[3.0] GAME EQUIPMENT

[3.1] THE GAME MAP

The raid map is a composite map developed specifically for the scenarios given in the game. It is representative of the type of terrain in which most raids have taken place. Such areas were fairly isolated and could not be reinforced swiftly enough by the defender to halt the raids, although many raiding forces took heavy casualties while performing their missions. Note: The Fortified hexes in Scenario 15.3 and the redoubt hexes in Scenario 15.6 do not exist in any other Scenario.

[3.2] THE PLAYING PIECES

There are several different types of playing pieces among the die-cut counters. First, there are the Combat UnilS, representing the infantry and heavy weapons teams of from two to four men. Then, there are the Artillery Markers, which the Player employs to display the use and effect of artillery and mortar fire which he calls in from units on or off the map. Next, there are the Vehicle Counters, which are optional. These represent the individual vehicles that may be assigned in a scenario to one side or the other. Finally, there are the other Game Markers which are used to display and identify the effects of combat, simulate smoke, represent mines, etc.

The Summary of Unit Types briefly describes each unit/marker.

[3.3] SUMMARY OF UNIT TYPES

[3.3.1] Combat Units:

Four-man Fire Team. Basic infantry unit.

Two-man light machine gun section. Identified as LMG in the rules.

Three-man heavy machine gun section. Identified as HMG in the rules.

Two-man Bazooka team. See Optional Vehicles and Weapons, Section 14.0.

Two-man 106mm recoilless rifle team. See Section 14.0.

60mm mortar and two-man crew. See Indirect Fire, Section 9.0.

81mm mortar and three-man crew. See Section 9.0.
[3.32] Vehicles:
- Tank. See Section 14.0.
- APC (armored personnel carrier). See Section 14.0.
- Truck. See Section 14.0.
- Helicopter transport. See Helicopters, Section 13.0.
- Helicopter gunship. See Section 13.0.

[3.33] Command Counters:
- Platoon headquarters. See Section 5.0.
- Artillery impact marker, 60mm. See Indirect Fire, Section 9.0.
- Artillery impact marker, 81mm. See Section 9.0.
- Artillery impact marker, 105mm. See Section 9.0.
- Artillery impact marker, 155mm. See Section 9.0.
- Suppression. See Fire, Section 7.0.
- Current Strength marker. See Section 7.0.
- Mine. See Section 14.0.

Wreck. See Section 14.0.

Game-Turn Marker.

[3.4] GAME SCALE
Each hex represents 25 meters from side to side. Each Game-Turn represents 2 minutes of real time.

[3.5] GAME EQUIPMENT INVENTORY
A complete game of Raid should include the following parts:
- One Sheet of die-cut Counters (200)
- One Game Map
- One Rules Folder
- One plastic Die
- One Game Box/Coversheet Assembly
- *not included with subscription edition

If any of these parts are missing or damaged, please write:
Customer Service
Simulations Publications, Inc.
44 East 23rd Street
New York, New York 10010

Questions regarding the rules of the game will be answered if accompanied by a stamped self-addressed envelope and phrased to be answered by a simple one-word reply. Send rules questions to the above address marked “Rules Question: Raid!”

[3.6] NOTE ON TERMINOLOGY
The term “Observation Points” is used throughout the Raid rules in reference to various game functions. Observation, Command Control determination, Fire Combat, and other rules utilize the concept of Observation Points. Each particular rules section explains its use of this concept fully, but Players are advised to fully understand the concept in order to avoid confusion.

[4.0] SEQUENCE OF PLAY

GENERAL RULE:
Each game or scenario of Raid is composed of a number of Game-Turns during which both Players may have their units either fire or move and also bring on/off map artillery to bear on the situation. Each Game-Turn is continued by the same Sequence of Play which tells the Players the order in which they can fire, move and use artillery.

[4.1] SEQUENCE OUTLINE
A. Command Control Phase: The Players check the relative positions of their units and Headquarters to determine which units are in or out of Command Control (see Command Control, Section 5.0). Partial strength units may at this time reorganize (see Case 7.54).

B. Direct Fire Phase: The Players roll the dice and determine who is the first Player. This Player may then cause one or more of his units to fire at any unit of the second Player. Then the second Player may cause one or more of his units to fire at any unit of the first Player. The Players continue to alternate attacks until either all units capable of doing so have fired or both Players elect to pass (see Fire, Section 7.0).

C. Movement Phase: The Players roll the dice and determine who moves first. The first Player then moves a unit or stack of units hex by hex across the map. While he is executing this move, the second Player may interrupt him and attack the moving unit(s), using Opportunity Fire. After the first Player completes moving his first unit(s), the second Player moves one of his units or a stack of units. When he does so, the first Player may attack the moving unit(s) with Opportunity Fire. Players continue to alternate moves until all units have moved or both Players pass (see Movement, Section 8.0).

D. Suppression Marker Removal Phase: The Players remove all Suppression markers which have been imposed on units as a result of fire.

E. Indirect Fire Phase: Indirect Fire and Smoke markers are removed from the map (these have been placed on the map the previous turn). After consulting their Indirect Fire Plots, the Players execute any plotted Indirect Fire, placing markers on the map. Unlike Fire and Movement, it is not necessary to alternate Indirect Fire attacks, so long as all fire is eventually executed. Finally, both Players may plot future Indirect Fire (see Indirect Fire, Section 9.0).

F. End of Game-Turn: With the conclusion of the Indirect Fire Phase, the Game-Turn is completed. Note the passing of the Turn on the Turn Record Track on the map and begin a new Game-Turn.

[4.2] DETERMINING THE FIRST PLAYER
Both the Fire and the Movement phases require that the Players determine who goes first in each Phase. This is because it is often advantageous to be the first Player to move or shoot (if you have two men looking down each other’s rifle barrels at 50 meters, the first guy to shoot will probably kill his enemy). The easiest way to determine this is to make one side “odd” and the other side “even.” If, on a die roll, the number rolled is odd, that Player becomes the first Player for that Phase.

[5.0] COMMAND CONTROL

COMMENTARY:
One of the main elements in a successful small-unit operation of any kind is the generally high calibre of the unit commanders. The force whose leaders are truly flexible under any conditions, and who inspire their men to give their best at the worst of times, will usually be the one that completes its mission successfully. In any case, small units can function no more effectively than large ones without some sort of Chain of Command. After all, someone must give the orders. This makes the Command Control section very important as the rules bring the elements of unit cohesion and control into play.

GENERAL RULE:
Combat units are in or out of Command Control. To be in Command Control a combat unit must be within the Command Radius of the Command Counter that they are directly subordinate to. The Command Radius is measured in Observation Points. The combat units must also conform to the Chain of Command by being within Command Radius of its controlling Command Counter.

CASES:

[5.1] CHAIN OF COMMAND

[5.11] All combat units are subject to a Chain of Command which works as follows: the Platoon Headquarters is the highest controlling unit. All other units are subordinate to a particular Platoon Headquarters and to no other, with the exception of Indirect-Fire units. Each Platoon Headquarters has three squads assigned to it, along with several MG sections. Each Squad consists of two Fire
Teams and a Squad Leader. The Squad Leader must be within Command Radius of his respective Platoon Headquarters to be in command. Both sides in the game are organized exactly the same, except that Bravo Force only has two Platoons.

[5.12] All combat units are designated as to their respective Platoons and Squads by use of a number and letter system. The system contains, in order, the letter of the Fire Team, the number of the Squad and the number of the Platoon.

Example: Fire Team B/2/1 is "B" Team, 2nd Squad, 1st Platoon. MG sections have a number for their respective Platoons only as they were normal assigned to Platoons on a permanent basis. All MG's and Bazookas numbered 1 belong to 1st Platoon. On-map Artillery (see Section 9.0) and 106mm Recoiless Rifles (Case 14.23) have no designations as they are usually a Company-level asset.

[5.2] COMMAND RADIUS

The Command Radius is the range within which the Command Counters and the Squad Leaders (see Case 5.22) can still exercise control over their assigned combat units.

[5.21] If a Line of Sight (see Section 6.0) can be traced between a given Squad, MG section or On-Map Artillery unit and its Platoon Headquarters, the assigned Squad Leader has an Observation Range of eight (8) Observation Points. If a Line of Sight cannot be traced, the Command Radius is six (6) Observation Points.

[5.22] All Fire Teams designated "A" are considered to contain the Squad Leader; there is no Squad Leader counter. The two Fire Teams that make up a particular Squad must be within six Observation Points of each other at the beginning of the Command Control Phase (see Section 4.0) or before fire is allowed. If "A" Fire Team is destroyed, "B" Fire Team automatically becomes Squad Leader. (Players may want to replace the "B" Team counter with the destroyed "A" Team for their convenience).

[5.23] Combat units are judged to be in or out of Command during the Command Control Phase of every Game-Turn. Effects of Command Control last for the entire Game-Turn.

[5.24] Platoon Headquarters counters do not represent actual personnel; they merely symbolize the effect that the unit leadership present in combat situations. They must always be stacked with a combat unit (or units) of any type and take on the Movement Allowance of the unit they are stacked with. They do not count against the normal unit stacking limit (see Movement, Section 8.0). No more than two (2) Headquarters may be in the same hex at the end of a Game-Turn. There is no direct consequence of killing a unit stacked with a Headquarters. The command is considered to have passed immediately to the nearest friendly unit in the same Platoon. The Command Counter is simply removed from the top of the unit that was killed and is stacked with the closest friendly unit of the same Platoon, regardless of the number of hexes between the two units originally. It should be noted that while such activity has no direct impact, it could have an indirect impact if the nearest friendly unit of the same Platoon is positioned so that it would put the other units of the Platoon out of the Platoon Headquarters' Command Radius.

[5.25] A Headquarters may move independently of a combat unit only to move from one unit to stack with another. In other words, Headquarters may change stacks during the Movement Phase. They have a Movement Allowance of ten (10) Movement Points for such purposes and are subject to all movement rules (see Movement, Section 8.0). They are not subject to Opportunity Fire (see Section 8.0) during this movement. They must always be stacked with a friendly unit at the end of a Movement Phase.

[5.3] EFFECT OF COMMAND CONTROL

[5.31] A unit out of Command (outside the Command Radius) of a Headquarters or Squad Leader may not fire during the Direct Fire Phase.

[5.32] On-Map Artillery (see Indirect Fire, Section 9.0) must be within the Command Radius of any Platoon Headquarters in order to fire plotted Indirect-Fire missions. Such units that are found to be out of Command during the Command Control Phase may not fire. No mission may be plotted for the unit in question until the owning Player brings it back into Command. The unit may then be used normally.

[5.33] Off-Map Artillery is always considered to be in Command Control for all firing and spotting. Whether or not it can be used will depend on the status of the unit spotting for it.

[5.34] Units that are out of Command Control have a Movement Allowance of three (3) Movement Points (see Case 8.1).

[5.35] Units that are out of Command Control have an Observation Range of five (5) Observation Points (see Case 6.1).

[5.36] Command Control does not apply to Helicopters (see Section 13.0), which are generally considered to be out of Command during the Command Control Phase may not fire. No mission may be plotted to be out of Command during the Command Control Phase may not fire. No mission may be plotted.

[6.0] OBSERVATION

GENERAL RULE:

In Raid, a unit must be able to observe a target before it can engage it. The ability of a unit to "see" a target is determined by the distance from the unit to the target and the target that lies between them. Before a Player can use one of his units to fire at a target or to spot a target for artillery, he must first establish that the Line of Sight between his unit and the target is not blocked. He does this by tracing a straight line from the center of his unit's hex to the center of the target's hex. If this line passes through terrain costing too many Observation Points, then the Line of Sight to the target is blocked; the unit does not see the target and may not fire at it or spot it for artillery. Line of Sight may be also blocked if there is an intervening contour line between the sighting unit and the target unit (see Case 6.2). A unit may observe or fire in any direction (Exceptions: see Cases 7.9 and 14.1).

CASES:

[6.1.1] OBSERVATION RANGE

Observation Range is how far a unit can see and is determined through the number of Observation Points expended by a unit to see into or through a particular hex. Each hex costs a certain number of Observation Points to look into or through (see Terrain Effects Chart).

[6.11] Each ground unit has an allowance of ten (10) Observation Points. These points are expended by hex by hex as a unit attempts to establish a Line of Sight through a particular target hex. If the Line of Sight passes through terrain costing more Observation Points than the unit has available, the Line of Sight is blocked. Observation Points may be used any number of times by a single unit or group of units, during the same Game-Turn at any time. They may not be transferred from one unit to another at any time, nor may units in the same hex combine their Observation Points to see farther.

Example: A unit in hex 3620, a Heavy hex, could see and be seen by an Enemy unit in hex 3222, another Heavy hex; it costs 6 Observation Points to see into the Heavy hex and 3 Observation Points to see through the 3 intervening clear hexes. If the unit were attempting to see an Enemy unit in hex 4218, a Building hex, the Line of Sight would be considered blocked; the Building hex costs 10 Observation Points to stack into and there are 6 intervening clear hexes. These make a total of 16 Observation Points, well over the unit's maximum of 10 Observation Points.

[6.12] If the Line of Sight passes directly along a hexside, the Observation Point cost is determined by the most expensive terrain in either of the two adjacent hexes.

[6.13] Observation Points are expended in the hex occupied by the target unit and not in the hex occupied by the spotting unit.

[6.14] A unit may trace a Line of Sight into (not through) a Heavy or Building hex.

[6.2] CONTOUR ELEVATION

The continuous red lines on the map are Contour Lines. As on a real tactical map, these lines represent different levels of elevation (height). In Raid, the difference in levels of elevation are determined by the height of terrain (10 meters). For Line of Sight purposes, the Players should determine what height the sighting unit is at, what height the target unit is at, and whether the height of the terrain lying between the two units is sufficient to block the Line of Sight. By locating the position of a hex in relation to the contour line on itself, a Player may determine the height of the hex and the height of any terrain in the hex.

[6.21] Any hex on the map is located somewhere in relation to the contour lines which serve to define the hills and ridges. For game purposes, all of the bottom land lying between the various 10 meter contour lines is defined as being 0 meters high. All of the hexes lying between the 10 and 20 meter lines are defined as being 10 meters high, and finally, all of the hexes enclosed by the 20 meter lines is defined as being 20 meters high (see Case 6.25).

[6.22] In any given situation, one unit may or may not be higher than the other. Any terrain between the two units which is higher than both units, must block the Line of Sight.

[6.23] If terrain exists between the two units which is higher than the lower unit, but the same height or lower than the higher unit, then it blocks the Line of Sight only if it is closer (in hexes) to the lower unit than the higher unit. If the two units are the same distance from the terrain between them then the Line of Sight is not blocked (Exception: see Case 6.24).

[6.24] In addition to other LOS restrictions, a unit in a hex not immediately adjacent to a contour line may not spot units at any lower elevation that are less than seven (7) hexes away.

Example: A unit in hex 3419 could see and be seen by an Enemy unit in hex 3424. If the unit were in hex 3418, however, it could not see or be seen by the Enemy unit in 3424.

[6.25] When a Line of Sight is being traced through a Building hex from a higher elevation, that hex is considered to be ten (10) meters higher than its actual elevation. When a Line of Sight is being traced into such a hex, that hex is considered to be at its actual elevation.

[6.26] When units at the same elevation are both higher than the terrain between them, count the intervening hexes as if they were all clear terrain, regardless of what type of terrain is actually present in those hexes (however, see Case 6.25).
In the diagrams, the lines of sight are shown as they might look from the side. The vertical scale is exaggerated for clarity. The code letters under each hex number are the contour lines that that line of sight clears.

[6.3] EFFECT OF MOVEMENT AND COMBAT ON OBSERVATION
All units are deployed face-down so that only the owning Player knows what they are. While units are face-down, the Enemy Player does not know exactly what kind of deployment the Friendly forces have made. Units are not turned face-up until spotted by an Enemy unit. The owning Player may look at his own units at any time during the Game-Turn. Once a unit is spotted, it remains face-up as long as an Enemy unit retains it within its Observation Point Range. If a spotted unit can duck behind a Building or into a Heavy hex or move out of Enemy Observation Range, the owning Player may immediately conceal the unit again by turning it face-down. So long as a unit is face-down, it may not be the target of direct fire.

[6.31] If a Friendly face-down unit fires at an Enemy unit, that Friendly unit is automatically spotted and is turned face-up immediately. At this time, the Enemy Player may use Overwatch Fire (see Overwatch Fire, Case 7.6) if he has a unit that can see the Friendly unit when it fires. If the Friendly unit is not within Observation Range of an Enemy unit, it is placed face-down again.

[6.32] If a face-down unit moves within Observation Range of an Enemy unit, it is automatically spotted (and immediately turned face-up). At this time the Enemy Player may use Opportunity Fire (see Fire, Section 7.0) to fire on the moving Friendly unit. If the Friendly unit subsequently moves out of Observation Range of all Enemy units even during the same Game-Turn, it is placed face-down again.

[6.33] If a face-down unit neither moves nor fires, it remains face-down until an Enemy unit is close enough to be within Observation Range.

[7.0] FIRE

GENERAL RULE:
In order to fire at an enemy target, a unit must be able to see the target. Other than this, there is no absolute prohibition on a unit firing at another unit. In the Direct-Fire Phase, a Player may attack an enemy unit. During the Movement Phase, a Player may only attack Enemy unit(s) that are moving or firing. When an attack is executed, its result is determined by the Fire Routine, which considers the unit that is firing, the target, the range to the target and any protection afforded the target by terrain.

C A S E S:

[7.1] FIRE ROUTINE
To make an attack, a Player simply states that he is attacking. He identifies which of his units are firing and he identifies the target.
Step 1: The attacking player determines the range between the firing unit(s) and the target unit. Range is defined as the nearest hexes between the firing and target units counting the target hex but not counting the firing hex.
Step 2: The attacking Player then determines whether or not he has sufficient Observation Points to see the target unit. This, in accordance with the Observation Rules (5.0), will depend on the terrain in the target hex and the terrain between the firing and target units.
Step 3: The attacking Player now determines the type of weapons in the firing unit (LMG, Semi, Auto, etc.) and cross-indexes the range and the type of weapon to see what modifications (if any) are made to the die roll. This is done on the Range Attenuation Table (see Case 7.2, Range Attenuation Table).
Step 4: The attacking Player now determines how many men are firing in each unit (there are never more than four men in a single ground unit and all men in the unit must fire at the same target if the unit fires at all). He cross-references this number (or unit type if a machine gun) on the Combat Results Table, which also will take into account what type of terrain the defending unit is in. After locating the column most appropriate to his situation, the Attacking Player rolls the die, adding or subtracting any modifications from the Range Attenuation Table. The result of the die roll is immediately applied to the target unit by use of the appropriate current strength marker which represents the number of men remaining in the target unit after the attack.
Example: A unit of three men with Semi-automatic weapons fires on a four man Enemy unit in Medium terrain at a range of three hexes. Having determined the range to the target and the type of weapons being fired, the attacking Player goes to the Range Attenuation Table. It shows that a Semis fired at a range of three hexes receive no modification to the die roll for combat. The attacking Player now goes to the CRT. He reads down to the section titled "Defender is In" and finds the line for Medium terrain. He reads across this and finds the column for three men firing. At this point he rolls the die. If, for example, he rolled a 4, he would see that he had inflicted one casualty on the target unit and had also suppressed it. A current strength marker with a 3 on it is now placed under the target unit, showing that there are three men left in the unit. Then a suppression marker is placed on top of the unit. If the attacking Player were firing with an LMG he would look at the Medium terrain line and find the "L" column on that line. In the example given, firing into Medium terrain at three hexes, an LMG also receives no die roll modification. The attack would be rolled on the L (Medium) column (this is actually the same column used in the attack with 3 men). A die roll of 4 in this case also means one casualty inflicted on the target unit with the appropriate markers being placed on the target unit immediately.

[7.2] RANGE ATTENUATION TABLE
(see page R12)

[7.3] RESTRICTIONS ON FIRE
[7.31] A unit may not fire more than once per Game-Turn, nor may it fire if it moves (Exceptions: see Case 7.4, Cones of Fire; and Section 10.0, Close Assault).

[7.32] A unit may suffer a combat result which prohibits it from firing or which reduces its effectiveness. See the Explanation of Combat Results, Case 7.8.

[7.33] A unit may not be attacked more than once during the Direct-Fire Phase. Note that when a Player attacks he may use more than one unit to fire with (see Case 7.5). When he announces the attack he identifies which units are firing. He may not add to this listing after he has stated it. Nor may he attack at the same target in a later attack in the same Phase.

[7.34] If a Player states an attack, he must execute that attack. He is responsible for calculating the chance of success before he opens his mouth. If he states an attack which is then found to make no sense, it is still considered to have been executed. In effect, the firing units have wasted their fire.

[7.4] MG KILL ZONES
LMG's and HMG's fire heavier rounds than light weapons, and consequently their bullets travel farther, extending their "kill zone."

[7.41] LMG's affect the two (2) hexes directly along the line of fire beyond the target hex. Any units in these additional hexes are attacked automatically by the firing LMG, whether they are Friendly or Enemy, as though they were a normal target.

[7.42] HMG's affect the four (4) hexes directly along the line of fire beyond the target hex. Any units in these additional hexes are attacked automatically by the firing HMG, whether they are Friendly or Enemy, as though they were a normal target.

[7.43] This extended fire zone stops in the first Heavy or Building hex that it enters.

[7.5] MULTIPLE FIRE ATTACK
When a Player uses several units to fire at the same target, they are considered to all be firing simultaneously. Each unit's fire is resolved separately, in any order the attacker wishes.

[7.51] Once a Player has announced a multiple-unit attack, he may not change his mind. He must execute all the fire as stated.

[7.52] Multiple-fire attacks are considered as one attack for purposes of the Sequence of Play. If a Player states that three of his units are making one attack, the fire of each unit is resolved before the Enemy Player may do anything.

[7.53] If the Enemy unit is eliminated as a result of multiple-fire attacks before all attacking units have fired, these attacking units may fire to gain any advantage of LMG or HMG "extended zones" (see Case 7.4).

[7.54] During the Command Control Phase, partial strength units that are in Command Control
and stacked together may combine to form full-strength units.

Example: If an LMG team (current strength: 1) is stacked with a 60mm mortar section (current strength: 1) plus a fire team (current strength: 2), these units could recombine during the Command Control Phase, provided they are in Command Control. Some of the possible combinations are:

(a) a full-strength LMG and a full-strength 60mm mortar section (remove fire team permanently);
(b) a full-strength fire team (remove LMG and 60mm mortar section permanently).

[7.6] DIRECT FIRE / OPPORTUNITY FIRE / OVERWATCH FIRE

[7.61] Direct Fire is executed during the Direct Fire Phase before either Player can move a unit. In the Direct Fire Phase, a Player may fire at any Enemy unit he can "see."

[7.62] Opportunity Fire is executed during the Movement Phase, when a Player fires at a unit at his opponent is moving. A unit can Opportunity Fire only at an Enemy unit that is moving (see Section 8.0).

[7.63] Overwatch Fire is identical to Direct or Opportunity Fire, with the limitation that it can be used only to fire at an Enemy unit which has just fired on a Friendly unit. If a unit fires on an Enemy unit, any other Enemy unit that has not fired or moved (during either the Direct Fire or Movement Phase) may immediately fire at the firing unit.

[7.64] Units that have not moved or fired in the current Game-Turn receive an additional five (5) Observation Points, which may be used only for Overwatch Fire. If the unit moves or fires, it loses this bonus for the remainder of the Game-Turn.

[7.65] There can be no Overwatch on an Enemy unit firing on a Friendly unit in the same Building (this has nothing to do with Close Assault; see Section 10.0), assuming the Building is more than one hex long. Units in the same Building hex must be involved in a Close Assault.

[7.7] DIRECT FIRE COMBAT RESULTS TABLE

(see page R12)

[7.8] EXPLANATION OF COMBAT RESULTS

* = No Effect.
S = Suppression: the unit may not move but may fire. It suffers a -1 on its combat die roll if its does so (see Case 7.82).
1, 2, 3, 4 = the unit takes the indicated number of casualties and suffers a Suppression.

[7.81] Suppression is temporary. There is a Suppression Removal Phase (see Sequence of Play, Section 4.0) in the middle of the Game-Turn, when all "S" markers are removed from the units on the map.

[7.82] If a Suppressed unit suffers another Suppression result while it is already suppressed this is considered to have no additional effect.

[7.83] All other combat results are considered to be cumulative; that is, a unit which has taken casualties from one attack and suffers additional casualties for any other reason adds the additional casualties to those already taken.

[7.84] If a unit in a stack takes more casualties than it has available, the remaining losses are taken from the next unit in the stack. This is an exception to the rule that a unit may not be attacked more than once per Phase (see Case 7.33). The next unit in the stack could still be fired at during that particular Phase. Conceivably, an entire stack could be wiped out by one Enemy unit.

[7.9] SPECIAL FIRING SITUATIONS

[7.91] Cross-Fire

If two or more Friendly units fire on the same Enemy unit and the angle described by their fire is at least 120° (see example above), they receive a one-column shift to the left on the Direct-Fire CRT. This applies to direct-fire units only, during either the Direct-Fire or Movement Phases. The effects of this "cross-fire" are in addition to any other effects on the CRT for the units involved.

[7.92] Cone of Fire

All MGs project a "cone of fire" described by a 120 degree arc radiating from the hex directly in front of the MG. This cone is projected out five Observation Points. The MG may fire on any Enemy unit that enters the cone during the Movement Phase providing that the MG's weapon symbol is pointing toward the base of the cone (see example left). The MG must be facing the Direct-Fire Phase (that is not considered movement). This is done simply by turning the counter so that the weapon symbol printed on it points to a hex; that hex becomes the base of the cone. The MG may fire on every Enemy unit that enters the cone, regardless of how many do enter. It may fire on each of these units one time. The MG may fire with this rule even if it fired during the Direct-Fire Phase (and therefore would not be able to fire normal Opportunity Fire during the Movement Phase) or moves/fires Opportunity Fire during that current Movement Phase. This is the only exception to the Direct-Fire and Movement Rules, Sections 7.0 and 8.0 respectively, which state that a unit may not fire and move in the same Game-Turn and may not fire more than once in a Game-Turn.

[8.0] MOVEMENT

GENERAL RULE:

During the Movement Phase, the Players alternate moving their units and/or stacks of units one by one. A Player may move any unit which has not fired during the current Game-Turn, and which is not suffering a Combat Result which prohibits it from moving. Within these limitations, a Player may move one, all, or none of his units. A unit moves hex by hex. The distance a unit can travel in a Game-Turn is dependent on its Movement Allowance and the cost of the terrain it crosses and enters. Whenever a unit moves and enters a hex it may be fired at by Enemy units using Opportunity Fire.

CASES:

[8.1] MOVEMENT ALLOWANCES

Fire Teams and LMGs have a basic Movement Allowance of six (6) Movement Points. HMGs and 60mm Mortar Sections have a Movement Allowance of five (5) Movement Points. 81mm
Mortar Sections have a Movement Allowance of four (4) Movement Points. An HQ's Movement Allowance depends on the unit it is stacked with (see Command Control, Section 5.0). Helicopters and vehicles are a special case (see Sections 13.0 and 14.0).

[8.2] EFFECT OF ROADS AND TRAILS

When a ground unit moves so that its path coincides with the path of a road or trail, it ignores the cost of moving through any other terrain the road or trail runs through. This means that roads and trails negate the cost of all other terrain when followed consecutively from hex to hex. It costs one Movement Point to move along a hex with a road or trail. This means that a Fire Team could travel up to six hexes through any and all types of terrain so long as it moved through road or trail hexes.

[8.3] RESTRICTIONS ON MOVEMENT

[8.31] A Player may move his units in any order he desires, but once he has moved a unit he may not return to that unit later in the same Turn and move it again. He would have to wait until a later Game-Turn.

[8.32] A Player may not move a unit which has fired during the current Game-Turn. Nor may he move a unit which is suffering a Combat Result that prohibits it from moving.

[8.33] A unit may not expend more Movement Points than its total Movement Allowance. Example: A Fire Team has a Movement Allowance of 6 Movement Points. It could not move more than 6 clear terrain hexes in any one Turn because this would require it to spend more than 6 Movement Points.

[8.34] A unit must always move from hex to hex. It may never stop halfway between hexes. A unit must always be in a specific hex.

[8.35] A Player may move a unit off the map. It is removed from play and may not return to the game. A unit must expend one Movement Point to exit the map.

[8.36] All units may move one hex regardless of terrain costs.

[8.37] Only units that begin the Movement Phase in the same hex (stacked; see Case 8.4) can be moved together.

[8.4] STACKING

A Player may place up to three Friendly units in the same hex. There is no expense for units to stack or unstack, except when such action represents loading or unloading from a Helicopter (see Section 13.0) or a Vehicle (see Section 14.0). The stacking limit applies only at the end of the Movement Phase. During the Movement Phase a Player may have any number of units in a hex as long as he obeys the stacking limit by the time he finishes moving. Units that begin the Movement Phase stacked in the same hex may be moved as one unit, so long as they remain stacked at the end of the Movement Phase. Command units do not count against the stacking limit for Helicopters or other vehicles.

[8.41] Stacking has no effect on a unit's ability to attack. Units in the same hex may fire at the same target, at different targets, or at no targets at all, just as though they were not stacked.

[8.42] Stacking has no effect on a unit's vulnerability to Enemy fire, except that any unit in a stack may be required to take losses to make up for men lacking in another unit in the same stack (see Case 7.84). Enemy units may fire at a unit in a stack and ignore any other units in the stack (Exception: see Helicopters, Section 13.0 and Optional Vehicles and Weapons, Section 14.0).

[8.43] Units stacked together in a hex are all vulnerable, in turn, to any Indirect Fire that impacts on the hex.

[8.44] There may never be more than one (1) vehicle in a hex at the end of any Movement Phase.

[8.5] MOVEMENT AND OPPORTUNITY FIRE

[8.51] A Player must pause each time one of his units moves into a hex to allow the Enemy Player a chance to fire at the moving unit. Only the unit actually being moved may be fired at. The attack is resolved exactly as detailed in Fire, Section 7.0.

[8.52] If a moving unit survives Opportunity Fire, it may continue moving. However, it may be fired at again when it enters a new hex, although the Enemy Player would have to use a different unit since no unit may fire more than once per Game-Turn (Exception: see Case 7.92).

[8.6] TERRAIN EFFECTS CHART

(see map)

[9.0] INDIRECT FIRE

GENERAL RULE:

Players may be allocated Indirect Fire units (mortars, artillery, etc.) by the scenario instructions. These may be used by the Player to fire onto the map, hitting an impact hex and thereby attacking units which are in the Impact Zone (the Impact hex and surrounding hexes). Some Indirect Fire units are on the map (60mm and 81mm mortars). These are ground units for all other game purposes except Indirect Fire. They may be fired on by other Enemy units and may take casualties. They may also fire Opportunity Fire, but not Direct Fire (the crews are assumed to have their own small arms). Indirect-Fire must be plotted in writing by the Firing Player one Turn before it is applied to the map. Indirect Fire is applied during the Indirect-Fire Phase of the Game-Turn. Note that Impact markers remain on the map until the following Indirect Fire Phase, affecting all units moving through the Impact zone during the ensuing Movement Phase.

CASES:

[9.1] FIRE PLOT

To plot a fire mission, the Player lists on a piece of paper:

1. The identification of the firing unit (the number of the hex occupied by the unit on the map or the name of the off-map unit).
2. The target hex number.
3. The type of Fire Mission—either High Explosive (HE) or Smoke.

[9.2] APPLICATION OF INDIRECT FIRE

After a Player writes a fire order, there is a delay of one Game-Turn before he can apply that fire to the map. During the Indirect-Fire Phase of the next Turn, the firing Player takes the following steps to apply his plotted fire to the map:

1. He announces that he has Indirect Fire plotted to arrive.
2. He then announces his plotted target hex(es).
3. Having pinpointed his target hex(es), he then follows the Scatter Routine (see Case 9.3) to determine exactly where the fire impacts. He then places an Impact Marker, corresponding to the firing unit, in the Impact hex.
4. He now calculates and states the Attack Strength of the Indirect Fire on all units located in the Impact Zone (the Impact Hex and the surrounding hexes affected by a particular Artillery unit's fire).
5. Finally, he attacks each and every unit found in the Impact Zone (including his own, if any) using the Indirect Fire Combat Results Table (see Case 9.42). If the Impact Zones of two or more Artillery units overlap, any units in the overlapping area are attacked by the combined total of the Attack Strengths of the Artillery units (see illustration below). The Attack Strengths of the individual Artillery units are found on the Artillery Unit Strength Chart (see Case 9.41).

The numbers in the hexes represent the Attack Strength of the 81mm and 155mm fires. In those hexes where the fire overlap, the total strength attacking the hex is given along with the strength of the individual units firing into the hex (in parentheses). Thus, the strength of the 155mm in its Impact Hex is 17 (15 for the 155mm plus 2 for the 81mm).

(continued on page 87)
[9.3] SCATTER ROUTINE
Printed on the map is a Scatter Diagram. A die is rolled for every Artillery unit to see if it’s fire scatters. There is a 50% chance that fire will scatter; if the die rolls an odd number, the fire scatters; if even, it does not. If the fire scatters the die is rolled again, the number rolled corresponding to a number on the Scatter Diagram. This shows the direction the fire scatters in. The die is rolled a third time, to see how many hexes the fire scatters in the indicated direction; a die roll of 1, 2 or 3 and the fire scatters one hex. A die roll of 4, 5 or 6 and the fire scatters two hexes. The final indicated hex becomes the Impact Hex and the Impact Marker for the artillery unit in question is placed on that hex.

[9.4] INDIRECT FIRE CHARTS AND TABLES

[9.41] Artillery Unit Strength Chart
(see page R12)

[9.42] Indirect Fire Combat Results Table
(See page R12)

[9.5] EFFECTS OF TERRAIN ON INDIRECT FIRE
The following die roll modifications for Indirect Fire attacks in specified terrain are made:

<table>
<thead>
<tr>
<th>Terrain Type</th>
<th>Die Roll Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear and Mixed</td>
<td>no effect</td>
</tr>
<tr>
<td>Medium and Broken</td>
<td>-1</td>
</tr>
<tr>
<td>Heavy</td>
<td>-2</td>
</tr>
<tr>
<td>Building</td>
<td>-3</td>
</tr>
</tbody>
</table>

[9.6] RESTRICTIONS ON USE OF INDIRECT FIRE

[9.61] A Player may not plot fire on a hex if none of his units can see (trace a Line of Sight to) the hex.

[9.62] Each Indirect Fire Artillery unit may fire only one mission at a time. A Player may not plot a new mission for a unit so long as that unit has a mission plotted.

[9.7] EFFECT OF INDIRECT FIRE ON BUILDINGS
Any Indirect Fire combat result of 3 or 4, in a Building hex, changes the Building hex (thereafter) into a Heavy hex for all movement, fire or observation purposes. This reduces the structure being reduced to rubble by the Indirect Fire. Players should keep track of the status of Buildings on a separate sheet of paper.

[9.8] ON-MAP AND OFF-MAP ARTILLERY UNITS

The 60mm and 81mm Artillery units are deployed on the map with the rest of a Player’s assigned forces (assuming he gets either of these in a scenario). They are crew-served weapons. The crew has the same basic small-arms as the rest of the force they are assigned to and may fire them for Opportunity Fire only. They may not fire an Indirect Fire mission or Opportunity Fire in the same Game Turn. If a mission has been plotted for the unit and it fires Opportunity Fire or suffers a combat effect before its Indirect Fire Phase, the fire mission is cancelled. All other Artillery units are Off-Map units. They are always considered in Command Control. They may not be attacked by the Enemy Player at any time.

[9.81] 60mm and 81mm units have crews of two and three men, respectively. Such a unit may continue to fire so long as at least one crew-member survives any adverse combat result. The 60mm may move with one surviving crew-member. The 81mm may not move without at least two surviving crew-members.

[9.82] The 60mm mortar has a minimum firing range of twelve hexes. These units may not Indirect Fire at targets at less than their respective minimum ranges.

[9.83] On-Map Artillery may not fire from inside Heavy or Building hexes, though they may move into and through such hexes.

[9.84] Off-Map Artillery units have no range limits and may fire onto any hex on the map that can be spotted by a unit of their force.

[9.9] INDIRECT FIRE AND CHAIN OF COMMAND
Friendly Indirect Fire may not be plotted for target hexes that cannot be seen by a Friendly unit. Additionally, the spotting unit must be in Command Control before the fire can be spotted for. Any on-map artillery unit must also be in Command Control to fire any plotted missions. If a spotting unit is out of Command Control, another Friendly unit must be able to see the target hex before it can be plotted for. If a hex has already been plotted for and the spotting unit is placed out of Command Control before the fire impacts, then the fire mission is cancelled. The spotting unit must be within the Command Radius of its Platoon HQ, which in turn must have artillery units within its Command Radius or call in fire from units off the map (see Section 12.0).

[10.0] CLOSE ASSAULT

GENERAL RULE:
During the Movement Phase, a Player may move a Friendly Indirect Fire Artillery unit into a hex containing an Enemy unit. When he does so all other action ceases and play is conducted according to the Close Assault procedure.

CASES:

[10.1] CLOSE ASSAULT PROCEDURE
To Close-Assault, a Player moves his unit or stack of units into a hex containing an Enemy unit or units. The moving unit(s) must stop in the hex being attacked. A Close Assault must immediately take place during the Movement Phase. This is executed exactly as per the Fire Combat procedure (see Section 7.0). Range is zero hexes for the Range Attenuation Table. The Players roll the die to see who shoots first, and alternate fire until all Enemy units and all attacking units have fired once. Assuming that both the attacking unit and at least one Enemy unit survive the fight, the attacker may either (1) move his unit(s) out of the hex, if the unit(s) still possess any movement points or, (2) leave the unit(s) in the hex. If he chooses the second alternative, another Close Assault must immediately ensue. Inevitably, any Close Assault will be resolved when the attacking unit vacates the hex or either the attacking unit(s) or the Enemy unit(s) is destroyed. One or the other must occur. Opposing units may never occupy the same hex at the end of a Game Turn. A unit may participate in only one Close Assault per Movement Phase.

[10.2] EFFECT OF STACKING ON CLOSE ASSAULT
The attacking Player may move either one or several units into a hex for a Close Assault. If he moves more than one unit, the units must have started their Movement Phase stacked in the same hex. All stacking limits apply for each side.

[10.3] EFFECT OF TERRAIN ON CLOSE ASSAULT
In a Close Assault, terrain is completely ignored except that a unit defending in Heavy or Building terrain still benefits from that terrain for the first round of Close Assault. If the same units execute more than one round of Close Assault on the same hex, then both attacking and defending units receive the terrain benefit.

[10.4] EFFECT OF PRIOR FIRE ON CLOSE ASSAULT
A Close Assault is a special event. The units engaged in a Close Assault situation are not affected by whether or not they have previously fired during the Game-Turn. A unit could conceivably fire during the Direct Fire or Movement Phase and still participate with fire during a Close Assault. Fire during a Close Assault does not count against the restriction of firing only once per Game-Turn (Exception to Case 7.33).

[10.5] EFFECT OF OTHER UNITS ON CLOSE ASSAULT
Once a Close Assault situation is created, the Players ignore all other situations until the Close Assault is complete resolved.

[10.6] EFFECT OF INDIRECT FIRE ON CLOSE ASSAULT
If, while moving to Close Assault, an attacking unit passes through an Indirect Fire Impact Zone, that unit must be subjected to Indirect Fire Impact Zone, that unit must be subjected to Indirect Fire attack before it Close Assaults (see Section 9.0, General Rule).

[10.7] EFFECT OF OPPORTUNITY FIRE CLOSE ASSAULT

[10.71] A Friendly unit may Opportunity Fire on the Enemy unit(s) attempting the Close Assault at any point in the Enemy unit’s movement, up to and including the Enemy unit’s entry into the hex being Close Assaulted. The Friendly unit must fulfill all the normal Opportunity Fire criteria (see Movement, Section 8.0).

[10.72] Friendly units defending in a hex being Close Assaulted may not perform Overwatch Fire on the assaulting Enemy units in the assault hex.

[11.0] SMOKE

GENERAL RULE:
Mortar or artillery units may fire smoke instead of high explosives. When plotting his fire mission, the Player notes “smoke” or “S” on his Indirect Fire Plot. Thereafter, the mission is executed exactly as though it were a normal mission, except that the Player places a smoke marker on the Impact Hex rather than the regular impact marker. Unlike Indirect Fire markers, which are removed from the map each Game-Turn unless renewed via continuous fire, smoke markers are removed on a die roll of 1, 2, 3, or 4. Otherwise they remain in place. Thus a mortar or artillery unit which fires smoke may not have to repeat the fire turn after turn to maintain the smoke.

CASES:

[11.1] EFFECT OF SMOKE
Regardless of the size of the firing unit or its coverage normally, all smoke attacks are considered the same. Smoke is presumed to cover the Impact Hex of the smoke attack and all adjacent hexes (only). When present on the map, smoke costs six (6) Observation Points to sight through and has all the characteristics of a Heavy hex.

[11.11] The line of sight/fire does not pass through a smoke hex any more than it passes through a Heavy Terrain hex.

[11.12] A unit which is fired on in a smoke hex gains the same benefit it would receive in a Heavy Terrain hex. The effects are not cumulative.

[11.13] Smoke has no effect on a unit’s ability to move.
[11.14] A Player may fire several smoke attacks into the same area and the resulting Impact Zones may overlap. This doubling up of smoke hexes has no additional effects.

[11.2] SMOKE AND OPTIONAL WEAPONS

Tanks, APC's, and trucks cannot fire smoke. The only weapons that can fire smoke are the On- and Off-Map Artillery units and the M203 (see Optional Vehicles and Weapons, Section 14.0).

[12.0] COMMUNICATIONS

GENERAL RULE:

In some scenarios, one or both forces may be given tactical radios. These may be distributed to the On-Map Artillery units and to the Squad Leaders. The Platoon Headquarters is always equipped with a radio as this is how Off-Map Artillery is called in (see Indirect Fire, Section 9.0). Radios increase tactical flexibility by giving the Platoon Headquarters unlimited Command Radius as long as the Squads and On-Map Artillery units also have radios.

CASES:

[12.1] EFFECT OF COMMUNICATIONS

As radios give the Platoon Headquarters unlimited Command Radius (see Section 5.0), Friendly units may now be an unlimited distance (in hexes) apart, with the following restrictions:

The "A" Fire Team, which always contains the Squad Leader (see Command Control, Section 5.0) may be any distance away from the Platoon Headquarters; but the "B" Fire Team of any Squad must still be no more than six (6) Observation Points away from the "A" Team or the "B" Team is out of Command.

[12.2] EFFECT OF COMBAT RESULTS ON COMMUNICATIONS

Suppressions and casualties have no effect on communications. Only the destruction of an entire unit will interrupt communications.

Radios are passed in the same way that command is passed (see Command Control, Section 5.0) when the entire unit stacked with the Platoon Headquarters or the "A" Fire Team of a Squad is killed. However, it takes one full Game-Turn before the next new Platoon HQ or the new Squad Leader gains use of the radio.

Example: If a Platoon HQ stacked with a Fire Team is killed (the Fire Team is destroyed), Command passes to the next nearest Friendly unit in the same Platoon, which immediately becomes the new Platoon HQ. Units of the Platoon that are outside the normal Command Radius of the new Platoon HQ at this point are considered Command. On the Command Control Phase (of the ensuing Game-Turn), the Platoon HQ regains the use of the radio and units of the Platoon that were out of Command are in Command again. If a Squad Leader ("A" Team) is killed, "B" Team becomes the Squad Leader immediately, but it will be the following Turn before it is back in Command and unless it was already within the normal Command Radius of its Platoon HQ. This takes place regardless of the status of the Platoon HQ.

[12.3] COMMUNICATIONS AND INDIRECT FIRE

On-Map Artillery units with radios are considered in contact with all Platoon HQ's at all times unless the unit is destroyed or the HQ has been destroyed with the Artillery unit outside its normal Command Radius. No Artillery unit may fire plotted fire missions if it's Platoon HQ has lost the use of its radio (see Indirect Fire, Section 9.0). On the Game-Turn that the HQ of the Platoon in question regains the use of its radio, Artillery may be plotted for use by that Platoon.

[13.0] HELICOPTERS

COMMENTARY:

Helicopters can be introduced into most of the modern scenarios to illustrate the pros and cons of airborne operations. The advantages of helicopters are ease and rapidity of troop deployment, increased range of operations, and immediate and effective fire support for Friendly forces. The basic disadvantage is the helicopter's vulnerability to anti-aircraft fire from small arms on or near the ground.

CASES:

[13.1] HELICOPTER MOVEMENT

All helicopters have an unlimited Movement Allowance and are not affected by terrain for movement purposes. They may move anywhere on the map in a single Turn but must still trace a path hex by hex to their eventual destination. While a helicopter is moving it is presumed to be using Nap of the Earth (NOE) flying techniques, which means that flying as close to the terrain as possible as it moves across the map. Helicopters must, of course, fly over all Buildings and Heavy terrain. They are subject to Opportunity Fire (see Case 13.5), just as any ground unit is. Gunships (see Case 13.4) may perform Close Assaults (see Close Assault, Section 10.0). Helicopters do not count against the stacking limit for ground units (see Movement, section 8.0) but there may never be more than one (1) helicopter of any kind in the same hex.

[13.2] HELICOPTER OBSERVATION

[13.21] Helicopters must rise above all terrain to see farther than 10 Observation Points (the owning Player flips the helicopter from its NOE side to its other side to show that he is raising the helicopter above terrain level for spotting or firing). A helicopter so raised has an Observation Point Allowance of twenty (20) and is exposed to Enemy ground units within 20 Observation Points. Needless to say, it may also be fired on when at altitude. When not at altitude, helicopters are subject to the same Line of Sight restrictions applied to ground units (see Observation, Section 6.0). They may rise to altitude or drop to ground level at the beginning of both the Direct Fire and Movement Phases.

[13.22] Helicopters may see units in Building hexes only if the units fire or the helicopter moves into the Building hex. Helicopters may see units fire or move in Heavy terrain hexes that border on hexes other than Heavy or Building in the helicopter's Line of Sight.


[13.3] TRANSPORTS

[13.31] Transports may carry a maximum of ten (10) men or pieces of equipment (mortars and MG's are counted in addition to their crews for transport purposes, so a LMG would be counted as three men — the LMG and its two man crew). Command units do not count against this limit.

[13.32] Transports take one full Game-Turn to load or unload troops and equipment in clear, mixed, or medium terrain. Ground units may move up to one-half (½) their Movement Allowance, rounding fractions up, on the Game-Turn that they load or unload from a helicopter.

[13.33] Transports take two full Game-Turns to load or unload in a Heavy or Building hex. Ground units may not move in the Game-Turn that they unload in such hexes.

[13.34] Ground units load/unload from any hex adjacent to the helicopter that is in Clear, Medium, or Mixed terrain. Ground units must be in the same hex as the Helicopter to load/unload from the helicopter in Building or Heavy hexes.

[13.35] Ground units may not engage in Direct, Overwatch, or Opportunity Fire in the same Game-Turn that they load/unload from a helicopter.

[13.36] Ground units receive no terrain benefit if fired on in the same Game-Turn that they load/unload from a helicopter. They are fired on as if they were in Clear terrain.

[13.37] Any transporting, loading or unloading takes place in the helicopter's Movement Phase.

[13.38] Helicopters may either load/transport or transport/unload in the same Game-Turn; they may not do both. Thus, a helicopter could load a unit in one hex and transport it to another hex in the same Game-Turn. It would not be able to unload the unit until the Movement Phase of the next Turn.

[13.4] GUNSHIPS

Gunships are used primarily to provide immediate fire support for Friendly ground elements and to escort Transports. They can carry a variety of weapons but for game purposes these will consist of HMG's and rockets.

[13.41] Each gunship may fire its HMG's three times per scenario. (Gunships expend an enormous amount of ammunition.) They have a maximum firing range of fifteen (15) hexes. They are fired using the regular Direct Fire procedure (see Section 7.0), but always shift one (1) column to the left on the CRT and receive a +3 benefit to the die roll.

[13.42] Each gunship carries two salvos of rockets per scenario. Rockets may be fired a maximum of twenty (20) hexes. They have a minimum range of five (5) hexes. A gunship firing rockets must immediately rise to altitude and may be subject to Opportunity Fire if spotted. This is an exception to the Sequence of Play (Section 4.0) which states that no movement may take place during the Direct-Fire Phase. A rocket attack has a strength of 9 on the Indirect-Fire Combat Results Table and is resolved on that table. The rockets are direct-fire weapons, however, and there is no scatter die roll.

[13.43] Gunships may use either of their weapons for all types of Direct Fire, subject to the restrictions for each.

[13.44] Gunships may fire either their HMG's or their rockets in a Game-Turn; they may not fire both in the same Game-Turn.

[13.5] ANTI-AIRCRAFT FIRE

Helicopters are extremely vulnerable to small-arms fire when at or near ground level. All anti-aircraft fire is conducted on the Direct Combat Results Table unless heavier weapons are used, as if the helicopter were in Clear terrain. Ground units may fire on a helicopter out to a maximum of fifteen hexes subject to Range Attenuation.
[13.51] The following changes are made in all CRT results: -1, 1 and 2 = no effect. 3 or 4 = Helicopter shot down.

[13.52] Ground units firing on a Helicopter at altitude automatically shift one column to the right (on both the Direct Fire and Indirect Fire CRT's).

[13.53] Any ground units carried in a helicopter that is shot down are automatically destroyed. Ground units are considered to be aboard a helicopter in the Turn they begin loading for all movement and fire purposes.

[13.6] HELICOPTERS AND INDIRECT FIRE
A helicopter at NOE in a hex that is attacked by Direct Fire is automatically destroyed if caught in the Impact Hex (see Indirect Fire, Section 9.0) or any of the six adjacent hexes, there is no penalty for a helicopter caught in any other hexes of an Impact Zone.

[14.0] OPTIONAL VEHICLES AND WEAPONS

COMMENTARY:
These rules will cover the addition of vehicles and special weapons to the game. They are provided to add more variety and to aid in the making of new scenarios. They may also be used to help balance some of the existing scenarios. Certain weapons not given in the regular deployments are a normal part of many commando-type units (e.g., U.S. Rangers use jeep-mounted 106mm recoilless rifles).

CASES:

[14.1] VEHICLES

Vehicles may be added to a scenario to give one side or the other more mobility and firepower.

Players should decide for themselves how many vehicles and what kind should go to either side. All vehicles have a maximum Movement Allowance of eighteen (18) Movement Points. They must pay all normal movement costs in each hex they enter and may not enter Heavy or Building hexes. Note: The vehicle symbol on the counter must be faced toward a particular hexside at all times for fire and movement purposes. They may change direction with no extra expenditure of Movement Points.

[14.11] Tanks all mount a 105mm gun. This gun fires with a strength of nine (9) against infantry, helicopters and trucks on the Indirect Fire Table, and with a strength of 12 against armored Vehicles on the Indirect Fire Table. Its effects are limited to the Impact Hex only, as it is a direct-fire weapon. It may be fired in any direction (3600). Tanks are also armed with two MG's: one that fires in any direction (mounted on the turret) and one that can be fired only in a 1200 arc in front of the tank. This procedure is identical to that given in Special Firing Situations (see Case 7.92).

[14.12] APC's (armored personnel carriers) carry two MG's that have the same restrictions as the MG's on tanks. APC's may also carry up to ten men and their equipment (two fire teams and an LMG, for instance). Passengers may fire their weapons from inside an APC.

[14.13] Tanks and APC's may fire all of their weapons in the same Game-Turn and even in the same Phase. Of course, any vehicle may fire more than once per Game-Turn. They may fire at the same target, at different targets or at no targets.

[14.14] Tanks and APC's are armed (hard) targets. They may be destroyed by helicopters (see Section 13.0), other tanks, and any other weapon with a sufficient attack strength on the Indirect Fire Combat Results Table. Tanks are destroyed on a Combat Result of 4. APC's are destroyed on a Combat Result of 3 or 4.

[14.15] Tanks may carry no more than one fire team at any time. The fire team is considered to be riding on top of the tank. A fire team so mounted is always fired on as if it were in clear terrain.

[14.16] Trucks carry no armament; their sole purpose is to transport personnel and equipment. Fire teams and LMG's only fire from inside a truck, with a $1 on their combat die roll. Trucks may carry up to fourteen men and their equipment (three fire teams and an LMG, for instance). Equipment does not count for purposes of loading and unloading.

[14.17] Trucks are soft-skinned vehicles. They may be attacked by fire teams and MG's on the Direct-Fire Combat Results Table. They are destroyed by a Combat Result of 3 or 4 when attacked in this manner. If attacked by heavier weapons, trucks are rolled for on the Indirect Fire CRT and are destroyed by any result except Suppression.

[14.18] Passengers on board any vehicle that is destroyed are also immediately killed.

[14.19] All vehicles require one full Game-Turn (from one Movement Phase to the next) to load or unload. The vehicle may fire but may not move in that Game-Turn.

[14.2] SPECIAL WEAPONS

These should be assigned to a Player on the basis of the scenario being played and the skill level of the Players. They may be used to balance out a scenario if one side seems to have an overwhelming advantage for some reason.

[14.21] The U.S. Army has introduced the M203 grenade launcher/12.7mm rifle combination weapon. This is the standard M16 with a 40mm grenade launcher attached under the barrel. The grenade launcher is a single-shot weapon (no magazine, one round at a time). For game purposes, the grenade launcher has a strength of six (6) on the Indirect Fire Combat Results Table, and effective range is limited to the hex of impact, or twice if the Impact Hex is vacated. Grenade launchers may be loaded on consecutive Game-Turns throughout the game. It is employed as a Direct Fire weapon, but its fire is always resolved on the Indirect Fire Combat Results Table. Maximum range for the grenade launcher is ten (10) hexes. It may fire either smoke, affecting only the hex of impact, or high explosive. The user may fire either the grenade launcher or the rifle (who's fire is resolved normally on the Direct Fire CRT), but not both in the same Game-Turn. The weapon is destroyed only if the entire fire team is killed. It should be assigned one to a Fire team (for whichever force gets it), and only to fire teams. There are no counters for this weapon.

[14.22] Rifle grenades have the same effect as the grenade launcher of the M203 (see Case 14.21), except that they may not fire smoke. Their range is six (6) hexes. They take two full Game-Turns to load, and thus the fire team may fire this weapon at maximum rate only on every third Game-Turn maximum.

[14.23] The 106mm recoilless rifle is used by many second-line infantry forces (and a few first line) and special units. It has a strength of nine (9) on the Indirect Fire Combat Results Table and its effects are limited to the Impact hex (it is a Direct Fire weapon). It may employ all types of Direct Fire (Overwatch, Opportunity, etc.) It has a crew of two (2) men and may continue to fire so long as at least one crew-member remains. It may be loaded on trucks (see Case 14.16) or helicopters (see Section 13.0) and takes two full Game-Turns to load or unload. It may be fired from a Truck if it is the only unit aboard. It may not be moved from the hex in which it is placed or unloaded except by vehicle. The weapon has the same effect on Buildings as artillery and has a range of sixteen (16) hexes.

[14.24] The Bazooka fires a shaped charge that can destroy Buildings or armored vehicles. It has a two (2) man crew and may continue to fire so long as at least one crew member remains. It is a Direct Fire weapon and may be used in all Direct Fire applications, but its fire is resolved on the Indirect Fire Combat Results Table. It has a fire strength of eight (8) and has the same effect on Buildings as regular artillery (see Section 9.0). The Bazooka is a hand-carried weapon with a Movement Allowance of five (5) Movement Points and a range of eight (8) hexes.

[14.25] Demolition Charges (satchel charges, plastic explosives, etc.) may be given to one side or the other to aid in the destruction of hard targets. They have a strength of nine(9) on the Indirect Fire Combat Results Table and have the same effect on Building hexes as regular artillery (see Indirect Fire, section 9.0). They are assigned to Fire Teams (only) at the beginning of a scenario, one per Fire Team, maximum. There are no separate counters for Demolition Charges; Players must keep track of which units have used their assigned Charges. They are "placed" in a hex during the Fire Team's movement so long as the Team stays in or passes through the target hex. The Fire Team may not perform any other activity (it may not Close Assault, for example) in that Game-Turn. The Demolition Charge may be detonated during the Indirect Fire Phase of the Game-Turn after it was placed in the target hex.

[14.26] Mines are defensive weapons and are placed in a hex before any combat takes place. A mine has a strength of eight(8) on the Indirect Fire Combat Results Table. It attacks any unit that moves through or stops in a hex so planted. The position of the mine may be plotted on a separate sheet of paper so that the opposing Player does not know its location before he enters a mined hex. Mines do not attack a unit attempting to leave a mined hex. If a stack of units enters a mined hex, each unit in the stack is attacked, individually, by the full strength of the mine. Mines may be planted in any hex at the beginning of a scenario. If planted in a Building hex, they have the same effect on the Building as regular artillery upon detonation.

[14.27] Whenever a vehicle is destroyed a Wreck Marker is placed in that hex. The Wreck Marker does count against the 1-vehicle-per-hex stacking limit.

[15.0] SCENARIOS

The first scenario is best played solitaire. It is extremely short and is intended only to give a general idea of how the game system works.

[15.1] ENTETEBBE: 3 July 1976

General Situation: The Israelis have landed and are launching their assault against the building containing the hostages and the airport control tower.

Alpha Force: six Fire Teams.

Bravo Force: three Fire Teams.

Mission: Alpha Force (Israelis) to kill all three Bravo Force Fire Teams by the end of Game-Turn 2.
Deployment: Alpha Force deploys in hexes 0905, 0805 and 0906, with two Fire Teams per hex. Bravo Force deploys in building hexes 0805, 0704 and 0505 (the control tower).

Special Rules: Command Control is suspended for this scenario. Alpha Force fires on the Auto line of the Range Attenuation Table, Bravo Force on the Semil line.

15.2 DAWN RAID

General Situation: An Airmobile Platoon executes a dawn raid on a guerrilla base.

Alpha Force: six Fire Teams, one HMG, 2 LMG's, three 60mm Mortars (On-Map); two 105mm Off-Map units; four Gunships, six Transports; one Platoon Headquarters.

Bravo Force: twelve Fire Teams, two HMG's, four LMG's, four 60mm Mortars (On-Map); two Platoon Headquarters, two Mines.

Mission: Alpha Force to capture documents in hex 4010 and get them off the map by Game-Turn 10. Bravo Force to prevent this.

Deployment: Alpha Force enters the map on Game-Turn 1 with all ground units loaded on Transports. He must bring the entire force (including Gunships) onto the map in the first turn. He may enter the map from any direction or combination of directions he wishes. Bravo Forces deploy anywhere on the map before the start of the Game. Bravo Force may also use two dummy counters. Use any spare counter to represent the documents to be captured. This does not count for stacking limits.

Special Rules: the document counter does not impair the fighting abilities of any unit. Either side may move or fire with the documents in its possession. Documents may not be destroyed by either side. They are captured by any Alpha Force that has been stacked in the same hex with the documents for one complete Game-Turn. The capturing unit may fire but not move in that Game-Turn. On the following Turn, the unit may move with the documents with its full Movement Allowance. If the entire unit is killed, the documents stay in the hex the unit was in before it was removed from play. The procedure may be repeated as many times as necessary during the Game by either side. For the first three Game-Turns, the Bravo Force is considered out of command. It regains full Command Control at the beginning of Game-Turn 4. This is to simulate the element of surprise that would be essential to a mission of this type.

Alpha Force only has radios; Bravo Force has none.

Alpha Force may fire its small-arms either as Semi or Auto on the Range Attenuation Table during any part of the Game. Of course, an entire Fire Team must fire the same weapon at the same time. Bravo Force may designate one Platoon to fire Semi and the other to fire Auto at the beginning of the Game.

15.4 CONVOY AMBUSH

General Situation: A small truck convoy is ambushed by a guerrilla force while on a resupply mission.

Alpha Force: six Fire Teams; six Trucks, three APC's, one Platoon HQ.

Bravo Force: six Fire Teams, two LMG's, two BAZookas, one Platoon HQ, two Mines

Mission: Alpha Force to get any two vehicles and at least two Fire Teams from one side of the map to the other. Bravo Force to prevent this. Time limit is 15 Game-Turns.

Deployment: Alpha Force to enter the map on hex 0126 and exit the map at hex 5701. Bravo Force deploys on the map anywhere except within six hexes of Alpha's entry and exit hexes.

Special Rules: Alpha Force has radios aboard all vehicles. Alpha uses the Auto line on the Range Attenuation Table; Bravo uses the Semi Line. Bravo Force has radios. This scenario will require the use of Section 14.0, Optional Rules.

15.5 TRAGINO AQUEDUCT (ITALY): 10 February 1941

General Situation: British Para troopers land near an Aqueduct in an attempt to destroy it and withdraw to the coast where they are to be picked up by naval craft.

Alpha Force: six Fire Teams, two LMG's, three Demolition Charges; one Platoon HQ.

Bravo Force: twelve Fire Teams, four LMG's, two Platoon HQ's.

Mission: Alpha Force to blow up the "Aqueduct" at hex 1926 and withdraw anywhere off a coastal hex by the end of Game-Turn 15. Bravo Force to prevent Alpha Force from getting off the map.

Deployment: Alpha Force to be "dropped" onto the map one unit at a time, using the Indirect Fire Scatter diagram. It lands as close as possible to the "Aqueduct." Bravo Force deploys one Fire Team within three hexes of the "Aqueduct" and all other forces off the map until Game-Turn 4. On the forth Game-Turn, Bravo Force enters all other units on hex 5701.

Special Rules: Alpha Force uses the Auto line on the Direct-Fire CRT, Bravo Force uses the Bolt line.

The Aqueduct is destroyed in exactly the same manner as a Building (see Indirect Fire, Section 9.0).

15.6 LITIANI RIVER: 8 June 1941

General Situation: Units of No. 11 Commando assault force of the Vichy French 22 Tiraillers from Algeria in an attempt to capture the redoubt and bridge at Kafr Bada on the Litiani River, during the Allied-Vichy battle for Syria.

Alpha Force (No. 11 Commando): twelve Fire Teams, six LMG's; three Platoon HQ's.

Bravo Force (22 Tiraillers (-)): twelve Fire Teams, three LMG's, three HMG's four 60mm mortars (off-map); two Platoon HQ's, one Mine.

Mission: Alpha Force to clear all Enemy units from the bridge (hex 1926) and the redoubt (hexes 1629-30, 1730-31 and 1629) by Game-Turn 12. Bravo Force to maintain at least one combat unit on either the bridge or any redoubt hex at the end of Game-Turn 12.

Deployment: Alpha Force deploys twelve Fire Teams and six LMG's, plus two Platoon Headquarters, within four hexes of the river on the east side. The remaining units enter the map on the first Game-Turn between hexes 0934 and 1833, on the south edge of the map. Bravo Force deploys anywhere within four hexes of the river on the south and west sides.

Special Rules: Alpha Force Fire Teams designated "A", use the Auto line on the Range Attenuation table; all other Alpha Fire teams and all Bravo Fire Teams use the Bolt line. Bravo Force is out of Command for the first Game-Turn and therefore may not plot Indirect Fire for the First Turn. The redoubt hexes are treated as building hexes for all purposes.

15.7 ASSAULT ON SOUTH YAAGSO (YAAGSO ISLAND): 27 December 1942

General Situation: A British Commando unit attacks a Norwegian fishing complex that is in German hands to prevent the making of explosive materials from the fishing by-products.

Alpha Force: twelve Fire Teams, two LMG's; four 155mm Off-Map Artillery units, one Demolition Charge per Fire Team.

Bravo Force: eight Fire Teams, two LMG's, two HMG's.

Mission: Alpha Force to destroy the following building hexes by Game-Turn 12: 4211, 4113, 4213, 4218, 4319, 4419, 4409, 4510, and 4908. Alpha Force must also get at least four Fire Teams off the map the way they came on (the waterfront). Bravo Force to prevent this.

Deployment: Alpha Force enters the map by landing on any wharf hex. No more than three units may land on any single hex. Alpha Force must withdraw from the map through the same hexes. Bravo Force deploys in the following hexes: 4205, 4206, 4608, 3815, 4211, 4113, 4218, and 4010.

Special Rules: Bravo Force is out of Command Control until Game-Turn 2. A Platoon Headquarters is placed in hex 3910 at this time. Bravo Force uses the Bolt line on the Range Attenuation Table, Alpha Force uses the Auto line.
So n T a y H ll d: This historical scenario introduces come up with, historical or otherwise. Players may make up their own scenarios. Some players wish to simulate actions that look place at a particular location, while others are merely at-tempting to cover the wharves with both M203's. They can have at least three units left by game-turn two. Stacking is also important. Units should be kept to a minimum in the hexes most likely to be assaulted by Alpha.

Dawn Raid: This fast-moving scenario simulates the typical Vietnam raid. Alpha's helicopters appear to be rather awesome, but they can be easily lost through careless play. Don't get too close with them or they will be downed by small-arms fire. The rockets should be used carefully against important targets such as HMG's, the target building, etc. The 60mm mortars should cover the approach with smoke, while the 105mm's should be used to inflict casualties. The most important limitation for Alpha is time. He must move quickly! Bravo should concentrate his forces in and around the target building. The HMG's should be given large fields of fire to maximize their anti-aircraft capability. Due to their short ranges and die modifications, the auto's should be used where close assault is likely, thus freeing the semi's for use against the helicopters. Bravo should try to slow Alpha down. Keep reinforcements for the target building close at hand.

Convoy Ambush: This is another fast scenario with Bravo trying to stop Alpha's convoy from getting off the map. Alpha should attempt to avoid the main bulk of Bravo's forces. By keeping the trucks to the rear, the APC's can clear a safe path for them to follow and they can avoid fire. Alpha should try to maintain mobility, but if the situation dictates, he should unload and provide cover for other units. Of course, he should also be on the lookout for Bravo's Bazookas, which are rather dangerous and should be killed if at all possible. The auto's should be used where close assault is likely, thus freeing the semi's for use against the APC's. Bravo should try to slow Alpha down. Keep reinforcements for the target building close at hand.

Tragino Aqueduct: This scenario is a race to the coast with the winner being the player to use optimum tactics. Alpha must maximize his turns, spending no more than three turns to destroy the bridges and get back in direction should be the southern edge of the bay, covering his withdrawal by suppressing enemy units with fields of fire on his exit hexes. Bravo must also maximize his turns. Care should be taken, in placing his advance unit, as this is his only chance to delay Alpha before he gets to the coast. He should split his forces into two groups: one to go south and engage Alpha directly, and the other to cover the coast after getting in range.

Litani River: Another rather bloody scenario with Alpha on the offensive. Alpha must carefully plan his assault. Where to cross the river is another problem. He would do best to try to avoid the field of fire of Bravo's northern units, assaulting in forces from the south. Bravo's chances of winning depend mostly on set-up. The three HMG's should be used to cover as much terrain as possible. The mine should be used to seal off the bridge.

South Vaung: Alpha is going to find it hard to win this rather bloody scenario as he sets up in Bravo's field of fire. Alpha must use optimum tactics to win. He should get under cover quickly and devote his efforts to getting the demolition charges in place rather than killing Bravo. Bravo's set-up is somewhat limited in this scenario, so he is going to have to position his units with care. He must make sure to cover the wharves with both HMG's. Bravo is also going to have to give some consideration as to what units are going to be out of command after game turn two as the Platoon Headquarters is not within command radius of all the set-up hexes.

**The Sweep:** This large scenario simulates the typical Vietnam raid. Bravo should use one Platoon to drive Bravo into the cross-fire of the other two. They should cover all possible exits, as Bravo wins if he gets one unit off the map. The M203's should be used whenever the target is at long range. He should keep his set-up fluid until Bravo gets moving in the right direction. Bravo should keep his set-up fluid and keep his moves off Alpha. He must take advantage of any holes left by Alpha and use smoke to cover any attempts to exit units by setting up in the center and then move to Alpha's weakest side.

**DESIGNER'S NOTES**

Special forces raids by their nature are short, decisive engagements. Either the raiding force totally surprises the enemy troops and imposes their will on the objective area, or the enemy troops are alerted in time and chew the raiding force to pieces. Reflected these extremes is a tremendous problem when designing a game. It's exceedingly boring to be the losing side in a one-sided encounter. Thus, scenario selection was very important. Admittedly, the set of the scenarios are not totally balanced, but that is due to the historical limitations of the situation.

Morale in a tactical game is very important. *Raid* is a commando game in its basic intent. Commando forces do not experience the command control difficulties that normal line troops experience. Since commandos by their selection and training are motivated individuals, I felt that morale for these units would not be a problem. What I felt would be important in a tactical level game would be communications. If the raiding force knows what it is supposed to accomplish, they will try to do it. The problem will arise when they are cut off and do not receive orders then they will not function at full efficiency. Although heroes sometimes arise out of such situations in reality). Thus, the command control rules reflect the importance of communications on the battlefield. The force that is being attacked will experience much greater morale and communication problems than the raiding force, especially if they are surprised. This was handled in the game by design, although heroes sometimes arise out of such situations.

A unique feature in *Raid* is its observation point system. Some other games (*Grunt* and *Search and Destroy*) have used similar concepts, but *Raid* evaluates terrain on how easy it is to see through. All distances and ranges in the game are given in terms of observation point costs. Thus, Line of Sight situations are very easy to resolve.

The movement rates were determined by the designer running around a football field at around 11 p.m. This was done at night to simulate the period when most raids take place and by the fact that the designer did not want to be ridiculed by his neighbors. The movement rates try to take into account the amount of ground a unit will cover in approximately a two-minute period while trying not to get killed.

Tactics in *Raid* are very important due to the special Firing rules. Overwatch fire simulates a unit watching for hostile fire and responding to it. This is why units that qualify for overwatch fire re-
### [7.2] RANGE ATTENUATION TABLE

<table>
<thead>
<tr>
<th>Weapon</th>
<th>Range (hexes)</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10-11</th>
<th>12+</th>
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<tbody>
<tr>
<td>Bolt</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Semi</td>
<td>+1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+1</td>
<td>+1</td>
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<tr>
<td>Auto</td>
<td>+2 +1</td>
<td>-</td>
<td>-</td>
<td>+1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+2</td>
<td>+2</td>
</tr>
<tr>
<td>LMG</td>
<td>+3 +2 +1</td>
<td>+1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+3</td>
<td>+3</td>
</tr>
<tr>
<td>HMG</td>
<td>+5 +4 +3 +2 +1</td>
<td>+2</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>+5</td>
<td>+5</td>
</tr>
</tbody>
</table>

**KEY:**
- = No effect on Combat Resolution Die Roll
+ = Add the indicated number to the Combat Resolution Die Roll
- = Subtract the indicated number from the Combat Resolution Die Roll

### [7.7] DIRECT FIRE COMBAT RESULTS TABLE

<table>
<thead>
<tr>
<th>Defender is in</th>
<th>Firing Weapon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear, Mixed, River</td>
<td>H,4, L,3</td>
</tr>
<tr>
<td>Medium</td>
<td>H</td>
</tr>
<tr>
<td>Heavy, Building</td>
<td>H, L,3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIE</th>
<th>Clear, Mixed, River</th>
<th>Medium</th>
<th>Heavy, Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
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<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>S</td>
<td>S</td>
</tr>
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<td>1</td>
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<td>2</td>
<td>S</td>
<td>S</td>
</tr>
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<td>4</td>
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</tr>
<tr>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Die rolls greater than 8 are treated as 8. Die rolls less than -1 are treated as No effect.

### [9.41] ARTILLERY ATTACK STRENGTH CHART

<table>
<thead>
<tr>
<th>Artillery Type</th>
<th>Distance of Unit from Impact Hex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Impact hex)</td>
</tr>
<tr>
<td>60mm</td>
<td>6</td>
</tr>
<tr>
<td>81mm</td>
<td>7</td>
</tr>
<tr>
<td>42</td>
<td>8</td>
</tr>
<tr>
<td>105mm</td>
<td>9</td>
</tr>
<tr>
<td>155mm</td>
<td>15</td>
</tr>
</tbody>
</table>

**KEY:**
# = Attack strength  = = No effect

### [9.42] INDIRECT FIRE COMBAT RESULTS TABLE

<table>
<thead>
<tr>
<th>Attack Strength</th>
<th>10-15</th>
<th>12+</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>2</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>3</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>4</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>S</td>
<td>S</td>
</tr>
</tbody>
</table>

**KEY:**
- = No effect
S = Suppression (unit may not move but may fire; it subtracts 1 from its combat resolution die-roll if it does so)
# = Unit takes indicated number of casualties and suffers Suppression

### [9.5] EFFECTS OF TERRAIN ON INDIRECT FIRE

The following die roll modifications for Indirect Fire attacks in specified terrain are made:

<table>
<thead>
<tr>
<th>Terrain Type</th>
<th>Die Roll Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear and Mixed</td>
<td>no effect</td>
</tr>
<tr>
<td>Medium and Broken</td>
<td>-1</td>
</tr>
<tr>
<td>Heavy</td>
<td>-2</td>
</tr>
<tr>
<td>Building</td>
<td>-3</td>
</tr>
</tbody>
</table>

### DESIGN CREDITS

Game Design: Mark Herman
Game Development/Contributing Design: Tony Merridy
Physical Systems and Graphics: Redmond A. Simonsen
Playtesters: Mark Edwards, Alden Moore, Abe Taylor, Tom McComb, Bill Metcalf, Irving Gregory
Production: Bill Bauer, Larry Catalano, Manfred F. Milkuhn, Harry L. Park, Bob Ryer

[continued from page R11]
**RAID! Counters (Front)**

<table>
<thead>
<tr>
<th>Alpha Forces</th>
<th>Bravo Forces</th>
<th>Mines, Smoke, and Impact Markers</th>
<th>Strength Markers</th>
<th>Game Turn</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Alpha Forces" /></td>
<td><img src="image2" alt="Bravo Forces" /></td>
<td><img src="image3" alt="Mines, Smoke, and Impact Markers" /></td>
<td><img src="image4" alt="Strength Markers" /></td>
<td><img src="image5" alt="Game Turn" /></td>
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</table>

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## Terrain Effects Chart

<table>
<thead>
<tr>
<th>Terrain Type</th>
<th>Movement Point Cost</th>
<th>Observation Point Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear and Bridge</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mixed</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Medium</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Heavy</td>
<td>3</td>
<td>6</td>
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<tr>
<td>Building</td>
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<td>10</td>
</tr>
<tr>
<td>River</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

### Note:
A unit may trace a Line of Sight **into** one (1) Heavy or Building Terrain hex maximum. A unit may **never** trace a Line of Sight through a Heavy or Building Terrain hex regardless of the number of Observation Points available.
a Heavy or Building Terrain hex regardless of the number of Observation Points available.

**TERRAIN KEY**

- **Clear**
- **Mixed**
- **Medium**
- **Heavy**
- **Road**
- **Trail**
- **River**
- **Sea**
- **Wall**
- **Fortified Position**
- **Bridge**
- **Building**
- **Contour**
### Terrain Effects Chart

<table>
<thead>
<tr>
<th>Terrain Type</th>
<th>Movement</th>
<th>Observation Point Cost</th>
</tr>
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<tbody>
<tr>
<td>Clear and Bridge</td>
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<td>2</td>
</tr>
<tr>
<td>Mixed</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Medium</td>
<td>Maximum</td>
<td>10</td>
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<tr>
<td>Heavy</td>
<td>Maximum</td>
<td></td>
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<tr>
<td>Building</td>
<td>Maximum</td>
<td></td>
</tr>
<tr>
<td>River</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

A unit may trace a Line of Sight into one (Maximum) Heavy or Building Terrain hex maximum. A unit may never trace a Line of Sight through a Heavy or Building Terrain hex regardless of the number of Observation Points available.

### Terrain Key

- Mixed
- Medium
- Heavy
- Building
- River
- Road
- Trail
- Wall
- Fortified Position
- Contour

### Terrain Effects Chart

TERRAIN KEY

- Mixed
- Medium
- Heavy
- Building
- River
- Road
- Trail
- Wall
- Fortified Position
- Contour

TURN REGISTER TRACK

1  2  3  4  5  6  7  8  9  10 11 12 13 14 15 16 17 18 19 20