard or it may remain in AC and attack now.

If the target Helicopter withdraws, the Attacker is eligible for another opportunity to fire at the withdrawing Helicopter at half FP, but with a -1 DRM. If more than two Helicopters are on the mapboard, the Attacker still has the first opportunity to fire in AC, but if its opposing more than one enemy Helicopter it must declare which target Helicopter it chooses.

A IFT result $>K$ has no effect and now the Defender makes its AC DR. If more than one defending Helicopters are on the mapboard both attack in sepperate attacks. If no Helicopter was able to eliminate/force to withdraw the Opponent, both/all participating Helicopters are locked in a "Distant Melee" and may not conduct any actions until the CCPh [Ex: Changing VCA]. While locked in a "Distant Melee" the Helicopters are considered flying at LOW and are subject to to Air-Defensive Fire (8.4) during the ensuing Fire Phases.

During the following CCPh the AC is repeated, this time the side with more Helicopters may attack first (if both sides have the same amount of Helicopters on the mapboard, the Attacker fires first again). Schould the first sequential round of AC still have no effect, the AC is repeated during that CCPh until the/all Helicopters of one side is either destroyed or withdrawn.

A helicopter may always voluntarily withdraw from AC, but is subject to the extra shot from its opponent(s) and is **immediately** removed from play (but without CVP).

Aerial Combat is subject to the following cumulative DRMs:

DRM Cause



-1	Target withdraws
-1	Firer is Attack Helicopter
-1	Target is damaged
-1	Target has all ATGM/RP still loaded
-1	Target is Transport Helicopter
-1	Target has no functioning MG/AutoCannon
+1	per every 5 AF (FRD) of Target
+1	Firer is damaged
+1	Firer has all ATGM/RP still loaded
+1	Firer opposes more than one Helicopter
+/- x	Target Size
- 1/2	Ace Pilot

A Original DR ≥ 12 results in MG/AutoCannon malfunction and the Helicopter **must** withdraw from AC.

8.31 Eliminated Helicopters: Whenever a Helicopter is eliminated (AC or Air-Defense) the Helicopter crashes in its hex and causes an Automatic Blaze.

Units in the crash hex are **not** effected by the crash other than being forced to move/rout out of the Blaze hex (thus preventing the "sleaze" usage of Helicopters and AC).

8.4 Air Defense: AA fire vs Aerial units (Helicopters and JAS) can only be conducted by AA-capable weapons that have not yet exhausted their fire capabilities during that turn. Only AA-capable weapons may set up in AA mode. Helicopters however may also be attacked by Small Arms fire.

A AA counter must be placed on any weapon that attacks an Aerial target while not in AA mode [**Exc:** Vehicular AAMG do not use AA counters and may fire at Ground/aerial targets without consideration of AA mode]. See also E7.5

8.4.1 Light AA Fire: JAS is always out of range to light AA fire, whereas Helicopters are assumed to be out of light AA Fire range, unless conducting a Sighting TC, flying on NOE, or while landing/starting and when landed. Only AA-Guns with IFE, Infantry-manned HMG, vehicular AAMG, AutoCannons and AA capable MA/CMG may fire at Helicopter as light AA fire. A squad with Spraying Fire apability, that is not yet marked with a fire marker may fire at a Helicopter that is within its normal range. A squad attacks with its IFP on the * column of the IFT, but the Helicopters Target Size and the +2 for moving/ motion apply as DRM. A squad/HS firing AA at a Helicopter is immediately marked with a TI counter.

A MG/AutoCannon loses its ROF when it fires at an Aerial target unless it uses its IFE. A light AA

weapon may not attack the same Aerial target more than once in the same hex per Fire Phase, unless the target expends another MP.

A vehicle conducting light AA fire during its own player turn is subject to Bounding Fire penalties if it is in Motion, has already spent MP during that Mph, not marked with a Opportunity Fire marker. Light AA fire is resolved on the * line of the IFT or, after making a TH DR on the SABOT/APCR TK Table.

If resolved on the IFT it is not modified by TEM/Hindrance other than LV/SMOKE. Helicopters are not subject to FFMO DRM but are subject to the Target Size DRM, even if the IFT is used.

Whenever a TK DR is used the AF are subtracted from the TK#.

When a TH DR is used and a Turret Hit is scored, the Turret AF is used for the TK DR, but the colored dr is also resolved vs the weapons pylons. On a colored dr ≤ 2 the Weapons Pylon is hit, and all weapons of that side (ATGM/RP) malfunction immediately.

On a Final IFT/TK DR $<$ the */TK# the Helicopter is eliminated and immediately crashes (8.31), if the Final IFT/TK DR is exactly the */TK# the Helicopter is damaged and must withdraw from the mapboard. If the Final IFT/TK DR is $1>$ than the */TK# the Helicopter must break off its actions and evade (8.4.11).

8.4.11 Evading: A Helicopter forced to evade must immediately change its Flightlevel to LOW and move as far as possible (in MP) to its friendly boardedge, where it remains until the owners next Mph.

8.4.12 Withdrawal: A Helicopter that withdraws is handled exactly as a Recalled AFV and must move off the closest friendly boardedge (in MP) using LOW.

A damaged/evading Helicopter is still subject to light AA fire, as it spend its MP to withdraw/evade.

8.4.2 Heavy AA Fire: Only AFV/Weapons that carry the AA note on their counter may use heavy AA fire vs Helicopter/JAS.

Heavy AA weapons are divided into the following categories:

- **AA-Guns**
- **Light SAM (Surface-to-Air Missiles)**
- **Heavy SAM**

AA-Guns and Light SAM are capable of firing at **all** Aerial units, while Heavy SAM may **not** fire at units that fly on NOE.

8.4.21 Radars: Most heavy AA wapons are equipped with Radars. These are Range-only-Radar (ROR) and/or Tracking Radar (TR) as indicated on the counter back.



A ROR equipped weapon is eligible to a -1/-2 TH DRM, while a TR negates the moving Target TH DRM.

8.4.21.1 Radar elimination: A AFV/Gun equipped with a Radar, that is attacked must always check for Radar elimination on a Turret Hit. If a Turret Hit was scored, another dr is made and on a dr ≤ 2 the Radar is eliminated and may not be utilized for the remainder of the game.

During a CG the owner may attempt to repair the radar during the RePh. On a repair dr of 1 or 2 the Radar is repaired, while any other dr permanently eliminates the Radar.

8.4.22 Missile Seeking Systems: All SAMs are equipped with a Seeking system, which is represented by a generic DRM.

A Missile equipped with a Heat Seeker (HS) is subject to a -1 TH DRM, a SAM equipped with a Radar Seeker (RS) is subject to a -2 TH DRM, whereas a Missile equipped with a Image Seeker (IS) is subject to a -3 TH DRM.

8.4.23 AA-Guns: AA-Guns may attack any Aerial target, but must be in AA mode, or pay the TH penalty for non-AA mode. A AA-Gun firing at a Aerial target has its ROF lowered by 1, and is also subject to a further reduction of ROF by 1, if it sets up in Woods and Orchards. A AA-Gun may not fire at Aerial units if it sets up in a Building [Exc: A Gun may use AA Fire if setup on a Rooftop, provided it is a very-small / small Target Size].

8.4.23.1 Multiple Hits: Most AA-Guns are eligible for multiple TK DR (as indicated on the counter back) and may therefore attempt multiple TK DR per hit. After each TK DR the Owner must declare if he wants to use the just rolled TK DR or attempt another one. He may not say afterwards that he rather uses the first DR than the third one.

8.4.24 Light SAM: These are portable, shoulderfired Surface-to-Air Missiles, which are used at Platoon level and give the Infantry a weapon to challenge opposing Aircraft/Helicopter.

All Light SAM are reloadable and have 2PP.

8.4.24.1 Range: All Light SAM have a minimum range (usually between 5 and 10 hexes) and a maximum range (80-100 hexes) beyond which they may not be used.

8.4.24.2 To Hit: To secure a hit with a Light SAM, check the TH Table printed on the counter back and add all applicable Aerial TH DRM.

8.4.24.3 To Kill: When a hit is secured, consult the SAM TK Table and add the appropriate AF to the DR.

If a Turret Hit was secured, the colored die of the TH DR is resolved vs the weapons pylons (Helicopter

only) and on a dr ≤ 2 the pylon is hit and all ATGM/RP of that side are malfunctioned immediately.

If the TK DR is 1> the TK#, the Helicopter must break off its actions and evade (8.4.11).

8.4.24.4 Leadership: A leader can use a light SAM at full effect, provided he neither operates nor directs any other form of fire during that player turn. Otherwise a leader may add his leadership modifier to the TH DR.

8.4.24.5 Usage: A squad may fire one light SAM without forfeiting its Inherent FP and may never fire more than 2 light SAM during a Fire Phase. A light SAM may not be fired during the AFPh, unless the unit is marked with a Opportunity Fire marker.

8.4.24.6 Usage Restrictions: A light SAM may never be fired from inside a Building or Pillbox. If fired from a Woods or Orchard in Season Location the light SAM may only be used if the owning squad has not fired yet, and by forfeiting its Inherent FP.

8.4.25 Heavy SAM: Heavy SAM utilize the same rules as light SAM with the exception that they are only Vehicular or Gun mounted and are allways considered in AA mode, except when moving.

Heavy SAM may never use Bounding Fire or Intensive Fire.

Some Heavy SAM have a ROF, which simply indicates that the Launcher has more than one missile at the ready.

Heavy SAM may not fire from a Building/Woods/ Orchard in Season hex.

8.4.26 Heavy AA fire vs JAS: Once a hit vs a JAS aircraft is secured, check the SAM/AA-Gun TK Table and resolve the TK DR, which receives no DRM.

A TK DR < the TK# eliminates the JAS, which is simply removed from play, but is counted for CVP. A TK DR = the TK# forces the JAS to withdraw and ends all actions of this JAS unit for the remainder of the game.

Ray: Whenever this Word Document is brought into ist final form (PageMaker?) I think we should check the numbering. I think it's not really consistent (?)