THE ARAB-ISRAELI WARS
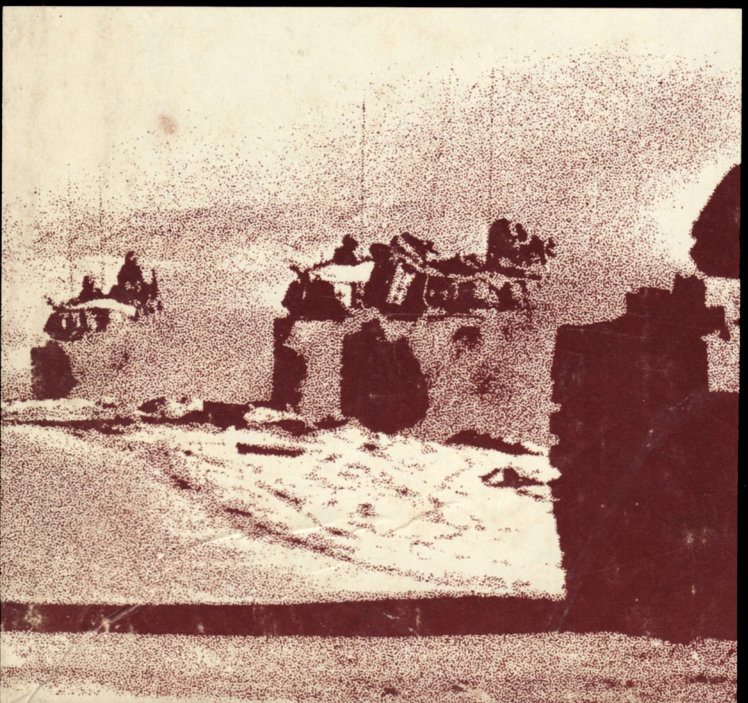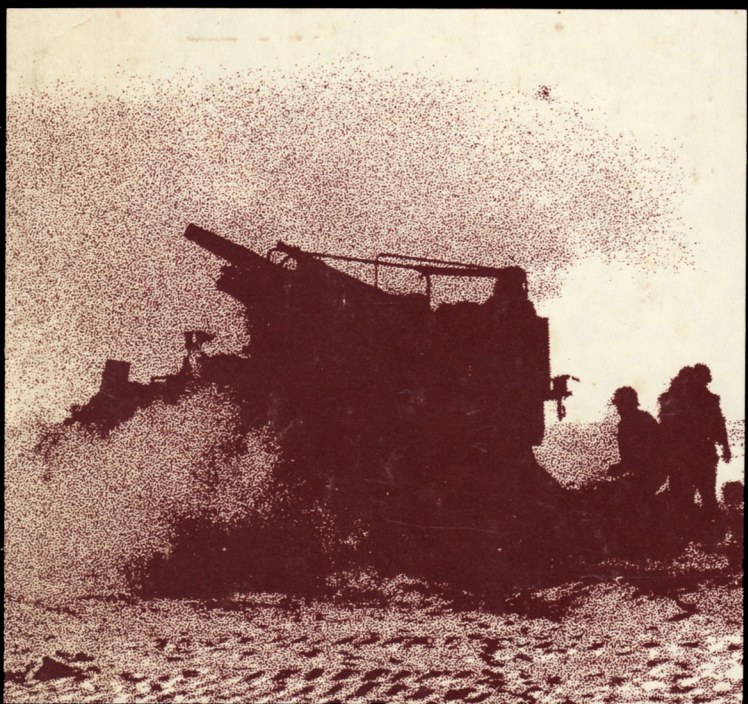
Tank Battles in the Mideast, 1956-73

"IT'S DESPERATE! THE SITUATION'S DESPERATE!" the commanding officer of the Bar-Lev fortress shouted to his superiors at Southern Command HQ. "WE HAVE LARGE BREACHES ON THE CENTRAL SECTOR, AND ON THE SOUTHERN—WE'RE BEING ATTACKED BY SCORES OF TANKS." He cut into the radio net again, but this time his voice was more emotional, "IF I DON'T GET AIR, THE SOUTH AND CENTER WILL FALL. AT LEAST 200 TANKS ARE POURING THROUGH, I MUST HAVE AIR URGENTLY!"

"Can you hold on?" General Gonen asked into the microphone.

There was a pause, then the speaker crackled: "THIS IS THE RADIO OPERATOR SPEAKING. THE EGYPTIANS ARE INSIDE THE COMPOUND. EIGHT HUNDRED MEN ON THE FENCES . . . THEY'RE FIRING INTO THE BUNKER . . . THIS IS MY LAST BROADCAST . . . THE EGYPTIANS ARE COMING IN SHOOTING . . . TELL MY MOTHER I FOUGHT LIKE A HERO." Then there was silence.

The Bar-Lev Line had fallen. Another desperate Arab-Israeli war had begun.

Now you can re-fight the battles that determined the fate of nations. Victories that strike like lightning, if you can win them—like the victories of Israeli arms in 1956 and 1967. Battles that were mammoth struggles for crossroads and passes and battles that were pinprick raids. The military forces of Egypt, Israel, Jordan and Syria are yours to command—can you lead them to victory in the battles that shaped the Middle East today?

TWENTY-FOUR DIFFERENT GAME SITUATIONS are provided in the game, re-creating the battles as they really happened on a PLATOON and BATTERY level: In 1956, the Israeli raid on the Kalkiliah police fort (10/10/56) and the clash of the Israeli 7th Armored Brigade and the Egyptian 1st Armored Brigade in the Sinai Desert (11/2/56); in 1967, the Israeli race for the Suez past static Egyptian defenses (6/5/67) and the Israeli attacks against Egyptian forces at Abu Agheila and Jordanian forces at Kuneitra (both 6/6/67); in 1973 the successful Egyptian surprise attacks at Lituf, Bir Gifgafa and Ismailia on 10/6/73, followed by the Syrians' entering the war by attacking Kuneitra (10/7/73), and the suicidal Israeli counterattacks at El Al (10/7/73), El Firdan (10/8/73) and Kuneitra (10/11/73); then the ambush of an Iraqi armored Brigade (10/11/73), and the defense of Ras Sudar against the Egyptians (10/14/73) leads into the great Israeli counterattack at the Chinese Farm (10/16/73), the crossing of the Suez Canal at Deversoir (10/17/73) and the final breakout into Egypt (10/18/73) that ended the war; in addition to other ambushes, raids and clashes that show how modern weaponry was used, could have been used if things had turned out slightly differently, or might be used in the future. Each situation is a complete, ready to play game. NO PRIOR MILITARY SKILL NEEDED. Just clear thinking, common sense, and a taste for intensive competition!

THE ARAB-ISRAELI WARS, like its enormously popular sister-games about armored warfare, *Panzer Blitz* and *Panzer Leader*, encompasses many new design concepts that create a game totally unlike anything you have ever before experienced:

* TACTICAL LEVEL COMBAT involving tanks overrunning defensive positions, infantry making close assaults, devastating jet air strikes, helicopter maneuvers and assaults, missiles guided to their targets from long range, artillery shelling and barrages, assaults across the Suez Canal, fortified defensive lines, meeting engagements, rear guard actions, stubborn defensive fights and tank-versus-tank duels with modern equipment maneuvering amidst the sand dunes, plus many more.

* PLATOON SIZE UNITS from the Israeli, Egyptian, Syrian and Jordanian armies, as well as irregular commando fighting units. The units include guided missiles, modern armor-piercing infantry weapons, all kinds

of modern artillery and tanks, jet airplanes, helicopters, engineering vehicles and more, all of which can be combined to form battalions, regiments, brigades and even the divisions that have fought in the Middle East.

* RULES OF PLAY which cover gun ranges, target elevation, hulldown shielding tactics, indirect artillery fire, improved defensive positions, fortifications, roadblocks, minefields, electronic warfare, morale, air attacks, bore-sighting for accuracy, firing while moving, opportunity fire, modern engineer techniques and vehicles, and much, much more.

In each game you get:

* Over 450 units representing the actual military units that fought in Egypt, Syria, Jordan and Israel.
* Big 22" x 28", four section, full color GEOMORPHIC map-board which can be re-arranged to make literally HUNDREDS of different terrain configurations that can represent the Suez Canal, the Golan heights, the Sinai desert, the Mitla Pass, the West Bank of Jordan, and many others.
* Comprehensive, illustrated Rules of Play and Campaign Notes booklet.
* Carefully constructed game Situations that provide twenty-four different, COMPLETE games.
* Easy-to-use game charts that reduce the complexities of tactical armored combat to manageable proportions.
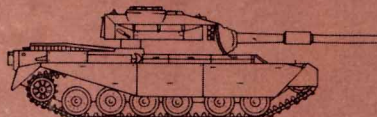
British Centurion Mk. III: Superior armor protection is the only redeeming feature of an otherwise mediocre tank; unreliable, underpowered and undergunned. Only in later, Israeli-modified models with an American engine and a new British gun, would the Centurion earn the title of "the best tank in the Middle East".
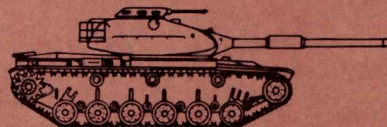
American M-60A1: Used by Israel and Jordan since 1972. Superb weaponry and a powerful and reliable engine turn an otherwise mediocre tank into a potent fighting machine.

Soviet T-62: While often called the best tank in the world, important weaknesses make the T-62 inferior to comparable Western tanks. Mechanically unreliable, with a cramped fighting compartment, its only redeeming feature is its 115mm smooth-bore gun.
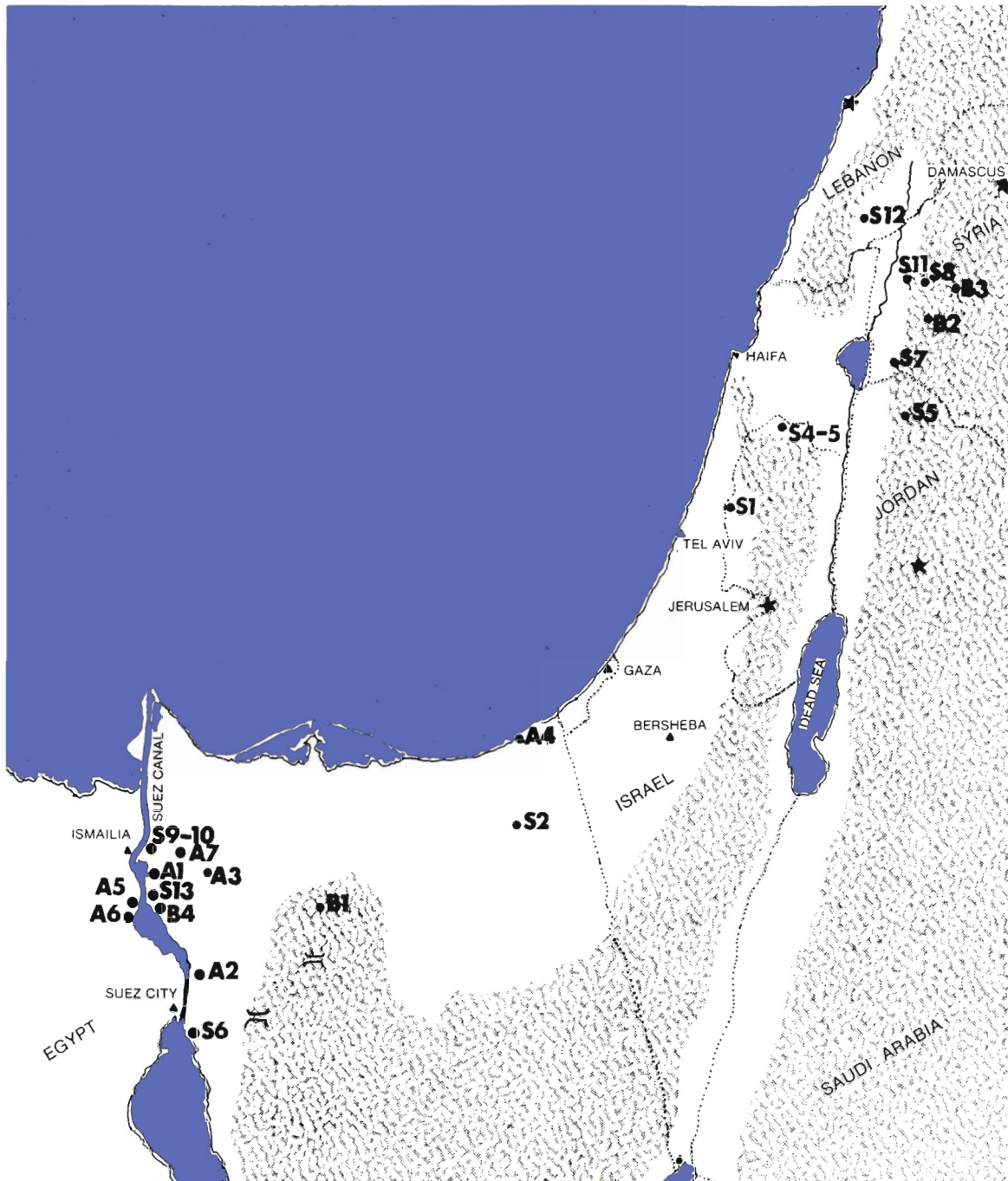
THE ARAB-ISRAELI WARS is Avalon Hill's Trademark name for its Mideast Tank Battle Game.

THE ARAB-ISRAELI WARS

RULES, DESIGNER'S NOTES, AND CAMPAIGN DATA

WHERE THE SITUATIONS OCCUR

Map labels: DAMASCUS, LEBANON, SYRIA, S12, S11, S8, B3, B2, S7, S5, HAIFA, S4-5, JORDAN, S1, TEL AVIV, JERUSALEM, GAZA, DEAD SEA, BERSHEBA, A4, ISRAEL, S2, SUEZ CANAL, ISMAILIA, S9-10, A7, A1, A3, A5, S13, A6, B4, B1, A2, SUEZ CITY, EGYPT, S6, SAUDI ARABIA

OUR DESIGN DEPARTMENT will be happy to take the time to answer queries regarding play of this game but ONLY when accompanied by a self-addressed envelope containing first-class postage.

REPLACEMENT PARTS COST
For current replacements parts list, send a stamped self-addressed envelope to: Parts Dept., The Avalon Hill Game Company, 4517 Harford Road, Balto., Md. 21214.

GLOSSARY

ATG—Anti-Tank Gun.
(att)—temporarily attached.
BDE SP GRP—Brigade Support Group.
CDO—Commando.
DIV SP GRP—Divisional Support Group.
DIV TANK GRP—Divisional Tank Group.
(elm)—elements of parent unit.
½track—halftrack.
helo—helicopter.
HOW—howitzer.
HVY—heavy tank.
MBT—Main Battle Tank.
mort—mortar.
(+)—reinforced.
(-)—reduced in strength.
Sherm—Sherman.

The Arab-Israeli Wars
Rules

TABLE OF CONTENTS

INTRODUCTION

THE ARAB-ISRAELI WARS is a realistic game simulating tactical level combat between Arab and Israeli military forces in the Middle East wars of 1956, 1967 and 1973. Twenty-four different game Situations allow you to re-create twenty-four different clashes between Arab and Israeli forces, ranging from lightning raids to desperate, climactic battles. Israeli forces fight Egyptian lank brigades along the Suez Canal and in the Sinai Desert, Syrian positions in the Golan Heights, and Jordanian forces in the West Bank of Jordan.

Combat units from alt these wars and all these armies are supplied, along with mapboards with the proper terrain, and rules that reflect the progressive sophistication of the weaponry used in the Middle East. Using these units and rules players can easily design unlimited additional game Situations to their own taste. Like Avalon Hill's immensely popular games of World War II tactical armored combat (PANZERBLITZ— Tactical Armored Combat on the Eastern Front, 1941-1945 and PANZER LEADER—Tactical Armored Combat in France 1944-1945), THE ARAB-ISRAELI WARS is an exciting game experience A ND a valuable source of information about the comparative strengths of the Arab and Israeli armies in the Middle East.

IF YOU HAVE NEVER PLAYED A WAR-GAME BEFORE, don't he overwhelmed by what looks like a lot of complicated rules. The length of the rifles is due to their precision in expressing the simple and easily understood concepts that make up the game.

Remember: the rules are all common-sense recreations of actions that happen in the real world, so if you think of actual tanks moving and shooting across the desert or in hills and towns then you will easily understand what is going on in the game. The rules have been organized into four sections, to allow you to get used to them gradually. The BASIC RULES, STANDARD RULES. ADVANCED RULES and OPTIONAL RULES gradually add more units with all the unusual weaponry of modern war. IT IS NOT NECESSARY   TO MEMORIZE THESE RULES. Just read the rules that you want to use and play a practice game or two, then re-read those rules that were unclear when you played. Game Situations have been provided for each section of rules, so you can play complete games as you become familiar with each level of the game. Once the basics of movement and combat have been understood, all the advanced functions in the game will fall into place naturally as you become familiar with them.

A WORD TO VETERAN AVALON HILL GAME PLAYERS: This game is based on the familiar PANZERBLITZ I PANZER LEADER game system, but there are a number of important changes, and a LOT of special or modified functions have been added to reflect the sophisticated nature of modern weaponry. You should closely examine all the charts, and carefully read each section of rules—especially the STANDARD RULES about indirect fire, morale and overrunning, and all the ADVANCED and OPTIONAL RULES. Even the BASIC RULES contain innovations about sighting and spotting.

COMPONENTS

This game includes:

1) Four mapboards that can be used individually **or** can be assembled to create a variety of larger playing surfaces.

2) One die-cut counter sheet containing Arab pieces (234 separate counters).

3) One die-cut counter sheet containing Israeli pieces (234 separate counters).

4) One rulebook containing examples of play, game Situations, Designer's Notes and historical unit composition data.

5) Player aid card (two-page fold-out).

6) One die.

This game is copy of The Avalon Hill Game Company.

BASIC RULES

I. GENERAL OUTLINE OF PLAY

Each side maneuvers its pieces on the board, using them to destroy enemy pieces and to capture territorial objectives on the mapboard. The players take turns moving, with each player moving as many of his own units as he likes, one unit at a time, before his opponent may move. Together the two complete moves—one by each player—form a complete turn, representing six minutes of real time. Each game Situation lasts for a specified number of complete turns; after the last turn the players compare how they have done to determine the winner.

All sorts of battles are provided in the game Situations—head-on struggles, fighting withdrawals, raids, and more. The skill of the players is the most important factor in winning the game— but die-rolling introduces the elements of unpredictability and chance that are always present in real-life combat.

II. THE PLAYING PIECES

The die-cut cardboard counters are the playing pieces. Each counter represents either a military unit or an engineering construction, or is a marker used to keep track of some game function.

A. COMBAT UNITS

Each military unit counter represents a battery, platoon or half-company size military unit, such as an infantry platoon, an artillery battery or a tank half-company.

1. Each unit's ability to attack, survive enemy attacks, move, etc. is expressed by the numbers printed on the unit counter:
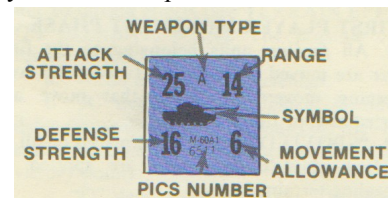
Each unit counter belongs to one of the national armies in the Middle East, as indicated by the color of the counter (blue for Israeli units, various shades of tan for Egyptian, Syrian and Jordanian units). All vehicle units have a silhouette of their main vehicle printed in the center of the counter; non-vehicular units bear the standard military planning symbol for that type of unit. Units with the same manpower and equipment have the same symbol and title, but each counter has a different PICS number, identifying that unit counter. The other information on the counter:

Attack Strength: The unit's ability to destroy enemy units, expressed as a number of attack strength points.

Weapon Type: A letter identifying the main armament carried by the unit.

"I"—Light infantry weapons

"A"—High-velocity, armor-piercing cannons

"H"—Howitzers and other high-explosive shell projectors

"(H)"—Howitzers with high trajectories and indirect fire capabilities

"M"—Mortars with high trajectories and indirect fire capabilities

"G"—Guided missiles

"AA"— Anti-aircraft guns with high rate of fire and air-burst shells

"•"—Air Strike

Range: The maximum distance away (in hexagons) an enemy unit can be and still be attacked by this unit. Example: a unit with a range of 8 could attack an enemy unit 8 hexes away or closer, but could not attack a unit 9 or more hexes away.

Defense Strength: The ability of the unit to survive an enemy attack, expressed as a number of defense strength points.

Movement Allowance: The maximum number of hexagons (hexes) which the unit can move through in one turn, expressed as a number of movement points. The unit must expend some of these movement points each time it enters another hex; the "movement allowance" is the maximum number of movement points the unit can expend in a single turn. Ordinarily the unit must expend one point to move one hex, but sometimes the unit must expend more (or less) points to enter certain hexes. (Note: a "C" printed above the movement allowance indicates that the unit can carry passengers.)

2. The Unit Function Table in this rulebook contains additional information about each unit in the game, information that is not printed on the counter. The most important information in the UFT is the unit's target type, which is either:

"A"—Armored

"NA"—Not armored

"F"—Lightly armored and flying (helicopters **and** airplanes)

B. ENGINEERING COUNTERS

Fortifications, improved positions, trenches, mines, bridges and blocks are explained in the STANDARD RULES.

C. GAME FUNCTION MARKERS

1. The "N" marker is placed beside the mapboard with the arrow pointing in the direction indicated as "North" for the game Situation being played. The "TURN NOW" marker keeps track of the passage of complete turns on the TIME RECORD TRACK.

2. "DISPERSED" markers are placed on the board, on units that are temporarily out of action due to enemy attacks. "SPOTTED" markers are placed on the board, on units that are in concealing terrain (woods or towns) but which are seen by the enemy anyway.

3. Wreck markers represent destroyed vehicles, and are placed on the board in road or town (or bridged) hexes where an armored unit is destroyed.

4. "INTERDICTION FIRE", "SMOKE" and "RELOAD" markers are explained in the ADVANCED RULES and OPTIONAL RULES.

III. THE MAPBOARD

The mapboard is composed of a grid of hexagons superimposed on stylized representations of terrain features. The hexagon ("hex") grid is used for positioning units and for measuring distances during movement and fire.

A.THE FOUR BOARDS

The four boards represent terrain typical for the Middle East. Board "A" portrays the Suez Canal area, board "B" portrays typical desert-road terrain, board "C" is an area of towns and orchards and board "D" portrays rough terrain, similar to the Golan Heights and the Mitia Pass. Each board may be used individually, or the boards can be joined side-to-side or end-to-end to create one, larger, mapboard: the terrain on each board has been designed so that the boards can be rotated and joined in any number of ways, any side to any side and any end to any end (except for board "A", which cannot join end to end with the other boards because of the Suez Canal).

1. On each board, a row of letters has been printed in the hexes along one edge. Each letter identifies that row of hexes on that board. Using these letters it is possible to specify any hex on any board-just identify the hex by specifying the board it is on, its hex row on that board, and its number in that hex row (counting the lettered hex as "1" and counting up across the board). For example, the coordinates A-R-2 identify the second hex in row R on board "A". This is one of the two town hexes on board "A"; the other is A-S-1.

2. The half-hexes on each board are playable and are included in this numbering scheme. When two boards are joined, the half-hexes along the joining edges combine to form a row of whole hexes along the seam. Each combined "seam" hex has two sets of coordinates, one set for each board. Example: if boards "A" and "B" were joined lettered edge to lettered edge, seam hex A-R-1 could also he called B-P-1.

3. The proper boards to use, and the proper way to join them, are specified for each game Situation, at the end of this rulebook.

B. TERRAIN FEATURES

Some kinds of terrain are in a hex, and some kinds of terrain are located on a hex *side, between* two hexes. For a detailed explanation of each type of terrain, see the *Terrain Effects Chart* (TEC).

1. Woods, towns, slopes and the Suez Canal are kinds of terrain that are located inside a hex. If part of a hex contains one of these terrain features, the whole hex is assumed to contain that terrain feature; if a hex contains none of these, it is a "clear terrain" hex.

2. The heavy **hex** side symbols (colored bars superimposed on a hex side) represent terrain located along that hex *side.* Yellow bars indicate sand dune hex sides, dark brown bars indicate crest hex sides, and light brown bars that are not next to the Suez Canal indicate ridge hex sides; the light brown bars bordering the Suez Canal on board "A" indicate moraine hex sides. See the *TEC* for hex side effects on sighting and movement.

3. In addition to the above types of terrain, a hex or hex side can also contain a *road.* Roads run from hex to adjacent hex, crossing the intervening hex side. Units moving along a road ignore the terrain in the hexes and hex sides they pass through, and also get to move at a faster rate than normal.

C. PLACEMENT OF UNIT COUNTERS ON THE MAPBOARD

When placed on the mapboard, each counter must be positioned so that it is within one hex. More than one counter may be placed in the same hex, up to a certain limit.

1. Combat units belonging to the same player can be placed in the same hex, up to the limit explained under "STACKING", below.

2. Combat units can *never* be in the same hex with enemy combat units.

3. Game function markers are placed in the same hex with combat units to indicate a special status for those combat units. As many markers as are required may be placed in a hex, and the markers do not affect the number of combat units that are allowed in that hex.

4. Engineering counters may be in the same hex with each other and with either side's combat units (but *not* both sides at once), as explained in the *STANDARD RULES. •—"*

5. In the *BASIC RULES,* no unit or counter is allowed in a Suez Canal hex or in any hex west of the Suez Canal. This rule is modified in the *STANDARD RULES.*

6. Units and counters may be placed in the half hexes around the board's edge as if they were complete hexes.

D. STACKING

Each combat unit counter and wreck counter in the game is worth "stacking points".' These stacking points are totalled for counters in the same hex; at no time during play may there be more than four stacking points in one hex. Half-hexes around the outside edge of the board can each hold four stacking points; when half hexes combine to form "seam" hexes, each "seam" hex can hold four stacking points.

1. Each combat unit counter is worth one stacking point. *Exceptions:*

a. Air units are worth zero stacking points. b. Passenger units loaded on carriers do not count for stacking (but each carrier unit does count).

2. A wreck counter bearing no number is worth one stacking point. A wreck counter bearing the numeral "2" is worth two stacking points. ^

3. Game function markers never count for stacking.

4. Engineering construction counters do not count for stacking.

(Special: engineering constructions can change the stacking limits in their hexes, as explained in the STANDARD RULES.)

IV. SEQUENCE OF PLAY

*A*RAB-ISRAELI WARS is played in turns. Each turn consists of four "phases", one for each player's movement and one for each player's fire. During each complete turn the players execute the game functions in the following order:

A. FIRST PLAYER FIRE PHASE:

1. All *face-up* units belonging to the first player may be used to execute direct fire attacks. Units that attack are inverted as soon as they attack.

2. All "DISPERSED" and "SPOTTED" counters positioned on units belonging to the first player are removed. Inverted units remain inverted.

B. FIRST PLAYER MOVEMENT PHASE

1. All *face-up* units belonging to the first player are moved as he desires (within the laws governing movement). Units that move are inverted as they finish moving.

2. "SPOTTED" counters are placed on all of **the** first player's units that are spotted in concealing terrain.

3. All counters belonging to the first player are turned face up.

C. SECOND PLAYER FIRE PHASE

The second player conducts movement as outlined in the "FIRST PLAYER FIRE PHASE", only using his own combat units.

D. SECOND PLAYER MOVEMENT PHASE

The second player conducts movement as outlined in "FIRST PLAYER MOVEMENT PHASE", only using his own combat units.

E. The second player records the passage of one complete turn by moving the "TURN NOW" counter along the time record track.

F. The players repeat steps "A" through "E" for each turn for as many turns as the Situation indicates, or until one player concedes defeat.

G. After the last turn Victory Points are calculated as specified for the Situation being played, and the winner is determined.

V. MOVEMENT

A. HOW TO MOVE UNITS

During a player's movement phase he may move as many of his combat units as he wishes, subject to the following restrictions:

1. Inverted counters may not be moved.

2. No unit is obliged to move. Face-up units which do not move remain face-up.

3. Units that do move must be inverted as soon as they finish their movement.

4. Units must be moved one at a time. a. A stack of units cannot move together; the units in the stack must move one at a time.

b. Once a unit has begun moving it must complete its movement and be inverted before another unit may be moved. Conversely, a moving unit's movement is finished for that movement phase once another unit begins moving.

5. Each unit's movement is traced from hex to adjacent hex. A unit may enter more than one hex during a movement phase, but in each case the hex entered must be adjacent to the hex the unit is leaving.

6. The number of hexes a unit may enter during a movement phase is limited by the "movement allowance" number that is printed on the unit counter.

a. In a single movement phase a unit may not expend more movement points than that units movement allowance indicates.

' b. The number of movement points a unit expends in entering a hex depends on the terrain in the hex entered and the terrain on the hex side between the hex left and the hex entered. To enter a

hex, a unit must expend the sum of the movement costs to enter the new hex and to cross the intervening hex side. The movement costs for each type of terrain are listed on the **Terrain** Effects Charts (TEC).

c. If a unit cannot expend the points required to cross a hex side and enter a hex, then that unit cannot cross that hex side and enter that hex.

d. *Exception to* RULES a, b and c: Units with a movement allowance of "1" may move one hex regardless of terrain entry costs.

7. Each unit must abide by the positioning rules in every hex it enters. The unit may not enter a Suez Canal hex, may not enter a hex containing an enemy unit, and may not enter a hex occupied by friendly units if it would cause overstacking in that hex. The unit cannot even pass through such hexes—it cannot enter them at all.

8. In the *BASIC RULES*, no combat takes place during movement.

B. CARRIER AND PASSENGER UNITS

Certain units can be "loaded aboard" other units. The units that can be "passengers" are identified individually in the "PASS" column of the *Unit Function Table:* the units that can "carry" these passengers are identified in the "CARR" column of the table also have a "C" printed on their counters, immediately above the movement allowance.

1. Each carrier unit can carry one passenger unit at a time.

2. Any carrier unit may carry infantry-class units (infantry, machine-gun, commando, engineer, Sagger, Cobra, 107mm guns or 81; 82mm mortar units).

3. Only "truck" units may carry towed-artillery class units.

4. Other classes of units may never be passengers (each unit's "class" is specified in the "CLASS" column of the *Unit Function Table)*.

5. A passenger unit is considered to be "located aboard" a carrier unit when the passenger unit is positioned directly underneath a "carrier" unit in the same hex.

6. When a passenger unit is "loaded aboard" a carrier unit, the passenger unit is ignored in **all** functions of the game.

a. The carrier unit is not affected in any way. **It** expends its own movement points normally, moving normally, it counts for stacking, it attacks and is attacked using its own combat strengths.

b. The passenger unit is considered to be part of the carrier unit; together, they count as one unit: the carrier unit with the passenger unit being ignored. The passenger unit does not count for stacking, it cannot expend its movement points, it cannot attack nor be attacked.

c. When the carrier unit moves, the passenger unit moves along with it, moving at the same time. While loaded, the passenger unit always stays with its carrier.

d. In. combat, only the carrier unit may attack or be attacked. If the carrier unit is eliminated, the passenger it is carrying is automatically eliminated; if the carrier unit is "dispersed", the passenger unit is automatically "dispersed" at the same time.

e. Whenever a carrier unit is inverted its passenger unit is also automatically inverted; whenever a carrier is turned face-up, the passenger loaded on it is turned face-up.

7. Passenger units that are not loaded may be loaded onto a carrier, and loaded passenger units may be unloaded. Loading and unloading of passengers takes place as part of the movement of the carrier unit, during the friendly movement phase.

a. To load, a passenger **unit must be in the** same hex with the carrier unit.

b. When it is unloaded, the passenger unit remains in the same hex where the carrier unit is when the unloading takes place.

c. Loading or unloading an infantry-class passenger costs a carrier unit one-half of its movement allowance (keeping any fraction). This is in addition to any movement points the carrier expends in moving from hex to hex; if the carrier cannot expend the required movement points it cannot load/unload its passenger. (Notice that' since a carrier unit expends only one-half of its movement to load/unload an infantry-class passenger, it is possible for a carrier unit to move and then load/unload, or load/unload and then move, or even move, load/unload and then keep on moving—if it can expend the movement points).

d. Loading or unloading a towed-gun class unit costs a truck unit all of its movement points; a truck unit cannot move in the same turn it loads or unloads a towed-artillery class passenger.

e. A passenger unit must always be face up **at** the moment that it is loaded or unloaded. If it is being unloaded, it is inverted as soon as it is unloaded; if it is being loaded it is inverted with the carrier, at the end of the carrier unit's movement. Notice that this means that *a passenger unit cannot move* by *itself nor at*tack in the same turn that it loads or unloads.

8. Unloaded passenger units are normal units for all purposes in the game, including stacking. This is true immediately before loading and after unloading; thus, a carrier may not unload a passenger in a hex if the unloaded unit would violate stacking limits, and a carrier unit cannot enter a hex to load if it would cause overstacking before the passenger is loaded.

C.ROAD MOVEMENT

A unit moving along a road may do so using the road rate for movement.

1. A unit is considered to be moving "along" a road if it meets the following conditions:

a. The unit is leaving a hex containing the road.

b. The unit is entering a hex containing the road.

c. The unit is crossing a hex side that **the road** crosses.

d. The hex being entered contains no more than one stacking point. If the hex contains two or more stacking points, the unit may not use the road to enter that hex.

e. The player who is moving the unit chooses to move along the road.

2. If any of the above conditions is not met, the unit may not use the road to enter that hex. The unit may still pay normal terrain costs to enter that hex.

3. A unit that is moving "along" a road (at **the** road rate) expends only one-half movement point for each hex it enters while moving along the road, regardless of terrain.

4. A unit may combine road movement **and** non-road movement freely in the same movement phase, expending movement points at the road rate when moving along the road and paying normal terrain costs when not moving along the road. Fractional movement points are not lost when a unit leaves the road—the

moving player can keep track of them and use them if the unit moves back onto a road that turn.

5. Town hexes count as road hexes.

6. *Special: In the STANDARD RULES, block, fortification, and mine field counters negate the road in the hex containing any of these counters. A hex is not a road hex as long as it contains one or more of these counters.*

VI. COMBAT

A. HOW TO HAVE COMBAT

1. Combat takes place when a player decides to have one (or more) of his units attack one (or more) enemy units.

a. For each attacking unit the Weapons Effectiveness Chart is used to convert the unit's attack strength to an effective strength for this attack. (See USING THE WEAPONS EFFECTIVENESS CHART, below.)

b. The effective attack strengths of the attacking units are totalled and then compared to the total of the defending unit(s') defense strengths. The comparison is stated as a ratio of the attacking total to the defending total, and this ratio is then rounded down (in the defender's favor) to the nearest "combat odds" ratio listed on the *Combat Results Table* (CRT). *Example:* 11 to 3 rounds down to 3 to 1, while 3 attacking II rounds down to 1 to 4.

2. Roll the die. cross-index the roll with the odds ratio on the CRT to find the combat results and apply those results to the units defending in that specific combat. The die roll may be modified due to terrain effects (see TERRAIN EFFECTS ON COMBAT, below). The possible combat results on the CRT:

a. "-" no effect on the defender.

b. "X" defender(s) eliminated. Remove the defending unit(s) from the board for the remainder of the game and count them as eliminated for victory points.

c. "D" defender(s) dispersed. The defending unit(s) remain on the board, but they are turned face down and a "DISPERSED" counter is placed on top of them. These units are said to be "dispersed".

d. "DD" special dispersal. Among the defenders in this combat, any units that were already dispersed are now eliminated. Any other, undispersed, defending units are now dispersed.

B. MODIFYING THE DIE ROLL

The die is rolled once for each attack. Each defending unit is considered in turn. The die roll modifications appropriate for that unit are made to the die roll—additions and/or subtractions — and the result is applied to that defending unit.

1. The CRT is consulted for each defending unit separately. It is possible for different defending units in the same attack to have different die roll modifications; the modifications that apply to a unit apply to that unit only.

a. Die roll modifications due to type of attack, TERRAIN ADDITIONS TO DEFENSE and positional defenses apply equally to each defending unit.

b. Die roll modifications due to a unit's being dispersed or due to HULL DOWN shielding can vary from unit to unit within the same attack, depending on the defending unit and its condition in the game.

2. For each defending unit the die roll modifications are cumulative (die roll modifications are NEVER transferable from one unit to another). The die roll additions and subtractions applicable to the unit are summed and the final result is used to modify the die roll.

3. Factors that affect the die roll:

a. A unit which is attacked while dispersed lowers the number rolled on the die by "1".

b. Each unit in a woods or town hex adds "1" to the die roll when attacked.

c. Each unit in the same hex with an improved position or fortification counter is plus 2 on the die **roll.**

d. A unit shielded behind an adjacent elevation hex side (see HULL DOWN, below) is plus 2 if it is any other unit. This applies to direct and opportunity fire attacks only.

e. Each unit is minus 2 if defending against an overrun attack.

f. Each defending unit is minus 2 if defending against a CAT attack; if the attacking units include one or more engineer units each defending **unit** is minus 3 instead.

C. COMBAT PROCEDURE

There are six types of combat described below and in the *STANDARD RULES.* ("Direct Fire" attacks, only. are described below. "Indirect Fire" attacks, "Overrun" attacks. "Close Assault Tactics" attacks, "Opportunity Fire" attacks, and "Air Strike" attacks are explained in the STANDARD *RULES.)*

1. The number of attacks a player can execute is limited only by the availability of attacking units and targets. A player can choose to make no attacks at all.

2. In order to attack a specific unit, an attacking unit must meet certain conditions. If these conditions are not met the attacking unit may not attack that defending unit.

a. Units that are inverted or "dispersed" cannot attack in any way.

b. The range in hexes from the attacking unit to the defending unit must be equal to or less than the range number printed on the attacking counter or the defender is "out of range" and cannot be attacked by that attacker.

c. The other conditions deal with the positions of the attacking unit(s) and defending unit(s) **on** the board. These conditions differ with each type of attack and are explained in the rules for each type of attack.

3. In ALL attacks the attacking units are inverted as soon as the attack has been resolved on the CRT. Once inverted it cannot attack again until after it is turned face up at the end of the next friendly movement phase.

4. In any one attack all of the defending units must be in the same hex. Defending units in separate hexes cannot be attacked together in one attack.

a. In some types of attacks it is possible to attack some units in a hex and leave others alone or attack them separately.

b. In other kinds of attacks it is necessary to attack all of the units in a hex together, as one combined defense factor. Check the specific rules governing each type of combat.

c. In any case, only the units attacked are affected by the combat results.

5. For each type of attack, all the fire directed at a target (defending unit or units) must be combined into ONE attack. A

defending unit cannot be involved in two (or more) attacks of the same type in the same turn.

6. Attack and defense strengths are not transferable from one unit to another. A unit's defense strength is used only in that attack in which that unit is defending; a unit's attack strength must be used in one attack against **one** target (defending unit or units).

D. USING THE WEAPONS EFFECTIVENESS CHART

1. Each unit in the game has a weapon type (I, A, H, (H), M G, or AA) and a target type (armored, non-armored or flying aircraft).

a. The weapon type represents the main armament carried by the unit and is indicated by the letter printed on each counter. Weapon types are also given on the UFT.

b. Target type indicates the type of defensive protection a unit carries. The target type of each unit in the game is given on the LEFT.

2. In an attack the effectiveness of each weapon changes depending on the type of attack being executed, the target type of the defenders and the range to the target. These changes are reflected in the WEC by doubling, halving or quartering a unit's attack strength appropriately.

3. The W*eapons Effectiveness Chart* is divided into fifteen "blocks" by heavy lines. Horizontally it is divided into three blocks by target type, and vertically it is divided into five blocks by the type of attack being made—direct fire (or opportunity fire), indirect fire, overrun attacks, CAT attacks and air strikes. The attacker cross-indexes the type of attack he is making with the target type of the defending unit(s) to find out which *WEC* block will be used to calculate the effective strengths of the attacking unit(s). (Direct fire attacks are the only type explained in the *BASIC RULES.)*

a. If an attack is being executed against defending units that have different target types then a target must be determined for all the defending units as a group. The group's target type is the target type in the majority among the defending units. Note that it is the majority of *units* which determines the group's target type— combat factors are irrelevant for this purpose.

b. If there is no majority among the target types, each attacking unit in turn treats the defending group as the target type *least favorable to that at*t*acking unit.* Thus, in an attack against a balanced group a "G" class attacker would treat the group as infantry while an "I" class attacker would treat it as armored—in the same attack!

4. Once the WEC appropriate for this attack has been determined, each attacking unit's effective strength is calculated in turn, using that block.

a. Within the block, each attacking unit's weapon type is cross-indexed with the range in hexes from that attacking unit to the defending unit(s).

b. The cross-indexed result is the effect on that attacking unit's attack strength. "Doubled" means that the unit's attack strength is doubled to get its effective strength; "halved" means the attack strength is halved, etc. Retain all fractional attack strength points.

c. "NOT ALLOWED" means that the attacking unit may not take part in this attack. The unit's effective attack strength is zero.

d. If a weapon type is not represented in the WEC block governing the attack, then units with that weapon type cannot make that type of attack. EXAMPLE: there is no line for "G" class weapons in the WEC blocks covering overrun attacks. "G" units cannot make overrun attacks.

e. Follow this procedure for each attacking unit in that attack.

f. The effective attack strengths of the units making the attack are then totalled and combat is resolved as described in section V.A above.

5. The two extra columns on the right side of the WEC give additional information for easy reference during play.

a. The "PROXIMITY AND SIGHTING" column notes the range and sighting requirements that attacking units must meet to make each type of attack.

b. The "DIE ROLL MODIFIER" column notes the die roll modifications that are in effect for each type of attack.

6. Further explanations and notes are given on the WEC itself.

VII. TERRAIN EFFECTS ON COMBAT

The mapboard is a two-dimensional representation of a three-dimensional area of ground. The various types of terrain (see the TEC) affect movement, block sighting and fire, conceal units so they must be "spotted" before they can be attacked, and "shield" units by making attacks against them less effective. Terrain effects on movement have already been explained under "MOVEMENT", above; terrain effects on combat are explained below.

A. THE THREE DIMENSIONAL MAPBOARD

1. The hexes on the mapboard represent two different elevations:

a. Ground level: 0-20 meters. b. Slope level: 20-60 meters.

2. Town, woods, Suez Canal and clear terrain hexes are all at ground level.

a. Clear terrain hexes and Suez Canal hexes represent open areas free of concealing obstacles.

b. Woods and town hexes represent areas containing trees or buildings that are tall enough and close enough together to conceal units in those hexes and to block sighting through those hexes.

3. Sand dune (gold), ridge (light brown) and moraine (light brown, along the Suez Canal on board A) hex sides all represent some kind of ground level obstacle that interferes with sighting.

a. Sand dune and ridge hex sides represent sand dunes or stony outcroppings that are tall enough to block sighting, unless units move close enough to the top of the obstacle to look over and down to the other side.

b. Moraine hex sides represent the man-made embankments that line the Suez Canal, as explained in the *STANDARD RULES*.

4. Slope hexes represent extremely irregular terrain, ranging from hills at the slope elevation to gullies at ground level, all contained within the same slope hex.

a. The highest sections of the slope hex are indicated by the crest (dark brown) hex sides along the side of the slope hex. These crests block sighting, unless a unit has moved up near the top, where it can look over and down the other side of the slope.

b. Units can sight through slope hex sides as long as their line of sight does not cross a crest hex side (or any other blocking terrain). It is assumed that they are sighting through the ground level gullies in the slope hex.

6. Units in slope hexes are always assumed to be occupying the highest sections of the slope hexes. From this elevated vantage point, units on slope hexes can see right over ground level obstructions.

a.' Crest hex sides are at the same elevation as the slope terrain; consequently, crest hex sides always interfere with sighting between units, whether the units are at ground level or on slopes.

b. Units at the slope elevation can see *over* ground level obstructions, but they still cannot see enemy units in concealing terrain. Thus, a unit on a slope can sec over towns and woods, but it still cannot see units that are concealed in towns or woods —such units must be "spotted" to be attacked.

7. I*mportant:* It is assumed in the game that all units that are immediately adjacent to an obstructing hex side i.e., that are in a hex that has one side that is a sand dune, ridge, or crest hex side —will follow the standard military procedure of positioning themselves just behind the obstacle, so that they can see and fire over the obstacle but ace partially concealed by it. Such units that are immediately adjacent to the obstacle hex side can see and be seen across that hex side, but they are partially shielded by it. Tanks that position themselves in this manner, so that their turrets and cannon stick out while their hulls are safe down behind the obstacle, are said to be "HULL DOWN"; in this game this term will be used to describe all units that are partially shielded in this manner.

a. A unit that is immediately adjacent to more than one obstacle hex side is assumed to be "HULL DOWN" shielded across all of those hexsides.

b. Ground level obstructions do not cause "HULL DOWN" shielding to and from units on slopes.

B. LINE OF SIGHT/LINE OF FIRE

Line of sight and line of fire are interchangeable terms that refer to the straight line between an attacking unit and a defending unit. If the straight line crosses any obstacle that blocks vision, then the *line of sight/line of fire* (or l.OS/LOF) is blocked; if the straight line is free of obstacles then the LOS/ LOF is clear, and the attacking unit has a clear view and clear shot at the defending unit.

1. In the game the LOS/LOF is used to determine whether an attacking unit can attack a particular defending unit.

2. In the game the LOS/LOF between two units is a perfectly straight line from the *center of the a*t*tacking unit's hex* to the *center* of the defending unit's hex. There is a dot in the center of each hex on the board; to test for LOS/ LOF, place a straight edge on the board so that the edge goes through the attacking unit's hex dot and the defending unit's hex dot.

3. If the straight edge passes through any blocking terrain ("blocking terrain" is explained under LOS/LOF OBSTRUCTIONS, below), then the LOS/LOF is blocked and there is no clear LOS/LOF; the attacker cannot see nor attack that defender.

4. If the straightedge does not pass through any blocking terrain, then the attacking unit has a clear LOS/LOF to the defender, and has a clear view and a clear shot.

C. LOS/LOF OBSTRUCTIONS

1. If neither the attacking unit nor the defending unit is on a slope hex (i.e., if they are both on non-slope hexes), then the LOS/LOF between them is blocked if it passes through a *blocking hex side* that is *not* part of either unit's hex.

a. Elevation hex side symbols (light or dark brown, or gold) identify blocking hex sides.

b. Also, each hex side that is a side of a town hex or a woods hex is a blocking hex side.

2. If either the attacking unit or the defending unit (or both) is on a slope hex, then the LOS/LOF between them is blocked only if it passes through a crest hex side that is not part of either the attacker's hex or the defender's hex.

3. A hex side that is a part of the attacking unit's hex does not block that unit's LOS/ LOF; and a hex side that is part of the defending unit's hex does not block LOS/LOF to that unit.

4. A hex side that blocks LOS, LOF does block LOS, LOF if the straight edge passes through any part of the blocking hex side.

a. Note that on the mapboard the hex side symbols do not always extend to the very ends of the hex sides. In such cases the entire hex side still blocks LOS; LOF, even the uncolored portion.

b. If the LOS/LOF straight edge line intersects a blocking hex side along its length, the LOS/LOF is still blocked.

c. If the straight edge line touches the very end of a blocking hex side—that is, if the line passes directly over the corner where a blocking hex side meets a non-blocking hex side—the defender gets the benefit of the doubt and the LOS,/LOF is blocked.

Unit B has positioned itself immediately behind the sand dune with respect to unit A; unit B sticks up over the sand dune, so the line of sight between them (solid line) is not blocked, but unit B is "HULL DOWN" and partially shielded Units A and C are distant from the sand dune and do not stick up over it; the line of sight between them (dotted line) is blocked. The same situation as represented on the mapboard:

D. SPOTTING

1. "SPOTTED" counters are placed on a player's counters at the end of that player's movement phase. A "SPOTTED" counter is placed on a unit if the unit meets the following conditions:

a. The counter must be inverted at the end of the movement phase.

b. The counter must be in a town or woods hex.

c. The counter must be in the LOS/LOF of an undispersed enemy unit.

2. "SPOTTED" counters are removed from a player's units at the beginning of that player's fire phase, **or anytime that those units are not in the** LOS/LOF **of an undispersed enemy unit.**

3. Units in a woods or town hex cannot be attacked unless they are "spotted". A unit in a town or woods hex is spotted if:

a. It is under a "SPOTTED" counter, or b. It is adjacent to an undispersed enemy unit.

4. A unit in a clear terrain hex or a slope hex is spotted if it is in the LOS/LOF of an undispersed enemy unit.

5. Trucks may not spot, and units loaded in trucks may not spot. They are not "enemy units" within the meaning of rules 1, 2, 3 and 4 above.

E. TERRAIN ADDITIONS TO DEFENSE

1. A unit (or units) that is attacked while in a town hex or a woods hex gets certain defensive advantages.

a. One is added to the CRT die roll when reading off the results for units defending in a woods hex or town hex.

b. In each attack against unit(s) in a town hex, the total defensive strength is increased by five points. Notice that the defending unit(s) get five points per *attack—not* five points per unit.

c. Units defending in woods hexes get no special addition to their defense strength.

2. These additions to defensive strength and die roll are in effect for all types of attacks.

3. These additions to die roll and defensive strength are NOT in effect if the defending unit(s) are aircraft (including helicopters).

4. These additions to the die roll and defensive strength are NOT in effect if the defending units are being attacked by opportunity fire just as they expend 2 movement points to make an overrun attack (see the *STANDARD RULES).*

F. HULL DOWN

1. When the LOS/LOF from an attacking unit to a defending unit passes through an elevation hex side (light or dark brown, or gold) that is part of the DEFENDER'S hex, the defending unit(s) are considered to be "hull down" and partially shielded. (Tanks that are "hull down" have most of their hull concealed behind a rise or sand dune—only the turret sticks up, presenting a smaller target. The same sort of phenomena works for non-tank units as well).

a. The LOS/LOF is not blocked by that hex side.

b. The defending unit is shielded if the LOS/LOF passes through any part of an adjacent elevation hex side, even the hex side's ends.

c. The defending unit is shielded if the LOS/LOF of any of the attacking units crosses such a hex side—even if other attacking units have LOS LOF that are completely unobstructed.

d. HULL DOWN shielding applies even if the attacker and defender are adjacent.

2. When the defending unit(s) are hull down the CRT die roll is increased.

a. When Russian tank units (T-34/85, T-10, T-55, Tl-67, or T-62 units) are hull down 1 is added to the CRT die roll before reading the CRT result affecting those units.

b. 2 is added to the CRT die roll when reading the results for other hull down units.

3. HULL DOWN shielding does not affect the die roll for some kinds of attacks.

a. HULL.DOWN shielding does not affect the die roll in indirect fire attacks, overrun attacks, CAT attacks or air strike attacks.

b. HULL DOWN shielding does affect the die roll in direct fire attacks and opportunity fire attacks.

4. Under certain circumstances elevation hex sides do *mil* confer HULL DOWN shielding.

a. If either the attacking unit or the defending unit is on a slope hex, the defender is HULL DOWN shielded *only* if the LOS

LOF between them passes through a *crest* (dark brown) hex side that is part of the defender's hex. Attacking units firing from slope hexes or to slope hexes ignore ground level (light brown or gold) elevation hex sides. Ground level elevation hex sides still cause HULL DOWN shielding between ground level attacking and defending units involved in that attack.
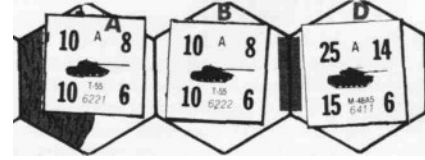
HULL DOWN SHIELDING: SLOPE HEXES Attacker A, on a slope, can fire at defender D without HULL DOWN shielding. If attacker B (at ground level) Joins in the attack, however, the elevation hex side does confer HULL DOWN shielding from that attacker—so the defender gets the benefit of shielding in the attack;

b. Using the *STANDARD RULES*, units making an opportunity fire attack ignore HULL DOWN shielding *if:* 1) they are being attacked by an overrun attack, and 2) they attack enemy units that are making that overrun attack just as the enemy units expend the two movement factors to execute the overrun attack.

HULL DOWN SHIELDING:
OPPORTUNITY FIRE AGAINST OVERRUNS (STANDARD RULES) Unit D is expending 2 movement points to make an overrun attack against unit A. At that moment an opportunity fire attack is made against unit D. If unit A fires alone, there is no shielding: but if unit B joins in the attack it is shielded and unit D gains the benefit.

c. Notice that in cases "a" and "b" above, certain elevation hex sides are ignored *only for LOS/LOF between certain attackers and defenders.* These same elevation hex sides are not negated for other attackers and under rule VI. F. 1 .c above, if the defender is HULL DOWN shielded from any of the attackers it gets the benefit of HULL DOWN shielding added to the CRT die roll.

VIII. DIRECT FIRE ATTACKS

All of the general rules governing combat are in effect (see V. COMBAT, above). In addition, the following rules apply to direct fire attacks:

A. Direct fire attacks can be made only during the attacking player's fire phase.

B. The player whose fire phase it is can make as many attacks as he wishes, limited only by the number of attacking units and targets that are available.

1. For each attack the attacking player may choose one or more than one of his units to make the attack. These attacking units may be in one hex or in different hexes, but each of the attacking units meet the following conditions or that unit cannot attack the specified defending unit(s):

a. There must be a LOS, LOF from each attacking unit to the defending unit(s).

b. Each defending unit being attacked must be spotted. It some units in a hex are spotted and some are not, only the spotted units may be attacked.

c. As with all attacks, an inverted counter cannot attack and the defending unit(s) must **be** within the attacking unit's range.

2. All of the attacking units involved **in** attacking the same defending unit(s) must be combined into one attack, summing the effective attack strengths of all units that attack. The same defending unit cannot be involved in two attacks in the same fire phase.

3. For each attack the attacking player chooses exactly which defending units will be attacked.

a. In each attack all of the units being attacked must he in the same hex.

b. The attacker may attack as many or as few of the units in a hex as he wishes. He may attack all, some, one or none of the units in that hex.

c. More than one attack per lire phase may be directed against the units in a single hex— however, each attack must be directed against different defending units in that hex.

C. Once the attacking player has specified the attacking and defending units in an attack the effective strengths of the attacking units are found on the WEC and totalled, the ratio of total attack strength to total defense strength is found and combat is resolved on the CRT, with appropriate die roll modifications for the individual units.

1. TERRAIN ADDITIONS TO DEFENSE apply to direct fire attacks: the defending units get additions to their defense strength and/or CRT die roll if they are in a town or woods hex. Add 1 to the CRT die roll, and if the defending units are in a town hex also add 5 points to the total defense strength.

2. HULL DOWN applies to direct fire attacks; the defending units get additions to their CRT die roll if the LOS/LOF to any of the attacking units passes through an elevation hex side that is part of the defending units' hex. Defending Russian tank units add 1 to the CRT roll, all other units add 2 to the CRT die roll.

3. When using the *STANDARD RULES,* defending units in the same hex with improved position or fortification counters get additions to their CRT die roll and/or defense strength. The CRT die roll is increased by 2, and if the defending unit(s) are in the same hex with a fortification the defense strength *of each* defending unit involved in the attack is increased by 10 points. The total defense strength is increased by 10 points per unit being attacked.

Example: Three defending units each have a defense strength of 2. If attacked while in a town hex their total defense strength is: 3 units times 2 points per unit, plus 5 points for the town = 11 defense strength points. If attacked while in a fortification their total defense strength is: 2 points per unit plus 10 points per unit because of the fortification, times 3 units = 36 defense strength points.

4. Subtract 1 from the die roll when reading **the** CRT combat results for a unit that was dispersed when attacked.

5. No other die roll modifications are applicable.

6. If all the attackers are aircraft, or the defender(s) are aircraft, the CRT die roll is not modified at all. The above modifications do not apply.

D. As soon as the attack has been resolved invert all of the attacking units that took part in the attack.

STANDARD RULES

I. NEW TURN SEQUENCE

Use the following turn sequence **instead of the one** given in the *BASIC RULES:*

A. **FIRST PLA**YE**R AIR PHASE**

1. Next turn's air strike attacks are written down, specifying the attacking units and the target hex.

2. Air strike attacks written down last turn are executed.

B. FIRST PLAYER FIRE PHASE

1. "SPOTTED" counters are removed from the first player's units.

2. *IN DIRECT FIRE ATTACKS* a. Next turn's indirect fire attacks are written down, specifying the attacking units and the target hex for each attack.

b. Indirect fire attacks written down last turn are executed. Units that take part in an indirect fire attack are inverted after that attack.

3. *DIRECT FIRE A* TTACKS— Direct fire attacks are resolved as explained in the *BASIC RULES.* Units that attack are inverted after their attack has been resolved.

4. Engineer units execute any attacks against neutral counters, removing or inverting affected counters.

5. The first player checks the MORALE **of** each of his dispersed units to see which units remain dispersed and which become un-dispersed. Undispersed units lose their "DISPERSED" counters but remain inverted.

C. FIRST PLAYER MOVEMENT PHASE

1. The first player moves his units that are not infantry class. Infantry-class units do not move in this step except to load or unload. Units are moved one at a time in any order the first player chooses, and a "SPOTTED" counter is placed on each unit while it is moving.

a. Carrier units may load, unload and/or move with passenger units, as explained in the *BASIC RULES.*

b. Inverted counters capable of split move and fire may move up to one-half of their movement allowance. These units may *not* move if they are dispersed.

c. Face-up units capable of making overrun attacks may move and execute their overrun attacks. From the time the first attacking unit is moved until the overrun attack is resolved, only units taking part in that attack may be moved. Other units may move (and even make other overrun attacks) before and after an overrun attack.

d. As each unit moves, face-up *enemy* units (belonging to the second player) make opportunity fire attacks. Only units with opportunity fire capability may make opportunity fire attacks. Attacking units are inverted.

e. Each unit is inverted when its movement or attack is completed.

f. Check the *Unit Func*t*ion Table*ts see which units can split move and fire, which can execute overrun attacks, and which can execute opportunity fire attacks.

3. All face-up infantry-class units are moved, one at a time.

a. Infantry units that are going to execute CAT attacks are left face-up, even if they have moved.

b. Infantry units that are not going to make CAT attacks are inverted as they move.

c. As each unit moves, face-up *enemy* units make opportunity fire attacks.

4. All CAT attacks are announced and resolved, one at a time. As each attack is resolved, the attacking units are inverted.

5. "SPOTTED" counters are placed on the first player's spotted units.

6. All undispersed counters belonging to the first player are turned face up.

D. SECOND PLAYER AIR PHASE

Second player conducts air strikes as outlined in the "FIRST PLAYER AIR PHASE," only using his own units.

E. SECOND PLAYER FIRE PHASE

Second player conducts fire attacks and un-dispersal as outlined in "FIRST PLAYER FIRE PHASE", only using his own units.

F. SECOND PLAYER MOVEMENT PHASE

Second player conducts movement as outlined in the "FIRST PLAYER MOVEMENT PHASE", only using his own units. The first player may conduct his opportunity fire attacks during the second player's movement.

G. Second player indicates the passage of one game turn on the Time Record Track.

H. Players repeat steps "A" through "G" for each turn for as many turns as the Situation indicates.

I. After the last turn Victory Points are calculated as specified in the Situation being played, and the winner is determined.

II. COMBAT ADDITIONS

A. INDIRECT FIRE

Indirect fire attacks are made in two steps. Each attack is secretly recorded at the beginning of a friendly fire phase and then executed during the friendly fire phase of the *following turn.* There is a one turn delay between the time the attack is specified (in writing) and the time the attack is executed.

1. Each indirect fire attack is specified a turn in advance by secretly recording the turn number, the attacking units and the target hex that will be attacked.

a. Each unit that is specified as taking part in an indirect fire attack cannot move nor fire until that attack is resolved during the player's next fire phase. The unit may not "change its mind"; it is committed and MUST make the attack as written, along with any other specified attacking units.

b. A target hex may not be specified unless there is an enemy unit in that hex and that unit is spotted. (See SPOTTING in the *BASIC RULES.)*

2. A unit must meet certain conditions before it may be specified as taking part in a given indirect fire attack.

a. Only units with "M" or "(H)" weapon types may indirect fire attack.

b. As with all attacks, the attacking unit cannot be inverted and the hex attacked must be within the attacking unit's range.

c. An "(H)" type attacker cannot make an indirect fire attack if it is LESS than a quarter of its range from the target. For example, an "(H)" type attacker with a range of 44 can attack targets that are from 11 to 44 hexes away —it *canno*t take part in an indirect

fire attack against a target that is closer than 11 hexes. "M" type attackers do not have to meet this condition, and "(H)" type attackers may ignore it when they are making *direc*t *fire* attacks.

d. The attacking unit does *not* have a **LOS**/ LOF to the hex being attacked. As the name "indirect fire" implies, the attacking unit does not need a direct line of sight to fire at a target. The target's location merely needs to be known, which is why the target must be spotted.

3. After next turn's attacks have been recorded all indirect fire attacks that were recorded last turn must be executed.

a. Units that were recorded as attacking but which are eliminated or dispersed at the time the attack is executed do not contribute their attack strengths to the attack.

b. All other specified attacking units *must* take part in the attack.

4. The attack might be executed against the target hex that was recorded on the previous turn, or it might be executed against one of the six hexes that are adjacent to the recorded target hex, or the attack might not harm any defenders at all.

a. All of the attacks recorded against the same target hex are combined into one attack. This entire combined attack will be executed against the same hex, whichever hex that turns out to be; if the combined attack "scatters" or "drifts", it will "scatter" or "drift" as a unit.

b. If any friendly undispersed unit has an unblocked LOS/LOF to the recorded target hex when the attack is executed, then the attack *must* be executed against that recorded target hex.

c. If no friendly undispersed unit has an unblocked LOS/LOF to the recorded target hex when the attack is executed, then the attack may "scatter" harmlessly or "drift" into a hex adjacent to the recorded target hex. Roll the die and consult-the *SCATTER CHART* below (you roll owe for the entire combined attack, *not* once for each unit contributing to that attack):

SCATTER CHART

> **DIE ROLL: RESULT:**
>
> 1 or 2   the hex originally recorded is attacked
>
> 3, 4 or 5   the attack "drifts" to an adjacent hex. Roll again and consult the DRIFT DIAGRAM below to see which hex is attacked,
>
> 6   the attack "scatters" completely and is ineffective. The attacking units attack, but no defending unit is affected.

DRIFT DIAGRAM

If the attack "drifts", a hex adjacent to the original target hex is attacked instead. To see which adjacent hex is attacked, roll a die and consult this diagram:
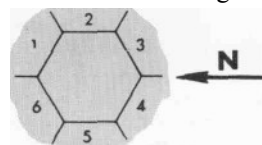
Orient the diagram so that the arrow is parallel to the long, lettered edge of the mapboard(s) and so that the arrow points north (or east, if the long edge runs east-west). The "target hex" corresponds to the recorded target hex; the attack is executed against the numbered hex that matches the die roll.

d. The hex that is determined by this procedure *mus*t be attacked, even if it is vacant (in which case the attack lands harmlessly) or is occupied by friendly units (in which case the friendly units are attacked)!

e. The entire combined attack is executed against the final target hex, even if that hex is out of range (or closer than the minimum range) of some of the units contributing to the attack. These units still attack that hex, even though the attack has "drifted" beyond their range.

f. The "drift" of *all* indirect fire attacks being made during the same fire phase should be determined before any indirect fire attacks are resolved. All attacks that end up being executed against the same hex must be combined into one attack against that hex.

5. All indirect fire attacks are executed during the fire phase on the turn alter they were recorded.

a- Only those units whose attack was recorded **on** the previous turn may attack, and all units with such recorded attacks /m/.v/ attack.

b. For each attack, the hex to be attacked is determined as explained in section 4 above. This hex is attacked by that entire attack, regardless of spotting requirements or range limitations (notice that spotting requirements and range requirements must be met when the attack is recorded, however).

c. All of the units attacking the same hex are combined into one total attack strength, even if their attacks ended up in the same hex through "drift".

d. Use the *"INDIRECT FIRE"* section of the WEC to determine the effective attack strength of each attacking unit, and then total the effective attack strengths of units attacking the same hex. This total attack strength attacks *each d*efending uni*t in t*urn*:* the die is rolled separately and combat results are applied separately for each defending unit in the hex being attacked.

e. *Each* defending unit gets the defense strength bonus for being in a town or fortification, if applicable.

f, The CRT die roll is modified appropriately if the defender is dispersed, or in a woods hex or a town hex or in the same hex with a fortification or improved position.

g. HULL DOWN shielding does not apply to indirect fire attacks and does not affect the CRT die roll.

6. As soon as all of the defending units in the hex have been attacked, all of the units that made that attack are inverted.

7. A hex may be attacked only once by indirect fire during each fire phase.

8. Normal direct fire attacks can be made against units in that hex later in the friendly fire phase.

a. Direct fire attacks and indirect fire attacks may not be combined.

b. All indirect fire attacks must be completed before any direct fire attacks can take place.

B. OFF BOARD ARTILLERY

Artillery units firing from off the board are termed *"Off-Board Artillery"* (OBA). These units are not represented by counters, but they can execute indirect fire attacks from off the board.

1. Off board artillery units are identified, with their weapon type and attack strength, in the AVAILABLE FORCES listed for each Situation.

a. Each OBA unit attacks like a normal unit in the game. A unit's attack strength points cannot be split up between targets, the effective strength(s) are calculated using the unit's weapon type on the WEC, etc.

b. An OBA unit can ignore range restrictions; it is assumed that it has the range to attack any hex on the mapboard.

2. Each OBA makes indirect fire attacks just like other "M" or "(H)" type units.

a. Attacks must be written a turn in advance, subject to the normal restrictions (the target must be spotted, etc.).

b. During an attack, OBA attack strength points combine normally with on-board artillery attack strength points.

c. Indirect fire attacks are resolved normally.

3. OBA units cannot be attacked, and they cannot make any other kind of attack—only indirect fire attacks.

C. CLOSE ASSAULT TACTICS

(CAT attacks)

CAT attacks are special attacks made by infantry and/or engineer units after the end **of** movement.

1. In order to make a CAT attack a unit must meet the following requirements:

a. Only infantry and engineer units may make CAT attacks.

h. In each attack each attacking unit must **be** adjacent to the defending unit(s).

c. A unit cannot attack if it is inverted.

2. A unit can move and CAT attack in the same movement phase.

a. A unit that is a passenger aboard **a carrier** unit any lime during a movement phase cannot execute a CAT attack during that movement phase. Thus, a loaded unit cannot CAT attack and a unit cannot unload and CAT attack.

b. A unit that uses the road bonus while moving cannot CAT attack.

c. Units which are going **to make a CAT** attack that same movement phase are left face up at the end of movement. They are not inverted **until** the attack is resolved.

3. CAT attacks are resolved during the attacking player's movement phase, after all of his units have moved.

a. The attacking strengths are totalled, using the CAT section of the WEC. Notice that against defending units that are predominantly armored the attackers' strengths are doubled.

b. All of the defending units in a hex must be attacked together. Their defense strengths are totalled to determine combat odds: the total defense strength is increased by five points if the defenders arc in a tow n hex, and each unit gets an additional ten defense strength points if it is in the same hex with a fortification.

4. Each CAT attack is resolved by one die roll, with the proper die roll modifications for each defending unit.

a. towns, woods, fortifications, improved positions and being dispersed affect the die roll. HULL DOWN shielding does NOT affect the die roll.

b. In addition, two is automatically subtracted from the die roll during a CAT attack. If one of the attacking units is an engineer unit, an additional one is subtracted from the die roll.

5. As each attack is **resolved the attacking** unit(s) are inverted.

6. Units in a minefield cannot CAT attack and cannot be CAT attacked.

D. OVERRUN ATTACKS

Overrun attacks can be executed by certain units (specified in the *Unit Function Table*} during a player's movement phase.

1. Overrun attacks are executed during the friendly movement phase. Each attack is made separately, before or after other movement or overrun attacks in the same movement phase.

a. Each attacking unit may move before making an overrun attack. A unit making an overrun attack is not inverted until the overrun attack is resolved, and it cannot move further once inverted.

b. All of the units involved in an overrun attack must move one after the other, followed immediately by the resolution of the attack. Once the first attacking unit has moved, only other units taking part in that attack can move until that attack is resolved.

c. Once all of the attacking units have moved into position (adjacent to the defending unit(s), all of the attacking units simultaneously expend two movement factors to execute the attack. Attacking units which do not have these two extra points to expend are inverted without adding their attack strengths to the attack.

2. In order to execute an overrun attack a unit must meet the following conditions:

a. Only units with overrun capability (as indicated on the Unit Function Table) may make overrun attacks.

b. In each attack each attacking unit must be adjacent to the defending unit(s) when the attack is executed. In addition, each attacking unit must expend two additional movement points (without moving) al the time the overrun attack is executed.

c. A unit cannot attack if it is inverted.

d. A unit may not make an overrun attack if it moves at the road rate at any time during that movement phase.

e. If any of the defending units have target type "A", only "A" weapon type attackers may attack.

3. Certain types of terrain and/or neutral counters prohibit overrun attacks.

a. A unit cannot execute an overrun attack if that attacking unit is in the same hex with a minefield, trench, block or fortification counter-

b. An overrun attack cannot be made against defending unit(s) in woods or town hexes, nor against defending units in the same hex with a minefield, trench, block or fortification counter.

4. Each overrun attack is resolved during movement, as soon as all of the units involved in that attack have moved.

a. The attacking strengths are totalled, using the OVERRUN section of the WEC. Notice that attack strengths are not modified during overrun attacks.

b. All of the defending units in a hex must be attacked together. The defense strengths of all units in the hex are totalled when determining combat odds; five is added to the total defense strength if the defenders are in a town, ten is added to each unit's defense strength if they are defending in a fortification.

c. *Important:* In each overrun attack, as soon as the combat odds have been determined **these odds are increased by one odds column.** For example, if the combat odds arc 2-1, the 3-1 column on the CRT is used to resolve the battle.

5. Each overrun attack is resolved by one die-roll, with the proper die roll modifications for each defending unit.

a. Improved positions and being dispersed affect the die roll. HULL DOWN shielding does NOT affect the die roll.

b. In addition, *two is automatically subtracted from the die roll during an overrun attack.*

6. As each attack is resolved the attacking unit(s) are inverted.

E. OPPORTUNITY FIRE

Opportunity fire attacks can be executed by certain units (specified in the Unit Function Table) during the *enemy* player's movement phase.

1. As soon as a moving unit expends one fourth of its total movement allowance in hexes where it is spotted and where it is in the LOS/ LOF of an attacking unit, that moving unit is activated as a target for that attacking unit.

a. The one fourth of its movement allowance must be expended while the moving unit is continuously in the attacking unit's I.OS/LOF.

b. A unit that is moving is automatically spotted when it is in the LOS/LOF of an undispersed enemy unit, even if the moving unit is in a woods or town hex. To indicate this, **a SPOTTED counter** is placed **on** each **unit from the time that unit** starts **moving until it finishes moving.**

c. As soon as a moving unit enters a hex where it is no longer in the LOS/LOF of the enemy attacker, then that moving unit is no longer activated as a target for that enemy attacker. The moving target will be activated again only if it expends another one fourth of its movement allowance in the LOS/LOF of that attacker. **A moving target must activate all over again each time it moves out of the** LOS/LOF **of the attacking unit.**

d. Every expenditure of movement points counts towards activating a target, including loading, unloading, expending two points to overrun, etc.

e. Note that a unit may be activated for some enemy units and not for others, depending on which enemy units had an unblocked LOS/LOF as the unit expended its movement points. A moving unit can be activated for different attackers at different times, and it can be repeatedly activated for the same attacker.

f. A unit that expends less than one fourth of its movement allowance in enemy LOS/LOF is never activated and cannot be attacked.

g. A unit can be seen and activated even while outside of the attacker's range, since LOS/LOF extends beyond a unit's range.

2. In order to execute opportunity fire attacks a unit must meet the following conditions:

a. Only units with opportunity fire capabilities (as indicated on the Unit Function Table) may make opportunity fire attacks.

b. As with all attacks, the attacking unit cannot be inverted and the target attacked must be within the attacking unit's range.

c. The attacking unit must have a LOS/LOF to the target and the target unit must be spotted; in addition, LOS/ LOF and spotting must have been maintained continuously during the moving unit's expenditure of at least one fourth of its total movement, immediately prior to the attack (i.e., the target must be "activated" for that attacking unit-see rule II.E.I above).

3. The attacking player may announce his attack whenever a moving unit expends movement points while it is activated as a target. The moving unit may also be attacked just as it becomes activated.

a. The moving unit gets to expend the movement points before the attack is resolved. If attacked while entering a new hex, it gets to occupy the new hex before the attack is resolved.

b. The moving unit pauses in the hex where it is positioned. The attack is resolved immediately, and if the moving unit remains undispersed and uneliminated it may continue its movement.

c. The attacker may attack with as many of his units as he wishes, as long as each one is able to attack the moving unit. All of the units that attack at that time must be totalled into one attack strength making one attack.

d. Only the unit that is moving can be attacked. This means that, as a general rule, only one unit at a time can be attacked by opportunity fire—the unit which is moving.

e. As soon as a moving unit is attacked it is no longer activated for *any* attacking units. It can become activated again during that movement phase if it moves another one fourth of its movement allowance while in enemy view. Note that this means that the same unit may be attacked more than once during a movement phase; it may be attacked only once per activation, however.

f. The attacker must announce his attack as soon as the moving unit expends its movement points. If he chooses not to attack he may not subsequently attack unless that moving unit expends more movement points (while activated).

g. Note that if an attacker does not immediately attack when a unit finishes its move, then he cannot attack that unit later during that movement phase.

h. Loading and unloading passengers counts as an expenditure of movement points for the carrier unit and the passenger unit. Attacks made while such points are being expended are resolved after the loading unloading has taken place; if the passenger becomes loaded only the carrier can be attacked, but if the passenger is unloading both carrier and passenger are expending points simultaneously and they may be attacked together or separately.

4. An opportunity fire attack is resolved like a direct fire attack.

a. The WEC sections dealing with direct fire attacks are used to calculate the effective attacking strengths.

b. The attack strengths are totalled to calculate combat odds. If two or more units in the same hex overrun simultaneously the attacker may choose which unit(s) to attack; otherwise, he may attack only the moving unit. Defense strengths are totalled, with bonuses for fortifications and towns.

c. The die roll is modified appropriately for each defending unit. Being dispersed affects the die roll, and *all* terrain and neutral counter modifiers affect the die roll (HULL DOWN shielding *does* affect the die roll).

d. Combat is resolved and the results are applied immediately. Eliminated units are removed and dispersed units are dispersed where they sit and may not finish their movement.

e. As soon as the attack is resolved all of the attack units are inverted.

5. Certain exceptions to the rules occur when an opportunity fire attack is made just as the attacking unit(s) expend their last two movement points when making an overrun attack:

a. All of the overrunning units expend their last two movement points simultaneously, so if several overruning units are in the same hex they can be attacked together, at the option **of the** player making the opportunity fire attack.

b. Each opportunity fire attack takes place *before* the overrun attack, so that overrunning units that are eliminated or dispersed do NOT contribute their attack strength to the overrun attack.

c. The overrun attack is not resolved until all opportunity fire attacks against the overrunning units have been resolved. The player making the opportunity fire attacks announces all his attacks against the overrunning units when they expend the two points to overrun—all attacks are announced before they are resolved.

d. Overrunning units do *not* get the benefits of any TERRAIN ADDITIONS TO DEFENSE— in other words, if attacked while overrunning they do not get additional defense strength nor additions to the die roll for being in woods, towns or improved positions (they cannot overrun from fortifications).

e. Overrunning units do *not* get the benefit of HULL DOWN shielding from units attacking from the hex being overrun,

f. Overrunning units do get the benefit of HULL DOWN shielding from units attacking from other hexes.

g. Infantry units being overrun use the CAT section of the WEC to calculate their effective strengths ;/' they attack just as the overrunning units expend the two movement points to overrun— an infantry unit *being overrun* would make an opportunity tire attack with the effective strength of a CAT attack.

F. AIR STRIKES

In the *STANDARD RULES* no counter is used to identify air strike attacks. Air strikes are made like OBA indirect fire attacks, with certain modifications.

1. At the beginning of the game the player with air strikes records the turn in which each of his air strikes will attack.

a. The player may specify different turns for each attack, or he may group them.

b. The number of air strikes a player has available—and the attack strength of each—is given in the AVAILABLE FORCES for each Situation. Each air strike may attack only once per game.

c. Each air strike can appear and attack only on the turn for which it is recorded.

d. E*xception:* in those Situations dated after 1967 the Israeli player does not have to record his air strikes at the beginning of the game; he must still record their arrival one turn in advance, at the time he specifies the target hex.

2. The turn before an air strike is scheduled to arrive, the attacking player must record the target hex for that air strike's attack.

a. The air strike can attack the hex that was recorded *or any adjacen*t *hex.* The player decides exactly which hex is attacked on the turn the attack is made.

b. The air strike can attack only units within the hex finally chosen.

c. Any hex on the board may be recorded as the target hex.

3. Each air strike has the weapon type indicated in the AVAILABLE FORCES of the Situation being played. The air strike's effective attack strength and method of attack depends on its weapon type.

a. The "air strike" section of the WEC is always used to calculate the effective attack strength of an air strike. In the *STANDARD RULES* air strikes are always assumed to be attacking from a

range of one hex. Cross-index this one-hex range with the air strike's weapon type to find the effect on its attack strength,

b. "A", "G" and "H" type air strikes are executed in the same manner as direct fire attacks, with the attacking player choosing which defending units are attacked in one mass attack. Unlike direct fire attacks, however, the defending units do *no*t get the benefit of HULL DOWN SHIELDING.

c. "(H)" type air strikes are resolved in the same manner as indirect fire attacks, attacking each defending unit in the attacked hex one unit at a time.

d. The CRT die roll is modified if the defending unit is dispersed, is in a woods or town hex, or is in a fortification or improved position. HULL DOWN SHIELDING does not apply to air strike attacks.

4. Each air strike must attack as a unit—its attack points cannot be split up into different attacks.

5. All air strike attack points attacking the same target must be totalled into one attack strength and resolved as one attack.

a. The same unit cannot be attacked more than once in the same friendly air phase.

b. *Special:* If defending units are being attacked as a group by non-'(H ('-type air strikes at the same time that an '(H)' type air strike is executed against the same hex, a special procedure must be used to combine the attacks. The totalled effective '(H)' attack points are multiplied by the number of defending units being attacked, and this total is added to the other attack points; this grand total of effective attack points makes one combined attack against the defending group. This counts as the '(H)' attack against those defending units. '(H)' type air strikes cannot use this procedure when they are attacking by themselves, only when they are attacking in combination with other air strikes attacking a group of defenders.

III. SPLIT MOVE AND FIRE

Certain vehicular units (specified in the *Uni*t *Function Tab*le*)* have the capability to move after they have fired in the same game turn.

A. During the movement phase, any inverted units which have the capability to *spli*t *move an*d *fire* (SMF, as indicated on the *Uni*t *Function Tab*le*)* are allowed to move up to one-half of their normal movement allowance.

1. Units which are inverted and dispersed may not move.

2. Units which are **using SMF may not** execute overrun attacks.

3. Units using SMF remain inverted. B. A unit's "full movement allowance" is always the movement allowance number printed on the counter, even when the unit is using SMF. Thus, if the unit attempts to do an action that expends half of its movement allowance, the unit must expend half of its *print*ed movement allowance to do that action. Similarly, a unit using SMF is activated as a target (for enemy opportunity fire) when it expends one-fourth of its *print*ed movement allowance in enemy LOS/LOF. *Example:* a unit with a movement allowance of 6 must expend 1.5 movement points in enemy LOS/ LOF to be activated, whether it is using SMF or not.

IV. MORALE

At the end of each player's fire phase that player checks each of his dispersed units to see whether that unit becomes undispersed.

Under the STANDARD RULES a unit is never automatically undispersed—it must be checked for, individually.

A. MORAI.E LEVELS

Morale is represented by "morale levels", ranging from A (best) through D (worst). All of a nation's units in a Situation have the same morale level: the morale level represents the leadership, social cohesion and training that enable a unit to reorganize itself under battlefield conditions.

1. Each nation's morale level is specified in the Situation being played.

2. Infantry and non-infantry units with the same morale level are treated differently. Infantry units are deployed over a wider area and have (proportionally) less communications gear, which makes their cohesion more difficult to maintain.

a. Only units labeled "INF" and "CDO" on their counters are infantry units under this rule.

b. All other infantry-class units, and all non-infantry-class units are non-infantry.

c. All units in the same hex with a FORT or IMPROVED POSITION are treated as if they have non-infantry morale.

B. THE MORALE CHART

The *Morale Chart* is used to determine whether a dispersed unit should become undispersed or not.

I. For each unit in turn determine the row and column of the Morale Chart to use.

a. The row is determined by the unit's morale level.

b. The column is determined by whether the unit is infantry or non-infantry.

2. Roll a die for that unit. If the number rolled is in the range indicated on the Morale Chart, the unit is undispersed. Example: a non-infantry unit with morale level "A" needs to roll from 1 through 5, inclusive. It rolls a 5 and is undispersed. If a 6 were rolled, that unit would remain dispersed.

a. If the unit becomes un-dispersed the DISPERSED counter is removed from it but the unit remains inverted.

b. If the unit fails to become un-dispersed—if the unit remains dispersed—the DISPERSED counter remains on it.

3. A unit that remains dispersed may roll for MORALE again on the next turn, and again each turn until it either becomes un-dispersed, or the game ends, or the unit is finally eliminated.

V. NEUTRAL COUNTERS

The employment and effects of the various neutral counters is summarized on the *NEUTRAL COUNTERS CHART*.

A. Overview

Each type of neutral counter confers certain advantages and/or disadvantages on unit(s) that are occupying the same hex with the neutral counter. These counters are neutral; either side's units may move onto them (subject to the rules of the game), and they have the same effect on both side's units.

B. Wrecks

"Wrecks" have been explained in the *BASIC RULES*.

1. Wrecks are not placed in hexes where the road has been "negated" by other neutral counters.

2. If a neutral counter is created in a **hex** that contains a wreck(s), then the wreck(s) remain.

C. FORTIFICATIONS

1. A fortification counter can be placed in any hex on the board *except* town hexes or Suez Canal hexes.

a. Only one fortification can be placed in a hex, and a fortification cannot be placed in the same hex with another neutral counter.

b. Fortification counters are placed during initial placement, as directed for the Situation being played. They cannot be placed during play.

c. Once placed, fortifications cannot be moved nor removed.

2. A fortification counter affects the combat abilities of units in the same hex.

a. Each unit in the same hex with a fortification is assumed to be "in" the fortification. Each unit gets the advantages and disadvantages of being in the fortification.

b. Units in a fortification may be attacked singly or in combination, depending on the attacker's wishes and the normal rules governing each type of attack. Each unit keeps its normal target type.

c. Each unit in a fortification gets an additional 10 defense strength points. In addition, two is added to the CRT die roll before the combat results are determined against each unit defending in the fortification.

d. Units in a fortification cannot execute overrun attacks, and they cannot be attacked by overrun attacks. Overrun attacks cannot be made into nor out of fortifications.

3. A fortification counter negates the road in that hex.

4. Infantry units in a fortification roll for morale as if they were non-infantry.

D. IMPROVED POSITIONS

1. An improved position counter can be placed on any hex on the board *except* a town hex or a Suez Canal hex.

a. Only one improved position can be placed in a hex, and an improved position cannot be placed in the same hex with another neutral counter.

b. Improved positions are placed during initial placement, as directed for the Situation being placed. They cannot be placed during play.

c. Once placed, improved positions cannot be moved nor removed.

3. Each unit defending in an improved position has two added to its CRT die roll.

4. If a unit is attacked by opportunity fire just as it expends the two movement points to execute an overrun attack, then the unit does not get the benefit of being in the improved position.

5. An infantry unit in an improved position rolls for morale as if it were non-infantry.

E. MINEFIELDS

(In the *STANDARD RULES* only the minefields labeled "2-1" are used).

1. A minefield counter can be placed on any hex on the board *except* a town hex or a Suez Canal hex.

a. Only one minefield counter can be placed in a hex, and a minefield cannot be placed in the same hex with a fortification nor in the same hex with an improved position.

b. A minefield can be placed in the same hex with a block, trench or bridge.

c. Minefield counters are placed during initial placement, as directed for the Situation being played. They cannot be placed during play.

d. Once placed, minefield counters cannot be moved. They can be removed from the board during play by engineer units or flail units (see below).

2. A minefield counter attacks each unit that moves onto it or tries to move off of it.

a. As soon as a unit moves onto a minefield, the minefield executes a 2-1 attack against that unit. There are no modifications to the die roll and combat results are applied normally. A dispersed unit must stop its movement immediately, on the minefield.

b. *Exception:* An engineer or flail unit is not attacked when it moves onto a minefield.

c. As soon as a unit that is on a minefield attempts to move off, the minefield attacks that unit at 2-1. The CRT die roll is not modified and combat results are applied normally. A unit dispersed by the attack stops b*efore* it moves- i.e., it remains in the same hex with the minefield and is dispersed. Since it did not expend its movement point(s), it *cannot he attacked by opportunity fire!*

d. Note that a unit can move right through a minefield if ft survives the attacks as it enters and leaves.

e. If a unit moves from minefield, to minefield, the minefield being left attacks first and if the attack is successful the unit never leaves that minefield. The second minefield does not attack unless the unit survives the first attack and moves into the second minefield.

3. Units in a minefield cannot make an overrun attack nor can they make a CAT attack.

4. Units in a minefield cannot be attacked by an overrun attack nor a CAT attack.

5. A minefield counter negates the road in that hex.

F. BLOCKS

1. Block counters can be placed during initial placement or during play.

2. Blocks are placed during initial placement as directed for the Situation being played. Blocks placed during initial placement may be placed in any hex except a Suez Canal hex.

3. Each block placed during the play of the game must be placed by an engineer unit (See ENGINEERS, below). When placed during play block counters may be placed only in certain hexes.

a. During play a block counter may be placed **in** any hex containing at least one ridge hex side.

b. During play a block counter may be placed in any town or woods hex.

c. During play a block counter may be placed in any non-Suez-Canal hex that is adjacent to a town hex or a woods hex.

d. During play a block counter may not be placed on a hex that does not meet one of the above conditions.

4. Only one block can be in a hex at a time.

a. A block counter cannot be placed in a hex that contains a fortification or an improved position.

b. A block counter can be placed in a hex with a minefield, trench or bridge.

c. A block counter cannot be placed in a hex if there is already a block counter in that hex. If the first block counter is removed during play, however, then another block counter may subsequently be placed in that hex.

d. Once placed, a block counter cannot be moved.

e. A block counter that has been placed on the board can be removed during play by an engineer counter (see ENGINEERS, below).

5. A unit can move only one hex on the turn in which it enters a hex containing a block counter. To enter a hex containing a block counter a unit must start its turn adjacent to the block and move only one hex onto the block. That unit then stops its move.

6. A unit that starts its turn on a blocked hex may leave freely.

7. Units in the same hex with a block counter cannot make overrun attacks and they cannot be attacked by overrun fire.

8. A block counter negates the road in that hex.

G. TRENCHES

Trench counters represent broad anti-tank trenches designed to prevent the movement of vehicles. (Trench counters have a special meaning when they are placed on Suez Canal hexes. This is explained under THE SUEZ CANAL, below. This section of the rules is about only those trench counters which are placed on clear terrain hexes.)

1. A trench counter can be placed only in clear terrain hexes.

a. Only one trench can be placed in a hex, and a trench counter cannot be placed in the same hex with an improved position nor with a fortification.

b. A trench counter can be placed in the same hex with a block counter or a minefield. Also, a bridge counter may be placed in the same hex with a trench counter.

c. Trench counters are placed during initial placement as directed in the Situation being played. A trench counter may never be placed during play.

d. Once placed, trench counters may not be moved nor removed from the board.

2. If a trench counter is in a hex that does NOT contain a bridge counter, then only infantry-class units can enter that hex. Non-infantry-class units may NOT enter that hex.

3. U nits in the same hex with a trench counter cannot execute overrun attacks and overrun attacks cannot be made against them.

4. A trench counter negates the road in that hex.

H. BRIDGES

(This section deals only with bridges that are placed on trenches in clear terrain. Bridges on Suez Canal hexes are explained under THE SUEZ CANAL, below.)

1. A bridge counter can be placed in a hex only if that hex contains a trench counter.

a. Bridges are placed during play by bridge-laying units. Bridge counters are never placed on clear terrain during initial placement.

b. A bridge counter cannot be placed in a hex that contains a mine, block or wreck counter. If these counters are in the same hex with a trench counter they must be removed before a bridge can be placed on that trench counter.

c. Once a bridge counter is in a hex, wrecks and blocks can be placed in that hex subsequently during play.

d. Once placed on the board a bridge counter cannot move from hex to hex like other units. However, a bridge counter can be "picked up" again by a bridge-laying unit and that bridge counter can subsequently be placed in another hex containing a trench.

2. Only one stacking point of non-infantry-class units may be in a bridged hex at any time.

3. If a bridge is in a road hex the trench **no** longer negates the road.

4. Combat in bridge hexes:

a. Overrun attacks are prohibited into and out of bridge hexes.

b. Bridges are armored targets and may be attacked normally *except* a bridge cannot be attacked by CAT attacks.

c. If an armored target is destroyed on a bridge a wreck counter is placed on the bridge, whether the bridge is on a road or not.

d. If a bridge is destroyed, all non-infantry-class units in that hex are automatically eliminated

VI. THE SUEZ CANAL

In the *STANDARD RULES* the Suez Canal hexes are playable but there are special rules concerning their use. The Suez Canal itself is an obstacle and in addition there are built-up embankments (called "moraines") along both banks of the canal. These moraines are higher on the west bank than the east bank, but on both banks they are high enough to block movement and sighting.

A. SUEZCANAL HEXES

1. No combat unit can enter an empty Suez Canal hex.

2. A trench counter is the only neutral counter that can be placed in an empty Suez Canal hex.

B. MORAINE HEX SIDES

1. The hex sides that run along both sides of the Sue/. Canal hexes are "moraine hex sides." These hex sides are identified by light brown color bars (these are the only light brown bars on board -A").

a. Every hex side that lies between a Suez Canal hex and a non-Suez-Canal hex is a moraine hex side. No other hex side is a moraine hex side.

b. The entire hex side is considered to be a moraine hex side even if the color bar does not extend to the ends of the hex side

2. No unit may move across a moraine hexside.

3. LOS/LOF cannot be traced through a moraine hex side if both the attacking unit (or spotting unit) and target unit are at ground level.

a. Moraine hex sides block **LOS/LOF** even between units that are adjacent.

b. Moraine hex sides do *not* block LOS/LOF if either the attacker or the target is on a slope hex.

C. CUTS

Passageways are cut through the moraines to allow access to the water's edge of the canal. These passageways or "cuts" are made by bulldozing (Israeli practice) or pumping streams of water (Egyptian practice) through the moraines. In practice these cuts are made in pairs across the canal from each other, allowing access to the canal from both sides.

1. A trench counter in a Suez Canal hex indicates that at that point "cuts" have been made in the moraine on both sides of the canal.

a. In that hex, the two moraine hex sides that are directly opposite each other are transformed into sand dune hexes for all purposes in the game. The two opposite hex sides are where the "cuts" are located; in that hex they are the two moraine hexsides that are parallel to the Suez Canal printed on the board.

b. Note that movement is possible across the transformed moraine hexside.

2. A trench counter in a Suez Canal hex allows a bridge counter to be placed in that hex. No other unit may be placed in a Suez hex containing only a trench.

3. Trench counters are placed during initial placement, as directed by the Situation being played. If the Situation indicates that the trenches are to be placed on the Suez Canal, then the trench counters *must* be placed on Suez Canal hexes; if the Situation does not indicate that the trenches belong on the Suez Canal, then the trenches *canno*t be placed on any Suez Canal hex.

a. Only one trench can be placed in a hex.

b. Trench counters must be placed during initial placement. They may never be placed during play.

c. Once placed, trench counters may not be moved nor removed.

D. BRIDGES

1. Certain bridge counters are specified in the Situations as being placed on Suez Canal hexes. These counters must be placed on Suez Canal hexes that contain trench counters, as directed by the Situation being played.

a. Bridge counters must be placed on Suez Canal hexes only during initial placement. Bridges may not be placed on Suez Canal hexes during play.

b. Only one bridge counter can be placed in a hex. A bridge counter must be placed in the same hex with a trench counter.

c. Once placed, bridge counters cannot move. They can be eliminated during play by engineer demolition or by being attacked during combat.

d. Wrecks, blocks and minefields can be placed on a bridge counter.

2. One stacking point's worth of units may occupy a bridge in the Suez Canal hex. This limitation is in effect during movement.

a. Subject to the above limitation, units may move through a bridged Suez Canal hex as if it were clear terrain, or even occupy the bridged hex. Blocks, minefields, etc., if present, create their normal limitations.

b. Wrecks count as stacking points and passengers do not count for stacking.

c. All units that enter or leave the bridged hex must enter and leave through the "cuts." i.e., through the moraine hexsides that have been transformed into sand dunes.

E. THE BANKS OF THE SUEZ CANAL

The two rows of hexes adjacent to the Suez Canal are the "banks" of the Suez Canal. Hexes in these rows arc "bank hexes"—each bank hex has at least one moraine hexside.

1. The direction the "NORTH" arrow is pointing in the Situation being played determines which bank is the east bank and which bank is the west bank.

2. Fortification counters and improved position counters on east bank hexes have special effects on the moraine hexsides in their hex.

a. ALL units on a fortification counter in an east bank hex trace LOS/LOF as if the moraine hex sides in that hex were sand dune hex sides instead. Thus, LOS/ LOF may be traced across the moraine hex sides that are part of that hex—but only to and from the units in that hex. The moraines remain impassable and the fortification has its normal effects on combat.

b. All non-infantry-class units on an improved position in an East Bank hex trace LOS/ LOF as if the moraine hex sides in that hex were sand dune hex sides. Thus, LOS/LOF may be traced across the moraine hex sides that are part of that hex but only to and from the non-infantry-class units in that hex. The moraines remain impassable and the improved position has its normal effects on combat.

3. An improved position counter on a WEST Bank hex transforms that hex into a *slope hex/or purposes of tracing LOS/LO*F. Units in the hex can sight and be sighted across all moraine and sand dune hex sides.

a. All moraine hex sides remain impassable. b. Only two infantry-class and one non-infantry-class units may occupy an improved position on the west bank. Wrecks do not count against this limit.

c. The improved **position has its normal** effects on combat.

E. COMBAT IN THE SUEZ CANAL

1. A unit in a Suez Canal hex is spotted if it is in the LOS/LOF of an undispersed enemy unit.

2. Units in Suez Canal hexes cannot execute CAT or overrun attacks.

3. Units in Suez Canal hexes cannot be attacked by overrun or CAT attacks.

4. Each unit's defense strength is halved while it is in a Suez Canal hex (retain fractions). *(Exceptions:* Bridges and air units.)

5. Bridges can be attacked like units.

a. Bridges are armored targets and are not halved in defense.

b. A bridge "dispersed" by combat is not inverted, but a DISPERSED is placed on it. Units may not move onto a "dispersed" bridge but units on it may move off. The "dispersed" bridge rolls for MORALE normally.

c. When a bridge is eliminated all units and neutral counters on the bridge arc eliminated also. When the bridge is removed all units and counters in that hex that are forbidden to be in non-bridged Sue/ Canal hexes are removed also. Units that did not use the bridge to enter the hex are not eliminated and remain in the hex.

VII. ENGINEERING FUNCTIONS

A.ENGINEERS

Engineer units can remove minefield counters and bridge counters from the board during play, and they can place or remove block counters.

1. Engineers remove minefield counters by "attacking" them at least twice.

a. Engineer units are not attacked by a minefield as they enter that minefield. They are attacked normally if they attempt to leave the minefield.

b. In order to attack a minefield an engineer unit must be face-up and in the same hex with that minefield. The attack is resolved during the fire phase like a direct fire attack.

c. No matter how many engineer units there are attacking a minefield the minefield can be attacked only once per turn and the attack is made at 1-2 odds.

d. A "D" or "DD" result against a face-up minefield causes the minefield to be inverted.

e. An inverted minefield continues to function like a minefield in all respects and must be attacked again to be removed from the board. The minefield remains inverted regardless of the condition or presence of engineer units.

f. A "D" or "DD" result against an inverted minefield causes the inverted minefield to be removed from the board.

g. the engineer unit that attacks a minefield is inverted as soon as the attack is resolved. Not all the engineer units in a hex need take part in the attack against the minefield.

2. To remove a bridge counter from either a Suez Canal hex or a clear terrain hex takes **an** engineer unit two turns.

a. 1 he first turn the engineer unit must start on the bridge and move adjacent to the bridge. As the engineer unit leaves the bridge counter is inverted.

b. An inverted bridge functions like a bridge in all respects.

c. An inverted bridge remains inverted as long as any engineer unit remains adjacent to it. If all engineer units move away or are eliminated, the bridge counter is turned face up again.

d. The engineer unit removes the bridge counter by "attacking" it during any fire phase. The bridge may be attacked any turn that the bridge is inverted and the engineer unit is adjacent and face up; once attacked thus by an engineer unit, the inverted bridge is automatically removed from the board.

e. The engineer unit is inverted as it attacks.

3. Removing block counters: the rules for removing block counters are exactly the same as the rules for removing bridge counters.

4. Creating blocks:

a. During play blocks can be created only on town or woods hexes, or hexes adjacent to town or woods hexes, or a hex with at least one ridge hex side.

b. An engineer unit places a block counter in a hex by being in that hex, face up at the start of the turn; the block counter is placed and the engineer unit is inverted during the friendly fire phase.

5. General rules governing engineers:

a. The engineer unit must be face up in order to execute any of the above engineering functions. As soon as the engineering function is executed the engineer unit is inverted. An engineer unit may not fire nor make other moves in the turn it does an engineering function.

b. If an engineer unit is inverted or dispersed it cannot proceed with any engineering functions until it is face up again. Any inverted neutral counters in the same hex or adjacent hexes remain inverted.

c. If there is no engineer in the same hex with an inverted bridge or block counter, nor in any adjacent hex, then the inverted bridge or block counter is immediately turned face up again.

d. An engineer unit can do only one engineering function per turn.

B. ENGINEER VEHICLES

1. "Sherman flail" and "PT 54" units are flail units that have a special ability to clear away minefields.

a. Flail tank units are never attacked by minefields, entering or leaving.

b. A flail unit in a minefield expends one-half of its movement allowance to remove the minefield.

2. "M-60 AVLB" and "MTU-2" units are bridge-laying units. These units can place bridge counters during play. They may place bridges only on c*lear* terrain hexes, however, and each bridge-laying unit can lay only THREE bridges per game.

a. 1 he turn before the bridge is to be placed the bridge-laying unit must move adjacent to the hex being bridged. Only clear terrain hexes containing a trench counter can be bridged.

b. To lay the bridge, the bridge-laying unit must move one hex from the adjacent hex onto the hex to be bridged. I he bridge counter is placed as the unit enters, allowing the unit to enter that hex. The bridge-laying counter must stop in that hex.

c. A bridge that has been placed during play may be picked up again by reversing this procedure.

d. Each bridge-laying unit carries only three bridges. A running total of how many bridges each unit has left should be kept during the game. Each bridge picked up increases the number of bridges a unit is carrying and can subsequently lay. A bridge-laying unit can never carry more than three bridges.

ADVANCED RULES

I. AIR UNITS

A. GENERAL RULES

Airplane and helicopter units are the only air units in the game. They are always assumed to be up in the air.

1. Air units are always allowed in any hex on the board, regardless of terrain, the presence of enemy 'units, stacking limits, etc.

2. There is always I.OS/ [.OF between each air unit and every other unit on the board.

3. Air units never get the benefits of terrain.

a. Air units are always spotted.

b. Defending air units never get terrain bonuses, nor do they get bonuses for being in the same hex with neutral counters (forts, improved positions, etc.).

4. Air strikes must be assigned to air units and executed by air units. Air strikes cannot be executed independently of air units.

B. THE ADVANCED AIR PHASE

This section replaces section l.A. "FRIENDLY AIR PHASE" in the STANDARD RULES.

1. The player writes down the number of airplane-carried air strikes he will use during his next friendly air phase (next turn). He does *not* have to specify target hexes.

2. The player moves all of his helicopter units, one at a time. Enemy units may execute antiaircraft attacks as the helicopter units move.

3. Alter all helicopter movement has been completed, the player places airplane counters on the board to execute his air strikes.

a. Airplane counters do not move from hex to hex; each airplane counter is simply placed in any hex on the board without moving through any of the intervening hexes.

b. The player is committed to using the number of air strikes he wrote down last turn. After he has used *all of* his air strikes, he must reveal the number he wrote down last turn to show that he used the right number.

c. The player must place down one airplane unit for each air strike he is using: he must continue to place airplane counters down until he has run out of air strikes for that turn—or until he has run out of available airplane counters (see B.4, below).

d. After all airplane counters have been placed, enemy units may execute anti-aircraft attacks against them. Eliminated or dispersed airplanes are removed from the board.

e. After anti-aircraft attacks have been resolved, the remaining airplane counters may execute air strike attacks against any enemy units within range. As each attack is resolved, the attacking airplane(s) are removed from the board.

f. After all air strikes have been resolved, all remaining airplane units (which did not choose to attack) are removed from the hoard.

4. Only four Israeli and two Arab airplane counters are provided in the game. If a player runs out of airplanes while he still has air strikes left to be used that turn, he stops when he has placed his last airplane counter on the board and resolves all combat involving the airplane counters on the board. After all of these airplane counters have been removed from the board—whether because of enemy anti-aircraft fire, or after having executed their air strikes, or because the player decided not to attack with them he resumes placing airplane counters on the board, until he either runs out of airplane counters again (in which case he resolves the combat of the airplanes on the board again and once more resumes placing airplanes) or until he at last runs out of air strikes to be executed that turn.

a. Using this procedure, the airplanes are assumed to be attacking in "waves." Each time that the player runs out of airplane counters the counters on the board comprise one "wave" of airplanes that are all attacking at once.

b. Each "wave" is placed on the board, undergoes anti-aircraft attacks, and executes its air strike attacks separately.

c. Notice that the player must place ALL of his airplane counters on the board as long as he has any air strikes left to be executed that turn. He must always put down as many airplane counters as he can, until his air strikes for the turn run out.

5. Airplane counters that are eliminated (or dispersed) are not removed from play. They are still available to be placed on later turns, or in later "waves" during that same turn. (This is because each time an airplane counter is placed on the board it represents a different group of airplanes).

6. Each time a player places an aircraft counter on the board, he uses one of the air strikes **he** had available that turn. Whether the air strike is executed or not, it is used up; if the airplane unit is removed from the board without attacking, the air strike is lost.

7. Notice that helicopter units do not execute their air strikes during the air phase.

C. ADVANCED AIR STRIKES

Under the *ADVANCED RULES,* each air strike must be assigned to some air unit. The air strikes cannot attack by themselves; each air strike must be executed by the air unit that is carrying it. In effect, each air strike becomes a temporary attack strength (with weapon type and maximum range) that is attached to that air unit. When the air unit attacks using that air strike, the air strike is used up and cannot be used again. Each air strike can be used only once per game.

1. Air strikes are assigned only to air units. Air strikes may be assigned to either helicopter units **or** airplane units, as indicated on the AVAILABLE FORCES for the Situation being played.

a. A helicopter unit may execute only that air strike which is specifically assigned to it (if any are).

b. All air strikes not specifically assigned to helicopter units must be assigned to airplane units. Each airplane can carry and execute *only one* air strike at a time.

2. Each type of air strike has a maximum range. An air unit cannot execute its air strike against targets that are farther away than **the** maximum range for that type of air strike.

a. "G" type air strikes can be executed up to 12 hexes from the carrying air unit.

b. "A" type air strikes can be executed up **to** 3 hexes from the carrying air unit. "

c. "H" and "(H)" type air strikes must be executed against units in the same hex with the air unit carrying the air strike. Their maximum range **is** ZERO.

3. "G", "A" and "H" type air strikes are executed against specified enemy units.

a. The attacker specifies the unit(s) the air strike is attacking. All defending units must **be** in the same hex.

b. Each defending unit in a town or woods hex must be spotted —it must be under a "Spotted" counter. (Notice that, since "SPOTTED" counters are placed only at the end of enemy movement, an airplane counter can never cause an enemy unit to be spotted. Thus, airplane units cannot spot— even for themselves).

c. For each attack, the defense strengths of the defending unit(s) are totalled into one defense strength and the attack is resolved as one battle. Adverse results affect only the units attacked.

4. "(H)" type air strikes are executed against a specified enemy hex.

a. Each unit in that hex is attacked separately by the air strike's attack strength. The die is rolled for each defender, and the results apply only to that defender.

b. A woods or town hex cannot be attacked unless it contains at least one spotted unit.

5. There is always assumed to be unobstructed LOS/LOF from an air unit to every unit on the board. Terrain does not block LOS/LOF, and there is no HULL DOWN SHIELDING.

6. Defending units in town hexes or woods hexes, or in the same hex with a neutral counter, do get the defensive bonuses.

7. Air strikes attacking the same target(s) at the same time must combine into one attack strength and resolve as one battle. A defending unit still cannot be attacked more than once by units that are attacking at the same time.

a. Air strikes executed by helicopters must also be combined with any other attack points that are attacking the same target(s) at the same time. A defending unit can still be attacked only once per phase, or once per activation (by opportunity fire).

b. *Exception:* Different waves of airplanes attack the same target(s) with separate attacks. If a wave of airplanes attack a target that was attacked by an earlier wave that same turn. The new attack is treated like a separate attack. If the defending unit was dispersed by the earlier attack, it is dispersed (-1 on the CRT) for the second attack. Thus, if airplanes in the same wave attack the same target, they must combine their air strikes into one attack; if airplanes in different waves attack the same target, the attacks are treated like separate attacks and resolved separately.

8. For all air strikes the AIR STRIKE section of the Weapons Effectiveness Chart is used to calculate the effective strength of the air strike attack.

9. Air strikes are assigned to a unit as soon as that unit is placed on the board, and cannot be transferred to another air unit. If that air unit is removed from the board without executing its air strike, that air strike is simply lost.

D. ANTI-AIRCRAFT ATTACKS

Anti-aircraft attacks are direct fire or opportunity fire attacks executed against enemy air units during the enemy air phase.

1. Airplane units are on the board only during the friendly air phase, so they can be attacked only during the friendly air phase. When the player stops placing his airplane counters on the board, and before the airplanes have a chance to execute their air strikes, the airplane counters may be attacked by any enemy units within range.

a. The attacks are executed like direct fire attacks. The DIRECT FIRE section of the WEC is used to calculate the effective attack strengths, all attack points are combined into an attacking total, all defense points are totalled into a defending total, etc.

b. Unlike normal direct fire attacks, there are no modifications to the CRT die roll.

c. Units have to be face-up in order to attack, and as soon as each attack is resolved all the attacking units are inverted.

d. Eliminated or dispersed airplane units are immediately removed from the board; they do not get to execute their air strikes, and the air strikes are lost. Eliminated airplane units count as eliminated units for victory point purposes, but the airplane counters are not removed from play and remain available to be placed on the board in later turns or in later waves that turn.

e. If a player is attacking in "waves" of airplanes, each wave is subjected to anti-aircraft fire in its turn. Notice that if a unit executes an anti-aircraft attack against one wave, it is inverted and cannot attack later waves that turn.

2. Helicopters move during the friendly **air** phase and can be attacked as they move. **The** procedure is similar to opportunity fire.

a. The helicopter unit cannot be attacked until it expends its fourth movement point. If it expends three or less movement points it cannot be attacked during that air phase.

b. Once attacked, a helicopter unit cannot be attacked again until it expends one more movement point. In other words, the helicopter is "reactivated" as a target each time it expends one movement point. (This replaces the "one-fourth of its total movement" expenditure that activates ground units.)

c. The DIRECT FIRE section of the WEC is used to calculate the effective strengths of the attacking units, and the attacks are resolved like opportunity fire attacks.

d. The only CRT die roll modification is -1 if the helicopter is attacked while dispersed.

e. Units must be face-up to attack **and are** inverted as they attack.

E. HELICOPTERS

Helicopters are normal combat units that remain on the board until they are eliminated (or until they exit, if allowed in the Situation being played). However, all game procedures are modified to some degree when helicopters are involved.

1. Helicopters are allowed in any hex on the board, regardless of terrain, enemy units, stacking limitations, etc.

2. Helicopters expend movement points to move from hex to adjacent hex, moving like other units. However, helicopters move during the friendly air phase (instead of the friendly move-ment phase), and they pay only one movement point to enter an adjacent hex, regardless of terrain.

a. Helicopters move after next turn's air strikes have been written, at the start of the friendly air phase.

b. Helicopter units move one at a time, each unit completing its move before the next unit may begin to move.

c. *Important:* A helicopter unit may move its full movement allowance *even if i*t *is inverted or dispersed.* Being inverted or dispersed does not hinder helicopter movement!

3. Helicopters may be attacked by enemy units as the helicopters move. The procedure is like opportunity fire, except the helicopter is first activated as a target when it expends its fourth movement point, and thereafter it is reactivated each time it expends one movement point (during that turn).

4. Helicopters may also be attacked normally by direct fire attacks. Helicopters may NOT be attacked by CAT, overrun, indirect fire nor normal opportunity fire attacks.

5. When helicopters attack they ignore *all* hex sides for HULL DOWN SHIELDING. A defender is still HULL DOWN SHIELDED if it is shielded from other units that are taking part in the same attack.

6. Some helicopter counters have attack strengths printed on them; these helicopter units may execute normal attacks with these attack strengths.

7. In addition, in some Situations air strikes have been assigned to specified helicopter units. These units may attack using these air strike attack points, as outlined in the section "ADVANCED AIR STRIKES", above. These air strike attacks are temporary, one-shot attacks that cannot be repeated.

a. "G", "A" and "H" type air strikes may make direct fire attacks during the direct fire phase or opportunity fire attacks during the enemy movement phase.

b. "(H)" type air strikes may make indirect fire attacks during the indirect fire phase.

c. Each type of air strike can be executed only against those enemy units within the range of that type of air strike, and the AIR STRIKE section of the WEC is always used to calculate the effective strengths of the air strikes.

d. Air strike attack points are treated like normal attack points and must combine with other attack points directed against the same target. Thus, if a ground unit and an air strike are attacking the same target, that target can still be attacked only once and the attack strengths must be combined and resolved as one attack.

e. Air strikes carried by helicopters may be executed at the owning player's discretion, he does NOT have to write down the attack a turn ahead of time.

f. A helicopter may NOT attack with its own attack strength and an air strike at the same time. It can attack with one or the other —not both.

8. A helicopter has to be face up to attack, and as soon as its attack is resolved it is inverted.

9. Some helicopter units are carrier units (see the UFT for a listing).

a. A helicopter can carry up to three infantry-class units. (As is explained later in the *ADVANCED RULES,* two Sagger units count as one passenger—so a helicopter could carry up to six Sagger units).

b. A helicopter unit must expend its whole movement allowance to load or unload passengers in a hex. A helicopter may load and unload any number of passengers at once, subject to its carrying capacity.

c. A helicopter may not unload passengers into a hex where they are not allowed by the rules of the game.

II. SPECIAL UNIT CAPABILITIES

A. MOUNTED INFANTRY FIRE

Certain passenger units are able to join attacks made by their carrier units.

1. The units able to attack while passengers are indicated as "special infantry" on the *Unit Function Table.*

a. The indicated Israeli units may use mounted infantry fire in 1967 or later Situations.

b. The indicated Egyptian and Syrian units may use mounted infantry fire in 1970 or later.

c. Other Arab units may never use mounted infantry fire.

2. A passenger can attack only if its carrier attacks, and it must attack the same unit(s) that its carrier attacks.

a. The passenger unit may join in any kind of attack the carrier makes, including overruns.

b. The passenger unit consults the WEC separately using its own weapon type.

c. Trucks and units loaded in trucks cannot attack at all.

3. A passenger unit that attacks can still be moved and unloaded, normally (if the carrier unit can expend the required movement points).

B. BAILOUT

1. Certain passenger units may unload immediately if their carrier unit is dispersed.

a. The units which may bail out are indicated as "special infantry" on the LIFT.

b. Special infantry units may bail out from any carrier unit except helicopters.

c. When a carrier unit is dispersed, the owning player must decide immediately whether its passenger unit will bail out.

d. A unit may not bail out if it would violate stacking limits or other rules.

e. A unit that bails out is automatically dispersed and unloaded.

2. A unit that bails out is considered to have been attacked by the attack against its carrier; thus, the bailed out unit cannot be attacked again that phase.

C. QUICK MARCH

1. The units that are allowed to use "quick march" are indicated as "special infantry" on the Unit Function Table.

2. Just before each unit moves, the owning player must announce whether that unit will use "quick march" to move that turn.

a. The movement cost for entering a non-slope hex is 1/2 movement point (instead of one m.p.) for a unit using quick march. Other terrain costs and restrictions remain unchanged, and the unit may not exceed its movement allowance.

b. Notice that a unit using quick march cannot enter a slope hex or cross a ridge hex side unless it moves along a road at the road rate.

c. A unit that is attacked by opportunity fire while it is using quick march has its defense strength halved.

d. A unit that uses quick march is automatically attacked at 1-2 as soon as it finished moving, as a penalty for using quick march. If the unit has been dispersed by opportunity fire 1 is subtracted from the CRT die roll and a "DD" result will eliminate the unit.

e. Units using quick march may not CAT attack that turn.

D. CROSS COUNTRY PENALTY

1. The units which must pay the cross country penalty are indicated on the UFT.

2. Each unit indicated must expend one extra movement point when crossing a hex side containing a yellow or brown color bar.

3. Units crossing moraine hex sides or moving along a road at the road rate do not have to pay this penalty.

E. MISSILE PASSENGERS

1. Two Sagger units count as one passenger unit when loaded on a carrier.

2. Two Cobra units count as one passenger unit when loaded on a carrier.

3. A carrier unit pays the normal movement cost to load/unload one of these units. A carrier may load/unload two such units in the same hex for this same movement cost.

F. MISSILE RELOADS

1. "Reload" counters have been provided **for** Sagger and Cobra missile units.

2. During initial placement a "reload" counter is placed on each Sagger and Cobra unit.

3. During the play of the game each "reload" counter must stay with its missile unit. The reload counter moves, loads, unloads, etc., with its unit at no extra cost; it is considered to be part of the missile unit.

4. When the missile unit attacks, the reload counter is removed from the board and placed off to the side. This signifies that the set of reloads has been loaded into the missile launchers to replace the fired rounds.

5. When the missile unit fires again, the reload counter—which is off the side of the board—is removed from play and placed back in the game box. The missile unit has fired its reloads: **that missile unit cannot attack as long as its own reload is out of play.**

6. Thus, a Sagger or Cobra unit can attack only if:

a. Its own reload is with it on the board; or b. Its own reload is off to the side of the board.

7. Reload counters have identification numbers corresponding to their missile units.

8. In addition to the numbered reload counters, there are also three Sagger reloads labeled "(RES)". These are reserve reloads (Cobra units do not have reserve reloads).

a. One reserve reload should be included for every three Sagger units in the Situation being played. A reserve is included only for a full set of 3 Saggers—no reserve reload is given for an extra 1 or 2 reloads (i.e., 7 Saggers get 2 reserves).

b. Any Sagger unit can carry one reserve reload in addition to its own reload. The reserve reload is placed on the unit and is treated as part of the unit.

c. A reserve reload functions by being swapped for a normal, numbered reload when the normal reload has been removed from play. The Sagger unit that is carrying the reserve reload can get its own reload back from the game box by exchanging it for the reserve reload counter.

d. Reserve reload counters are never used for firing themselves: i.e., they are never placed to the side of the game board, etc. Only the numbered reloads are used in the firing procedure; reserve reloads are used simply to buy normal reloads back.

9. Reloads *on* the board may be transferred freely between Sagger units in the same hex.

a. A missile unit can fire only using its own reload; other reloads are treated as reserves.

b. A missile unit can carry only two reloads when it moves; it can have any number of reloads as long as it remains stationary.

c. When a missile unit is eliminated, its reloads (on the board) can be immediately transferred to other missile units in the hex. If there are no surviving missile units in that hex the reloads are immediately lost and removed from play.

G. VARIABLE MINEFIELDS

1. There are three types of minefields available: 3-1, 2-1, and 1-1.

a. These types of minefields are available as indicated in the Situation being played.

b. In addition, during initial placement a player may exchange minefields for different types of minefields.

c. One 2-1 minefield can be traded in for two 1-1 minefields.

d. Two 2-1 minefields can be traded in for one 3-1 minefield.

2. Each type of minefield attacks with the attack strength printed on it. Thus, a 3-1 minefield executes an automatic 3-1 attack when a unit tries to enter or leave it.

3. When an engineer unit attacks a minefield, he attacks at the reverse of the odds printed on the minefield. Thus, an engineer attacks a 3-1 minefield at 1-3 odds.

III. INDIRECT FIRE ADDITIONS

Units with indirect fire capabilities may now execute three different types of indirect fire attacks: neutralization, destructive or interdiction attacks. All may be executed against hexes not in the attacking unit's LOS, [.OF.

A. INDIRECT FIRE SEQUENCE

1. All indirect fire attacks must be recorded in advance, at the beginning of the friendly fire phase. For each attacking unit the following must be recorded:

a. The turn the attack is recorded. b. The identification of the attacking unit. c. The coordinates of the target hex. d. The type of attack ("NEUT", "DEST" or "1NT").

e. For destructive attacks only, the identification of the target unit being attacked in the target hex also must be specified.

2. The following conditions must be met when each attack is recorded:

a. The attacking unit must be face up.

b. The target hex must be within the attacking unit's range (and no closer than the attacker's minimum range, for an '(H)' type attacker).

c. No more than one attack can be recorded for an attacking unit in a turn.

d. Spotting requirements for the target hex vary with the type of attack. Each type of attack is explained separately, below.

3. Different attacks and different types of attack may be directed against the same target hex.

a. Attacks of the same type directed against the same hex combine into one attack.

b. Neutralization and destructive attacks directed against the same target also combine into one attack.

c. Interdiction attacks never combine with other types of indirect fire attacks.

d. Destructive attacks combine with each other and neutralization attacks only when they are attacking the same target *unit.*

4. An indirect fire attack is never executed during the same player's turn in which that attack was recorded.

a. Neutralization and destructive attacks are executed during the friendly fire phase on the turn after they were recorded.

b. Interdiction attacks begin at the start of the next *enemy* turn after the attacks were recorded and continue until the end of the next *friendly* turn after that. Thus, an interdiction attack continues over one entire round of play, starting just after the friendly turn on which it was recorded and ending at the end of the next friendly turn.

5. Each attacking unit is totally committed to the attack that has been recorded for it.

a. Once an attack has been recorded for an attacking unit, that unit cannot move nor attack until that attack has been completed —EXCEPT to execute an attack that was recorded on the *previous* turn. (Interdiction attacks are "completed" when they *slop}*.

b. Attacks that are recorded on different turns for the same attacking unit never interfere with each other; a player can record an attack on turn I, record an attack on turn 2 and then execute the attack that was recorded on turn I—recording the second attack does not interfere with executing the first attack. *Recorded* attacks do not interfere with each other.

c. When the time comes to execute a recorded attack, the attacking player must announce that attack and reveal the recorded attack to his opponent. The attack must then take place, even if all the targets have moved away and the attack lands harmlessly.

d. An attacking unit that is dispersed by an enemy attack between the time its attack is written and the time the attack should be executed cannot attack and its attack does not have to be revealed.

6. The execution of each type of attack is explained below in the rules section dealing with that type of indirect fire attack.

7. These new types of attack—neutralization, destructive and interdiction—apply only to prerecorded indirect fire attacks.

a. Units able to execute direct fire, opportunity fire and/or anti-aircraft fire attacks may still execute these attacks normally, as long as they are not committed to an indirect fire attack,

b. These new types of attack apply only to indirect fire attacks— they cannot be used in and do not affect direct fire or other types of attacks.

8. Off-board artillery units may use these new types of attack by themselves or in combination with on-board attacking units.

B. NEUTRALIZATION ATTACKS

Neutralization attacks are the same as the normal indirect fire attacks explained in the *STANDARD RULES.* Only the name has been changed.

1. When the attack is recorded the target hex must contain a spotted enemy unit.

2. The attack is executed during the friendly fire phase on the turn after it was recorded.

a. If the target hex is not in LOS/LOF of an undispersed friendly unit when the attack is executed, the attack must be checked for "scatter" and possibly "drift".

b. The attack is executed against the final target hex by attacking each unit in that hex, one defender at a time.

3. All neutralization attacks recorded against the same target hex combine into one attack, which is then executed against each defending unit in turn.

a. If the attack "scatters" or "drifts", the entire combined attack is affected. The whole attack "scatters" or "drifts" as a unit.

b. If a destructive attack is being executed against an individual unit in the same target hex, the "destructive" attack is added to the "neutralization" attack against that unit and the combined attack is resolved as one battle.

c. Interdiction attacks are *not* added to neutralization / destructive attacks.

4. The INDIRECT FIRE section of the WEC is used to determine the effective attack strength of each attacking unit against each defender in turn. The CRT die roll is modified as indicated for indirect fire attacks and the CRT results are applied normally.

5. Neutralization attacks are executed against the final target hex even if the hex is empty and the attack has no effect. Attacking units are inverted as soon as the attack has been executed.

C. DESTRUCTIVE ATTACKS

Destructive attacks are executed against specified enemy units at triple effect.

1. When a destructive attack is recorded the specific unit being attacked must also be recorded.

a. The target *unit* must be spotted by some undispersed friendly unit when the attack is recorded.

b. The target hex must still be recorded, and the target unit must be in that hex.

2. Each destructive attack is executed during the friendly fire phase on the turn after it was recorded.

a. Each attacking unit must be on the board, face up, or it cannot attack.

b. A destructive attack attacks only one unit—the recorded target unit. No other unit can be attacked by that destructive attack even if the recorded target unit cannot be attacked for some reason.

c. If the recorded target unit is not in the target hex or is not spotted when the attack takes place, then the attack is made but it has no effect. Other units in the target hex are never attacked by that destructive attack, and a destructive attack never "scatters" or "drifts".

3. All destructive attacks directed against the same target unit combine into one attack.

a. The combined destructive attack is also combined with all neutralization attacks directed against that unit; the total destructive/neutralization attack is resolved as one battle.

b. The destructive attack does not affect attacks against other units in that hex.

4. The indirect fire section of the WEC is used to find each attacker's effective strength, and then the effective strength of each unit making a destructive attack is tripled. The die roll is modified normally for indirect fire attacks and the normal CRT results are applied.

5. Destructive attacks must be executed as recorded, even if they have no effect because the target unit has moved or is not spotted. Attacking units are inverted as soon as the attack has been executed.

D. INTERDICTION ATTACKS

Interdiction attacks are low intensity bombardments that hinder movement through an area during one complete round of play (i.e., during one enemy turn and one friendly turn).

1. The target hex does not have to be spotted and does not have to be occupied by any unit when the attack is recorded; any hex in range may be specified.

2. Each interdiction attack begins at the start of the next enemy turn after the interdiction attack was recorded, and continues for one complete round of play, ending at the end of the next friendly turn.

a. While the interdiction fire attack is in effect it is represented on the board by an "interdiction fire" counter. The "interdiction fire" counter is placed in the target hex when the attack begins and is removed when the attack ends.

b. If the "interdiction fire" counter is not in friendly LOS/LOF (of an undispersed unit) when it is first placed on the recorded target hex, it *automatically* "drifts". Roll a die and consult the "drift diagram" in the STANDARD RULES; the "interdiction fire" counter moves one hex in the appropriate direction. Do NOT consult the "scatter chart", only the "drift diagram": unspotted interdiction attacks never stay in the original target hex and never are lost, they always just drift. c. An interdiction attack attacks every unit—enemy *or friendly*—that expends movement points or CAT attacks while in the same hex or *adjacent to* the "interdiction fire" counter.

3. A unit is attacked each time it expends movement points or CAT attacks while in the same hex with or adjacent to an "interdiction fire" counter.

a. The unit is attacked only once per movement expenditure or CAT attack, no matter how many movement points it expends all at once and no matter how many interdiction fire counters it is adjacent to.

b. The unit is attacked repeatedly each time it expends movement points or CATs, even if it expends the points in the same hex.

c. Example: A carrier unloads in a hex and then attempts to move away. It is attacked once when it expends one-half of its movement to unload, and it is attacked again when it expends the movement to leave the hex, assuming that that hex is adjacent to one or more "interdiction fire" counters.

4. *Importan*t: An interdiction attack must contain at least 14 *basic* attack strength points to be effective.

a. The WEC is not used—the attack points that count are the ones that are printed right on the unit counters, without modification.

b. Interdiction attacks directed against the same recorded target hex are totalled into one attack. If "drift" occurs, the whole attack drifts together.

c. If different attacks are recorded against different target hexes but "drift" into the same hex, they are *not* combined. *Each* attack must maintain 14 points to remain effective.

d. If at any point the combined strength of an interdiction attack falls below 14 *basic* attack points, then that attack is ineffective and its "interdiction fire" counter is *immediately* removed from the board (and the remaining attacking units **are** inverted).

e. A unit contributes to an interdiction attack only so long as that unit remains face up. If it is dispersed and inverted by enemy attack, it immediately stops contributing its attack points to the interdiction attack.

f. Interdiction attacks are never combined with other types of indirect fire attacks.

5. *Important:* It does not matter how many attack points are taking part in an interdiction attack, as long as there are at least 14 attack points.

a. An interdiction attack against an **armored target** is always executed at **1-2** odds.

b. An interdiction attack against a **non-armored target** is always executed at **1-1** odds.

c. An interdiction attack against a **flying target never has any effect.**

6. *Importan*t: The CRT is used to determine combat results, but the results are interpreted differently.

a. The die roll is never modified in an interdiction attack.

b. A "D" or "DD" result does *no*t disperse the target. Instead, the target unit is stopped b*efore* it CAT attacks or expends the movement that triggered the interdiction attack. The target unit is inverted and can do nothing for the remainder of its turn (it is un-inverted normally at the end of its turn).

c. Notice that the unit is stopped b*efore* it expends the movement/CAT attacks. Thus, it remains in the hex where it was before it expended the movement, and any action it was attempting (such as overrunning, unloading, etc.) does not take place.

d. Similarly, a stopped unit cannot be attacked by opportunity fire or minefields as a result of movement points it was prevented from expending. A unit under interdiction attack must survive and expend the movement points before it can be attacked by minefields or opportunity fire.

e. Interdiction, minefield, and opportunity fire attacks cannot be combined and must be resolved separately, the interdiction attack first, each time a unit expends movement points. A unit stopped by interdiction attack cannot then be attacked by minefields nor by opportunity fire, just as a unit stopped before movement by a minefield cannot then be attacked by opportunity fire.

IV. SUEZ CANAL GROSSING

*In each Suez Canal hex the two moraine hex sides tha*t *are* d*irect*ly *across from each other and parallel t*o *each other (these* t*wo moraine hex sides are also paralle*l *Id the Sue: Canal printed in* t*he hoard), are termed the "ent*r*y" hex sides in*to *tha*t *Suez Canal hex.-These are* t*he two hex sides* t*hat are transformed into sand dune hex sides when a trench counter is placed in* t*hat Suez Canal hex.*

The t*wo Bank hexes tha*t *con*t*ain these entry hex sides are the* "debouchement" *hexes for that Suez Canal hex. Notice tha*t *they have* t*he same le*tt*er coordinate as the Suez Canal hex.*
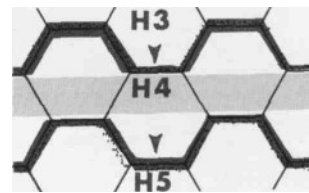
"H 4" identifies the Suez Canal hex. The arrows indicate the entry hex sides into that hex. "H 3" and "H 5" indicate the two debouchement hexes for "H 4".

A. AMPHIBIOUS UNITS

1. Units listed as "amphibious" on the UFT may enter a Suez Canal hex that contains a trench counter, even if there is no bridge in that hex.

a. An amphibious unit cannot cross a moraine hex side unless it is an "entry" hex side that has been transformed into a sand dune hex side.

b. To enter a Suez hex, a unit must start adjacent and expend its whole movement to move one hex into the Suez hex.

2. A unit leaving a Suez Canal hex must pass through either of the transformed entry hexes, and may expend its full movement normally.

B. FERRIES

1. The Egyptian "GSP" and the Israeli "FERRY" units are special carrier units that can transport any unit onto or across a "cut" Suez Canal hex. Ferry units are amphibious units and may enter and leave Suez Canal hexes accordingly.

2. Ferry units have special procedures for loading and unloading and carrying passengers.

a. Any combat unit may be a passenger on a ferry.

b. A ferry can carry a passenger only while it is in a Suez Canal hex.

c. A ferry can carry only one passenger at a time. Only one passenger unit can be loaded or unloaded by a ferry in a turn.

d. Loading procedure: The ferry unit starts the turn in the Suez Canal hex, and the passenger unit must start the turn in one of the two debouchement hexes for that Suez Canal hex. The ferry unit expends its whole movement allowance without moving, and the passenger unit is automatically moved one hex onto the ferry—it is loaded.

e. Similarly, when a passenger unit is unloaded the ferry expends its full movement allowance and the passenger is placed on either of the debouchement hexes.

f. A passenger unit must be face up to load and is inverted when it unloads—it can neither expend movement points nor attack the turn it loads or unloads.

g. Note that a carrier carrying a passenger counts as one passenger when aboard a ferry.

h. A unit on a ferry cannot "bail out" (rule II.B above).

3. Otherwise, a passenger aboard a ferry is treated like a normal passenger.

C. INFANTRY BRIDGES

1. Infantry bridges are constructed during play by construction engineer units. Infantry bridges may be constructed only in Suez Canal hexes that do NOT contain a trench.

2. Infantry-class units may move onto a Suez Canal hex that contains an infantry bridge.

a. The entry hex sides into that Suez Canal hex can be crossed by infantry-class units.

b. The entry hex sides remain moraine hex sides for all other purposes.

c. Only one infantry-class unit may be on the infantry bridge at any time.

3. Units able to "quick march" may do so when traversing infantry bridges.

D. ASSAULT BOATS

1. Assault boats are carrier units used to transport infantry-class units across Suez Canal **hexes.**

2. Assault boat counters have not been provided in the game. Instead, the number of assault boats is listed in the AVAILABLE FORCES for the Situation being played.

a. At the beginning of the game the owning player assigns each assault boat to any of the Suez Canal hexes on the board. Any number may be assigned to any hex, except the total assigned cannot exceed the total provided for that Situation. The player secretly records the Suez Canal hexes and the number- of assault boats assigned to each.

b. The assault boats cannot be moved—they **can** be used only in the hexes where initially assigned.

c. Each assault boat can be used only once during the game—after one use it is ignored for the remainder of the game.

3. Assault boats function as carrier units.

a. Each assault boat can transport one infantry-class passenger.

b. Each assault boat expends all of its movement to load a passenger. The passenger must start in ANY adjacent non-Suez hex; when it is loaded it is placed in the assault boat's hex. While loading or unloading a passenger unit may cross any moraine hex side.

c. Similarly, an assault boat expends all of its movement to unload a passenger into any adjacent non-Suez hex. Once it has unloaded a passenger, the assault boat is out of action for the rest of the game.

d. Only four assault boats can be carrying passengers in the same hex at the same time. Four passengers can be unloaded from a hex and four more can be loaded into that hex in the same turn, however, if the player has enough assault boats there.

e. Assault boats can be attacked by opportunity fire as they load. Eliminated assault boats do not count for victory points, but the passenger units do. A passenger is eliminated if an assault boat is eliminated out from under it. If an assault boat is dispersed, place the "DISPERSED" counter on the passenger unit—the assault boat is 'an infantry class unit for MORALE purposes.

f. Each assault boat has a defense factor of 1 and is a non-armored target.

g. A passenger unit must be face-up to be loaded and is inverted when it unloads from an assault boat.

V. CONSTRUCTION ENGINEERS

Egyptian construction engineers and Israeli pontoon engineers may construct "cuts", bridges and infantry bridges in Suez Canal hexes. These units are indicated as having "advanced" engineering capabilities on the UFT.

These units may NOT do the "standard" engineering functions described in the *STANDARD RULES.*

A. CONSTRUCTION RULES

1. To construct any of the things described below, a construction engineer must "build" in a hex for a stated number of turns.

a. In order to "build" in a hex, an engineer must start in that hex and expend its entire movement allowance without moving. The engineer must start the turn face up and cannot move nor attack that turn.

b. Each turn that an engineer "builds" in a hex, the owning player should write down the hex identification coordinates, what the engineer was working on, and the cumulative total of "building" turns completed so far on that project.

c. No matter how many engineers are in a hex, only one engineer unit can build in a hex in a turn.

d. When the required number of turns of building have been completed, the proper counter is placed in the Suez Canal hex.

2. Turns of building are never lost, no matter what happens to the engineer unit; another engineer can move in and start where the first one left off.

B. BUILDING "CUTS"

A "cut" requires 40 turns of building. The engineer unit must "build" in the East Bank debouchement hex for the Suez Canal hex where the trench counter will be placed.

C. BUILDING BRIDGES

1. Normal bridges can be built only in Suez Canal hexes already containing a trench counter.

2. The turn before building is to begin, a bridge counter and an engineer counter must be together in either of the debouchement hexes for the hex where the bridge is to go.

a. The engineer unit expends its entire movement allowance to move the bridge counter and itself onto the Suez Canal hex.

b. The bridge is inverted, and will remain so until it is completed.

c. This does not count as a turn of building.

3. The engineer unit must build in the same hex with the inverted bridge.

4. After 60 turns of building the bridge is turned face up and can be used.

5. The inverted bridge may be attacked normally. "D" and "DD" results are ignored; eliminated bridges are removed from the board and all their "building" to date is lost.

D. MOVING BRIDGES OVERLAND

Under the *ADVANCED RULES,* bridge counters are placed on the board and moved on non-Suez hexes. They represent the disassembled sections of the pontoon bridges being moved overland.

1. The Egyptian player can move a bridge on a "PM P" unit. The bridge is treated like a passenger on the PMP. To unload a bridge a PMP must expend its full movement factor, and the bridge cannot be unloaded unless it is immediately (that movement phase) placed on a Suez Canal hex as described in rule V.C.2. above.

2. The Israeli player moves a bridge by loading aboard any battle-tank class unit.

a. Any Israeli battle-tank class unit may load **or** unload a bridge counter at the cost of its entire movement allowance that turn.

b. While carrying a bridge, an Israeli unit has a movement allowance of one point.

3. Unlike other passenger units, a pontoon bridge can be attacked separately from its carrier.

a. A bridge counter is not automatically destroyed when its carrier is destroyed. **The** surviving bridge counter is **simply left in the hex** until it is destroyed separately.

b. A bridge can be attacked separately while it is being transported.

c. When overrunning or CAT attacking defenders in the same hex with a bridge, the attacking player need not include the bridge counter in his attack. If he does, it shares the fate of the other defenders; if he does not attack it, it is not affected by the combat.

d. Ignore "dispersed" results against a bridge not on a Suez Canal hex.

4. A bridge counter counts as two stacking points when it is not on a Suez Canal hex; when eliminated, it leaves two wrecks in if in a road or town hex.

E. BUILDING INFANTRY BRIDGES

1. The turn before construction is to begin, an engineer unit moves into a Suez Canal hex from one of its debouchement hexes, and an inverted bridge counter is immediately placed in the Suez Canal hex.

a. An infantry bridge is not allowed in the same hex with a trench counter.

b. The engineer unit must start this placement turn face up in the debouchement hex.

c. This placement turn does not count **as a** turn of construction.

2. After 5 turns of building, the bridge is turned face up and can be used.

3. The inverted bridge can be attacked normally, ignoring "dispersed" results.

OPTIONAL RULES

I. OPTIONAL ABILITIES

A. ANTI-TANK HOWITZERS

All Arab 122mm howitzer units may make direct fire attacks. Treat these units as "A" weapon type when used in this way.

B. WIRE-GUIDED MISSILES

Certain missiles are directed to their targets by wires running from remote control devices. When these missiles are in flight it is possible to trace the wires back to the home unit and break up the missile attack by attacking and disrupting the controlling unit.

1. The units equipped with wire-guided missiles are indicated on the UFT.

2. When a wire-guided missile unit executes a direct fire attack, it can be attacked by enemy opportunity fire.

a. The attacking player announces the attacking units and the units defending against the direct fire attack.

b. Before the direct fire attack is resolved, the defending units or any other units in the defending units' hex may execute opportunity fire attacks against any wire-guided missile units making the direct fire attack. *Only units in the hex being attacked by the direct fire attack can execute these opportunity fire attacks.*

c. Units making these attacks must obey all rules governing opportunity fire attacks. Units can attack only if they are face-up, in range, etc.

d. After all these opportunity fire attacks have been resolved the surviving face-up attackers execute the direct fire attack. Only

the announced attackers which remain undispersed may take part in the attack (and they *must* attack).

e. When using the MISSILE RELOADS rule, a missile unit uses its reload when its attack is *announced,* whether the unit survives to attack or not.

3. Wire-guided missiles execute opportunity fire attacks normally, without enemy fire.

C. HELICOPTERS DOWN

1. Helicopter units may be specified as being "down." "Down" helicopters are assumed to be landed or hovering just off the ground.

2. A helicopter unit is "down" only if a DOWN counter is placed directly on top of it.

a. DOWN counters can be placed on helicopters only during the friendly air phase, immediately after the end of all helicopter movement.

b. The owning player may place DOWN counters on as many of his helicopters as he chooses.

c. If a helicopter unit moved that air phase, it must be inverted as soon as the DOWN counter is placed on it.

d. All DOWN counters are removed from friendly helicopters just before helicopter movement begins during the next friendly air phase.

e. DOWN counters may be placed on helicopters during initial placement.

3. LOS/LOF is traced normally to "down" helicopters.

a. Elevation hex sides and terrain block LOS/LOF to "down" helicopters.

b. A "down" helicopter is always spotted when in enemy LOS/LOF, even when in a woods or town hex.

c. A "down" helicopter can be attacked by CAT, overrun and indirect fire (except "INT") attacks. In these attacks each attacker treats the "down" unit as the target type most favorable to that attacker.

d. A "down" helicopter never gets defensive bonuses for terrain, forts or improved positions.

4. "Down" helicopters cannot attack.

5. When this rule is being used helicopter units can load and/or unload passengers only during the friendly movement phase. The helicopter must be "down" and face up, and it must expend its full movement allowance in the loading/unloading hex, becoming inverted as it does so. The helicopter is subject to opportunity fire for expending movement.

D. NAP-OF-THE-EARTH (N-O-T-E)

Nap-of-the-earth is a new tactic in which the helicopters fly just off the ground and take advantage of terrain just like ground units. This technique is safer but is very demanding on the helicopter's crew. Since this is a new technique, use it only in Situations dated "1976" or later.

1. Using this rule requires the use **of the** *HELICOPTERS DOWN* rule above.

2. "Down" helicopters may expend movement points only during the friendly *movement phase*.

a. To expend movement points during the movement phase a helicopter unit must be "down" and face up.

b. A "down" helicopter that expends movement points is inverted as soon as it stops moving.

c. Loading and/or unloading costs the helicopter's entire movement allowance.

d. A "down" helicopter must expend two movement points to enter each hex regardless of terrain.

e. A "down" helicopter does not count for stacking and can enter any terrain.

3. As they expend movement points "down" helicopters may be attacked by enemy opportunity fire.

a. Enemy units must trace LOS/ LOF normally, with terrain blocking LOS/LOF.

b. "Down" helicopters are activated as targets every time they expend 1/4 of their movement allowance in enemy LOS/LOF, like ground units—not; like helicopters moving during the AIR PHASE.

E. SUPPLY

Each unit in the game (except air units and Sagger and Cobra missiles, which are explained in the *ADVANCED RULES)* carries enough ammunition for twelve attacks. Each time a unit attacks, the owning player must announce before the attack whether the unit is expending 1, 2 or 3 turns' worth of ammunition. If it attacks with 2 turns' worth, its effective attack strength is doubled, if 3 turns' worth it is tripled. Each player must keep track of how many turns' worth of ammunition each unit has fired; when a unit has fired all its ammunition, it may not attack for the rest of the game. Defending units do not consume ammunition.

II. NEW UNITS

A. MINELAYER

The MLG unit represents a MLG minelaying unit loaded on a BTR-152 transport. If this unit expends its entire movement allowance to move one hex, a 1-1 mine counter may be placed in the hex exited. A mine may be placed only in those hexes where mines are allowed.

B. SMOKE

1. A "SMOKE" counter in a hex transforms that hex into an "infinitely tall" woods hex for purposes of LOS/LOF and spotting.

a. The hex sides of that hex block LOS/LOF just like the hex sides of a woods hex, except all LOS/LOF are affected—even LOS/LOF to air units or units on slopes.

b. A unit in a hex with smoke must be spotted to be attacked.

c. When attacked by direct or opportunity fire, a unit is -1 on the CRT die roll if the unit is in the same hex with smoke.

2. Certain units are identified as smoke units on the Unit Function Table. Such a unit can place a smoke counter in the unit's own hex. This takes place during the friendly movement phase—the unit expends its entire movement allowance without moving, and the smoke counter is immediately placed down in the unit's hex.

3. Any "(H)" or "M" type unit *(except* MRL *units)* can make SMOKE attacks.

a. A smoke attack does not attack any units, it just causes a smoke counter to be placed in the target hex.

b. A smoke attack can be executed like a direct fire attack, with the smoke counter placed down immediately. The target hex must be in range and in LOS/ LOF of the attacking unit; the target hex does not have to contain any enemy units, but it must not contain any friendly units.

c. A smoke attack may also be executed as an indirect fire attack, recorded one fire phase and executed the next. The attack must be recorded as "SMOKE"; the recorded target hex must be in LOS/LOF of an undispersed friendly unit—it need not contain an enemy unit, but it cannot contain a friendly unit. When executed, the smoke attack "scatters" and "drifts" if not in friendly undispersed LOS/LOF.

d. A unit must be face up to execute a smoke attack and is inverted as soon as the smoke attack is executed.

4. Each time smoke is placed in a hex, it lasts only two turns.

a. The turn, phase and turn are noted for each smoke counter placed down; at the beginning of that same phase two turns later the smoke counter is removed.

b. Redundant smoke counters may be placed in the same hex to insure a continuous smoke-screen.

5. *Special:* Smokescreens extend a good distance into the air; thus, they block LOS/LOF even to air units and to units on slope hexes. LOS/ LOF can be traced into a smoke hex and out of a smoke hex but LOS/ LOF can *never* be traced t*hrough* a smoke hex, regardless of elevation.

THE SITUATIONS

A. ORGANIZATION OF THE SITUATIONS:

1. There are 24 Situations that increase gradually in complexity and in the number of rules that they employ. Four of the Situations can be played using only the BASIC RULES; these are Situations 'B1' through 'B4'. The next thirteen Situations can be played using the STANDARD RULES; these are numbered 'S1' through 'S13'. The remaining Situations require the use of the ADVANCED or OPTIONAL RULES; those Situations are numbered 'A1' through 'A7'.

2. At the start of each Situation is given that Situation's identification code (a letter indicating the complexity of the rules required by the Situation—B for BASIC RULES, S for STAND-ARD RULES, or A for ADVANCED/OPTIONAL RULES—and a number from I to 13), the historical or hypothetical date of the battle, the name of the battle, and a short description of the circumstances surrounding the battle.

3. After that each Situation is broken down into sections, each section headed by a particular title:

a. MAPBOARD contains a diagram of the mapboards to be used and how to connect them for this Situation. The letters A. B, C and D identify the corresponding mapboards and the orientation of the letters identifies the orientation of the lettered mapboards when they are put down together. The arrow and "N" indicate which direction is north for this Situation.

b. AVAILABLE FORCES lists the types of unit counters that each player may use in this Situation. The red numbers printed below each counter diagram indicate the number of each type that are used. The organization of these units (into battalions, etc.) is also indicated.

c. SET-UP lists the limits within which each side may place its unit counters at the start of the game, and explains when and where any additional units enter the mapboard during play.

d. SPECIAL RULES gives any specialties that apply to this Situation only.

e. GAME LENGTH gives the number of turns this Situation lasts, and which player will move first each turn. Elapsed turns are recorded on the TIME RECORD TRACK, on the CRT card.

f. VICTORY POINTS describes the ways in which both players can earn victory points towards winning the game.

B. DETERMINING VICTORY:

1. At the end of a game each player calculates the "victory points" he has earned in the Situation being played. Players can earn victory points by eliminating enemy units, capturing certain areas of the board or in other ways; at the end of each Situation there is a list of the ways in which a player can earn victory points in that Situation.

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Difference of
1-2 points: marginal victory.
3-6 points: minor victory.
7-14 points: substantial victory.
15-30 points: major victory.
31 or more points: decisive victory.

The winner's "level of victory" is given alongside his superiority in victory points; within each level a greater difference in points indicates a greater victory.

C. NOTES ON THE SITUATIONS:

1. Air strikes and Off-board artillery are always available—starting on turn 1, unless specifically indicated otherwise in the Situation. Note that since these attacks have to be specified at least one turn in advance they cannot actually attack on turn 1; however, their **turn** 2 attacks may be written on turn 1.

2. When units are specified as arriving on a certain turn all such units MUST enter the mapboard as specified on that turn.

3. All units may be set up as desired, within the limits given under "SET-UP" in each Situation. Naturally, the rules governing the placement of counters are in effect during set-up.

4. Units may never exit the mapboard except as indicated under "VICTORY POINTS" in that Situation. Aircraft counters (but NOT helicopters) are the only exception, since they exit the same turn (hey enter (unless they are shot down).

5. Hexes that are on two boards (i.e. "seam" hexes) are considered to be on BOTH boards for set-up purposes. Units that are allowed to set-up on a mapboard may set-up on the "seam" hexes of that board section.

6. East, west, north and south are determined relative to the "N" (north) pointer beside the mapboard configuration for each Situation.

7. Units that arrive during play enter the mapboard sequentially, i.e., each one enters and moves in turn. Any number may enter

through the same hex and still use their full movement allowance. Units that are set up on the board must obey all stacking limitations and other placement restrictions.

8. When using the Optional Aircraft Rule, replace each airstrike with an aircraft carrying that airstrike. An Israeli 21-point airstrike would thus be replaced by an aircraft counter carrying one 21-point air strike.

D. ADVANCED AND OPTIONAL SITUATION CHANGES

The following additions should be made to the AVAILABLE FORCES in the Situations listed, when the indicated advanced or optional rules are being used:

1. SITUATION S-11-When using the advanced air rules:

  Syrians add: 1 ZSU-23-4 to 78th Tank Brigade.

    1 ZSU-23-4 to 81st Tank Brigade.

    1 ZPU-4 and

    1 truck to Mech Inf. Battalion.

2. SITUATION S-6—When using the advanced air rules:

  Egyptians add: 1 ZSU-23-4 to 22nd Tank Brigade.

    1 ZPU-4-2 to 113th Mechanized Brigade.

3. SITUATION S-12—When using the advanced air rules:

  Syrians add: 2 ZSU-23-4 to 81st Tank Brigade.

    1 ZPU-4 to attached infantry battalion.

  PLA add: 1 S-60

    1 ZPU-4

    2 trucks

4. SITUATION A-6-When using the optional minelaying rule:

  Egyptians add: 1 MLG (minelayer) to Group A "scratch force".

(ZSU-23-4 is the "Shilka.")

THE UNIT FUNCTION TABLE

KEY

CLASS — indicates the class of each group of units — infantry-class, etc.

SYMBOL — picture of the counter representing the unit.

NAME AND PICS NUMBERS - name of the unit, and the range of PICS numbers printed on the counters.

PICS numbers: - the first digit indicates the unit's CLASS, the second digit differentiates between units in the same class. The third and fourth digits differentiate different counters that are the same type of unit. Zeroes have been skipped in the numbering sequence - a final "0" indicates that a counter is unique in the game. (Special: Only Jordanian units have a third digit of "I".)

WEAPON - the unit's weapon type. TARGET - the unit's target type.

HULL D - the addition to the CRT die roll this unit gets when it is HULL DOWN shielded.

ATTACK MODES — a dot in a column indicates that that unit can execute that type of attack: DF - direct fire; OF - opportunity fire; IF - indirect fire; OR - overrun attacks; CAT — CAT attacks.

TRUCK — a dot in the column indicates that the unit moves at the truck rate (use the "Trucks" column of the Terrain Effects Chart).

CARR — a symbol in the column indicates that the unit can carry passengers. "T" - the unit can carry "T" (towed artillery) or "I" (infantry) passengers. "I" — the carrier can carry only "I" (infantry) passengers. "3I" — the unit can carry three passengers at once, infantry only. Dot — the carrier cannot carry normal passengers — see note. (Special: Special Infantry units can do "Mounted Infantry Fire " only when they are loaded aboard "I" carriers.)

PASS - letter in column indicates that the unit can be a passenger. "T" - towed artillery passenger (costs carrier's entire MA to load or unload); "I" — infantry passenger (costs 1/2 of carrier's MA to load or unload).

SMF - a dot in the column indicates that the unit can split-move-and-fire.

ENGINEER ABILITIES - indicates the engineer functions the unit may perform. STANDARD - the unit can execute only those engineer functions indicated for engineers in the STANDARD RULES. ADVANCED - the unit can execute only the construction functions given in the ADVANCED RULES.

BRIDGING - unit may emplace AVLB bridges in clear terrain.

FLAIL, FERRY, BRIDGE TRANSPORT, MINELAYER - see the appropriate rules.

CROSS — a dot in the column indicates that the unit must pay the "Cross-country penalty" to cross elevation hex sides.

SPECIAL — a dot in the column indicates that the unit is "Special Infantry" able to do "Mounted Infantry Fire", "Bailout" and "Quick March".

AMPH — a dot in the column indicates that the unit is amphibious.

WIRE G — a dot in the column indicates that the unit uses "wire-guided" missiles.

SMOKE — a dot in the column indicates that the unit is able to place smoke in its own hex.

NOTES:

1) Treat as "A" weapon type for direct fire attacks when using OPTIONAL RULE I.A.

2) unit uses a "reload" when it attacks (ADVANCED RULES).

3) Counts as 1/2 passenger - two allowed per carrier (ADVANCED RULES).

4) Subtract an additional 1 from the die roll when an engineer unit joins in a CAT attack.

5) Trucks and units loaded in trucks may not "spot" enemy units.

6) Unit may not overrun if there is an armored unit in the defending hex.

7) Unit can carry one unit of any type, passenger or not, but only while in a Suez Canal hex.

8) Unit can carry bridges only.

9) Includes anti-aircraft attacks during the enemy air phase.

10) Air strikes only.

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Syrians add: 1 ZSU-23-4 to 78th Tank Brigade.
1 ZSU-23-4 to 81st Tank Brigade.
1 ZPU-4 and
1 truck to Mech Inf. Battalion.

2. SITUATION S-6 —When using the advanced air rules:

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1 ZPU-4-2 to 113th Mechanized Brigade.

3. SITUATION S-12—When using the advanced air rules:

Syrians add: 2 ZSU-23-4 to 81st Tank Brigade.
1 ZPU-4 to attached infantry battalion.

PLA add: 1 S-60
1 ZPU-4
2 trucks

4. SITUATION A-6—When using the optional minelaying rule:

Egyptians add: 1 MLG (minelayer) to Group A "scratch force".

(ZSU-23-4 is the "Shilka.")

SITUATION B-1
BIR GIFGAFA

AVAILABLE FORCES:

ISRAELI (MORALE B)

7(elm)		
16 ^ 10 / 10 SHERMAN 51 5	14 ^ 10 / 10 SHERMAN 50 5	13 ^ 12 / 9 AMX-13 7
5	**2**	**5**

SET-UP:
EGYPTIAN: Enter along north edge of board B on turn 1.
ISRAELI: Enter along south edge of board A on turn 1.

SPECIAL RULES: No units are allowed in or west of the SUEZ CANAL hexes.

November 2, 1956: En route to the Suez Canal, the Israeli 7th Armored Brigade is intercepted by the Egyptian 1st Armored Brigade:

EGYPTIAN (MORALE C)

1(elm)	
7 ^ 8 / 7 T-34/85 6	16 ^ 8 / 15 SU-100 7
12	**3**

GAME LENGTH: 15 turns—Egyptians move first.

VICTORY POINTS:
EGYPTIAN: 2 points for each Israeli unit eliminated, 1 point for each Israeli unit left on board at end of game.

MAPBOARD:

N

A B
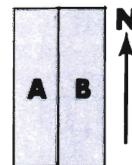
ISRAELI: 2 points for each Egyptian unit eliminated, 1 point for each Israeli unit exited anywhere along the north edge of the board during the game.

SITUATION B-2
RAFID

January 1973: The Israeli Barak Armored Brigade and the Syrian 112th Infantry Brigade clash along the cease-fire line in the Golan Heights:

MAPBOARD:

AVAILABLE FORCES:

ISRAELI (MORALE A):

SYRIAN (MORALE C):

SET-UP:

SYRIAN: Sets up first, anywhere on board D.

ISRAELI: Sets up second, anywhere on board C. The infantry platoon must be placed with the fortification, and both must be placed in one of the following hexes: 0-7, 0-8, N-9, M-9, L-8 or L-9.

SPECIAL RULES:
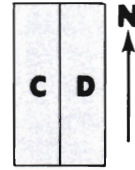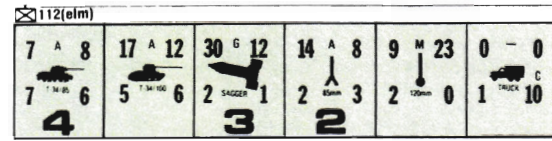
The Israeli infantry platoon and fortification represent a permanent settlement in the shadow of the Golan Heights. The infantry platoon and the fortification must set up on the same hex, and the infantry platoon may not move during the game.

The STANDARD RULES concerning fortifications are in effect: units in the same hex with the fortification each get 10 additional defense strength points when attacked, and the CRT die roll is increased by two when the defenders are in the same hex with the fortification.

GAME LENGTH: 7 turns—SYRIANS move first.

VICTORY POINTS:

SYRIAN: 1 point for each turn an attack is made against the infantry platoon, 4 points if the infantry platoon is eliminated, and 2 points for each other Israeli unit eliminated.

ISRAELI: 2 points for each Syrian unit eliminated and 10 points if the infantry platoon is never attacked.

SITUATION B-3
TEL MASCHARA

October 11, 1973: En route to the front, the Iraqi 12th Armored Brigade is ambushed east of Kuneitra by the Israeli 19th Armored Brigade:

MAPBOARD:

AVAILABLE FORCES:

ISRAELI (MORALE B)

IRAQI (MORALE D)

SET-UP:

ISRAELI: Set up on the mapboard 12 hexes or more from the east edge of the mapboard.

IRAQI: Enter on either road hex along the eastern edge of the mapboard on turn 1. The whole Iraqi force must enter together, along the same road.

SPECIAL RULES:

1. On the turn the Iraqi units enter the board they must be placed in stacks of two units on the easternmost nine hexes of the road on which they entered the game.

2. On each following turn all of the Iraqi units must move nine hexes along the road towards the west edge. Each Iraqi unit must stay on the road and cannot re-enter a hex it has already passed through this game; each Iraqi unit must move exactly nine hexes each turn while obeying the normal movement rules.

3. Special Rule number 2, above, is cancelled as soon as an attack takes place or when any Iraqi unit comes within two hexes of an Israeli unit. The rule is cancelled as soon as either of these criteria is met.

4. Due to decreased visibility the Israeli units are not doubled when attacking from a range of from 3 to 6 hexes.

GAME LENGTH: 12 turns—IRAQIS move first.

VICTORY POINTS:

ISRAELI: 3 points for each Iraqi unit destroyed.

IRAQI: 4 points for each Israeli unit destroyed, 1 point for each Iraqi unit exited from the west edge of the board.

SITUATION B-4
BOTZER

October 16, 1973: An attempt by the Egyptian 25th Tank Brigade to cut off the Israeli bridgehead at Deversoir is itself cut off by the Israeli "Natke" Armored Brigade east of the Great Bitter Lake:

MAPBOARD:
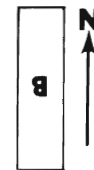
AVAILABLE FORCES:

ISRAELI (MORALE A)

EGYPTIAN (MORALE B)

SET-UP:

EGYPTIAN: Set up first anywhere on hex rows A, B, C, D or E.

ISRAELI: Set up second anywhere on hex rows CC, DD, EE, FF or GG.

SPECIAL RULES: None.
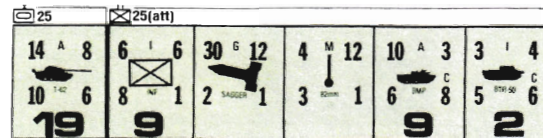
GAME LENGTH: 10 turns—Egyptians move first.

VICTORY POINTS:

ISRAELI: 3 points for each T-62 destroyed, 4 points for each other Egyptian unit destroyed, and 1 point for each Egyptian unit remaining on the board at the end of the game.

EGYPTIAN: 3 points for each Israeli unit destroyed, 3 points for each T-62 exited off the north edge of the board, and 1 point for each other Egyptian unit exited off the north edge of the board.

SITUATION S-1
KALKILIAH

October 10, 1956: A battalion of the Israeli 202nd Paratroop Brigade raids the Jordanian police fort at Kalkiliah.

MAPBOARD:
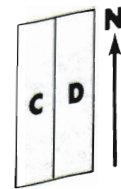
AVAILABLE FORCES:

ISRAELI (MORALE A)
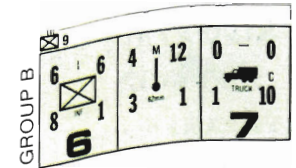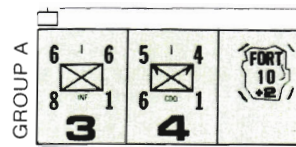
Off-board artillery:
2-25 lber how. (each 9 '(H)' attack points)

JORDANIAN (MORALE B)

SET-UP:
JORDANIAN: Set up Group A first, adjacent to the town hex on board D. Group B enters anywhere along the east edge on turn 5.

ISRAELI: Set up Group A anywhere on board C, set up Group B on any hex(es) east (or northeast or southeast) of the fortification and more than 4 hexes from the nearest Jordanian unit. Group C enters anywhere along the west edge of board C on turn 11 IF the Special Rule is in effect (see SPECIAL RULES, below).

SPECIAL RULES:
If 3 or more Israeli units are eliminated by the end of turn 10, then:

1. The game is extended for 5 more turns, for a total of 15 turns.

2. Israeli Group C enters along the west edge of board C on turn 11.

3. The Israelis get 1 victory point for each Jordanian unit eliminated during the 15 turns.

GAME LENGTH: 10 turns, Israelis move first.

Game expands to 15 turns if the Special Rule goes into effect.

VICTORY POINTS:
JORDANIAN: 5 points for each Israeli unit eliminated, 2 points for each Israeli unit on board D at the end of the game.
ISRAELI: 10 points if any Israeli units occupies the fort any time during the game. Also: 1 point per Jordanian unit eliminated IF the Special Rule is in effect.

SITUATION S-2
ABU AGHEILA

June 6, 1967: An Israeli armored brigade assaults a fortified position held by the Egyptian 125th Brigade of the 2nd Infantry Division:

MAPBOARD:
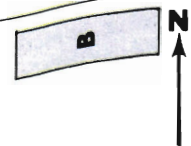
AVAILABLE FORCES:
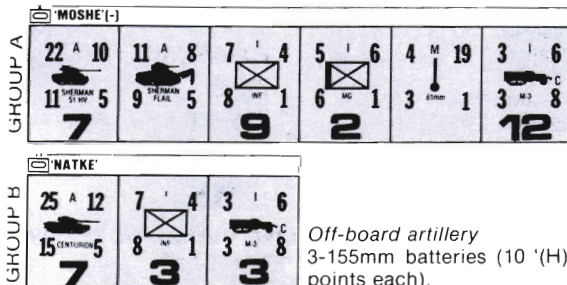
ISRAELI (MORALE A)

Off-board artillery
3-155mm batteries (10 '(H)' attack strength points each).

EGYPTIAN (MORALE C)
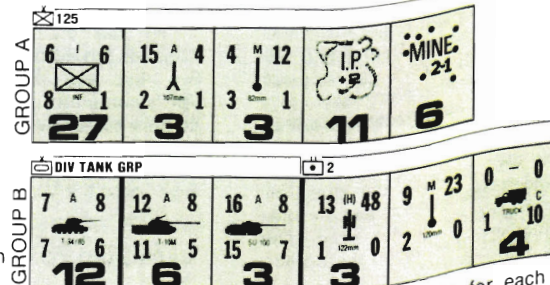
SET-UP:
EGYPTIAN: Group A sets up anywhere in hex rows V, W, or X. Group B sets up anywhere west of hex row N at least 4 hexes from the north edge of the board.

ISRAELI: Group A enters anywhere along the east edge of the board on turn 1. Group B enters anywhere along the north edge of the board west of hex row M on turn 1.

SPECIAL RULES: None.

GAME LENGTH: 10 turns—Israeli moves first.

VICTORY POINTS:

EGYPTIAN: 3 points for each Israeli unit eliminated, 1 point for each Israeli unit remaining on the board.
ISRAELI: 1 point for each Egyptian unit eliminated, 1 point for each Israeli unit from Group A exited off the west edge of the board, 4 points for each Israeli unit from Group B exited off the west edge of the board.

SITUATION S-3
IRBID

September 24, 1970: The Jordanian 40th Armored Brigade and 3rd Infantry Brigade engage advancing Syrian units north of Irbid.

MAPBOARD:
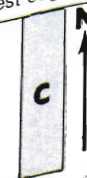
AVAILABLE FORCES:

JORDANIAN (MORALE A)
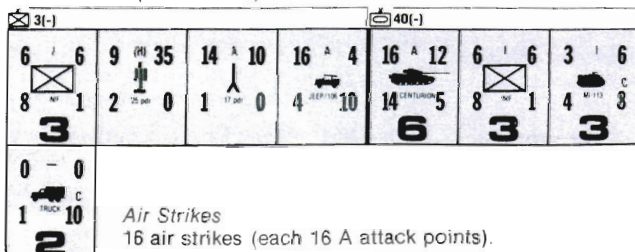
Air Strikes
16 air strikes (each 16 A attack points).

SYRIAN (MORALE C)
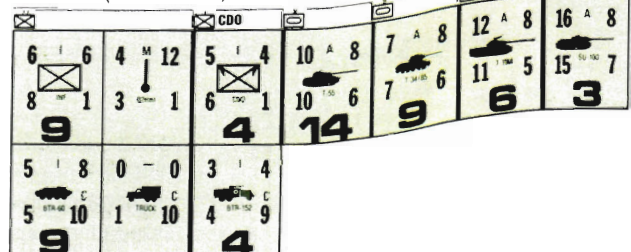
S-3 IRBID

SET-UP:
JORDANIAN: Set up first on or south of hex row M on board C.

SYRIAN: Enter anywhere along the north edge of either board on turn 1.

SPECIAL RULES: None.

SITUATION S-4 JENIN

AVAILABLE FORCES:

ISRAELI (MORALE A)

Air Strikes
10 air strikes (each 10 A attack points).

SET-UP:
JORDANIAN: Set up Group A first on board D but within 5 hexes of any hex on board C. Group B enters anywhere along the east edge of board D on turn 4 or later; all units of Group B must enter on the same turn.

ISRAELI: Set up Group A on board C, within 6 hexes of the west edge. Group B enters anywhere along the northern edge of either

GAME LENGTH: 12 turns, SYRIANS move first.

VICTORY POINTS:
SYRIAN: 2 points for each Jordanian unit eliminated, 1 point for each Syrian unit exited off the south edge of the board.

June 6, 1967: The Jordanian 25th Infantry Brigade and 12th Independent Tank Battalion defend Jenin against an attack by the Israeli Peled Division:

board on turn 2 or turn 3; all units in Group B must enter the mapboard on the same turn.

SPECIAL RULES: None.

GAME LENGTH: 20 turns, ISRAELIS move first.

VICTORY POINTS:
ISRAELI: 10 points for destroying the 25 Iber

JORDANIAN: 2 points for each Syrian unit destroyed, and 10 points for each town hex occupied by a Jordanian unit at the end of the game.

MAPBOARD:

JORDANIAN (MORALE B)

howitzer, 4 points for each Jordanian tank unit destroyed, and 1 point for each other Jordanian unit destroyed.

JORDANIAN: 2 points for each Jordanian infantry platoon exited off the east edge of board D, 1 point for each Jordanian unit remaining on either board at the end of the game, and 2 points for each Israeli unit destroyed.

SITUATION S-5 JENIN (MIGHT-HAVE-BEEN)

June 6, 1967: At the start of the 1967 war the Jordanian army was deployed into a thin front line all along the border with Israel. Front line battalions regularly covered frontages of up to 10 km—normally a large brigade frontage—so the Jordanian army had to rely heavily on its few reserve brigades to move up and reinforce any threatened parts of this front line.

During the war, however, the Israeli air force interdicted these reserves and prevented them from getting to the front. The Jordanian units stretched along the border,

such as the gallant but doomed 25th Brigade, were simply overwhelmed.

To see the difference these reserve brigades would have made, replay Situation S-4, but add the units listed below to Jordanian Group B. (Use Iraqi units to make up this additional brigade; specifically, it is assumed in this Situation that the Iraqi Tank Brigade has been able to cross the Jordan River onto the West Bank.).

MAPBOARD: (See Situation S-4)

AVAILABLE FORCES: (See Situation S-4 but in addition to units listed add:)

JORDANIAN

SET-UP, SPECIAL RULES and **VICTORY POINTS:** (See Situation S-4)

SITUATION S-6 RAS SUDAR

AVAILABLE FORCES:

ISRAELI (MORALE A)

Air strikes
10 (21 'A' attack strength points each).

SET-UP:
ISRAELI: Sets up first east of hex row 'V'.
EGYPTIAN: Sets up west of hex row 'K'.

SPECIAL RULES: None

October 14, 1973: Egyptian 6th Mechanized Division assaults Israeli defensive position held by a reinforced Israeli paratroop battalion:
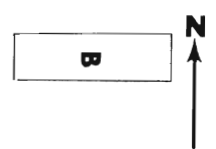
GAME LENGTH: 10 turns—EGYPTIANS move first.

VICTORY POINTS:
ISRAELI: 2 points for each Egyptian unit

MAPBOARD:

EGYPTIAN (MORALE B)

eliminated, 1 point for each Egyptian unit left on board.

EGYPTIAN: 2 points for each Israeli unit eliminated, 2 points for each Egyptian unit exited off the east edge of the board.

SITUATION S-7 EL AL

AVAILABLE FORCES:

ISRAELI (MORALE A)

SYRIAN (MORALE C)

October 7, 1973: Armored units of the Israeli Peled Division assault new Syrian positions held by elements of the 5th Infantry Division:

MAPBOARD:

SET-UP:
SYRIAN: Set up first anywhere on or east of hex row "R" on board D.
ISRAELI: Enter anywhere along the west edge of board D on turn 1.

SPECIAL RULES: None.

GAME LENGTH: 12 turns, ISRAELIS move first.

VICTORY POINTS:
ISRAELI: 3 points for each Israeli unit exited off the east edge of board C, 1 point for each Syrian unit destroyed, and 1 point for each Israeli unit on board C at the end of the game.
SYRIAN: 2 points for each Israeli unit destroyed and 1 point for each Syrian unit on board D at the end of the game.

SITUATION S-8 MAZRAT BEIT JAN

AVAILABLE FORCES:

ISRAELI (MORALE A)

Off-board artillery:
1-155mm howitzer (15 (H) attack points).

SYRIAN (MORALE C)

Off-board artillery:
3-122mm howitzers (each 12 (H) attack strength points).
2-152mm howitzers (each 14 (H) attack strength points).

October 11, 1973: The Israeli 7th Armored Brigade attacks prepared positions held by the Syrian 7th Infantry Division in front of Kuneitra:

MAPBOARD:

SET-UP:
SYRIAN: Set up first on or east of hex row K.
ISRAELI: Set up second on or west of hex row X.

SPECIAL RULE:
T-34/85 units may not move.

GAME LENGTH: 15 turns, ISRAELIs move first.

VICTORY POINTS:
ISRAELI: 1 point for each Syrian unit destroyed and 4 points for each Israeli unit exited off the east edge of the board.
SYRIAN: 3 points for each Israeli unit destroyed and 1 point for each Israeli unit remaining on the board at the end of the game.

SITUATION S-9 EL FIRDAN

AVAILABLE FORCES:

ISRAELI (MORALE A)

Off-board artillery
1-155mm battery (15 '(H)' attack strength points).

EGYPTIAN (MORALE B)

October 8, 1973: The Israeli 4th Armored Brigade attacks the Egyptian 18th Infantry Division:

MAPBOARD:

SET-UP:
EGYPTIAN: Set up within 6 hexes of the canal. Bridges must be at least 12 hexes apart.
ISRAELI: Enter along east edge of board B on turn 1.

SPECIAL RULES: None.

GAME LENGTH: 10 turns—ISRAELIS move first.

VICTORY POINTS:
ISRAELI: 20 points for each bridge destroyed, 1 point for each Egyptian unit eliminated, 1 point for each Israeli unit adjacent to the canal.
EGYPTIAN: 5 points for each Israeli unit eliminated, 1 point for each Israeli unit more than 4 hexes from the canal.

SITUATION S-10 EL FIRDAN (MIGHT-HAVE-BEEN)

October 8, 1973: After the fighting started on October 6, Israeli commanders transferred mobilizing reserve forces to the front line as quickly as possible. Limitations on mobilization capability and road capacity permitted only the most crucial units to be moved to the front. This meant that armored units were formed at the front with only tanks, the supporting armored infantry and artillery to follow later. If the counterattack had been delayed until these supporting units appeared, a disastrous defeat might have been averted.

To see the difference these supporting units would have made, replay Situation S-9, but add the units listed below to the Israeli forces.

MAPBOARD: (see Situation S-9).

SET-UP, SPECIAL RULES, GAME LENGTH and **VICTORY POINTS** (see Situation S-9).

AVAILABLE FORCES: (see Situation S-9, but add:)

ISRAELI

Off-board artillery
2-155mm batteries (15 '(H)' attack strength points each).

SITUATION S-11 KUNEITRA

October 7, 1973: Elements of the Syrian 7th Infantry Division and other units attack the Israeli 7th Armored Brigade east of Kuneitra:

MAPBOARD:

AVAILABLE FORCES:

ISRAELI (MORALE A)

GROUP A

GROUP B

Air Strikes
20 air strikes (each 21 A attack strength points).

SYRIAN (MORALE B)

SET-UP:
ISRAELI: Set up Group A first, anywhere on board D. Group B enters one unit per turn on a die roll of 1 or 2, anywhere along the west edge of board D (see SPECIAL RULE, below).
SYRIAN: Enter anywhere along the east edge of board C on turn 1.

SPECIAL RULE:
The Israeli player rolls one die at the beginning of each Israeli movement phase. If the roll is a 1 or a 2, one unit of his Group B enters that phase, anywhere along the west edge of board D. This continues until all units

in Group B have entered the game (or until the game ends). Only one unit may enter in any turn, and it may move normally.

GAME LENGTH: 12 turns, SYRIANS move first.

VICTORY POINTS:
SYRIAN: 3 points for each Syrian unit exited from the west edge of board D, 1 point for

each Syrian unit on board D at the end of the game, 1 point for each Israeli unit eliminated, and 2 points for each air strike the Israeli player calls in (the air strike does not have to actually attack—the Syrian player gets the two points for each air strike for which a target hex was specified).

ISRAELI: 2 points for each Syrian unit destroyed and 3 points for each Syrian unit on board C at the end of the game.

SITUATION S-12 MARJAYOU

Some Time in the Future: An Israeli armored brigade advances into Lebanon opposed by an Arab force of Syrians, Palestinians, and Lebanese.

MAPBOARD:

AVAILABLE FORCES:

ISRAELI (MORALE A)

Off-board Artillery
3-155mm batteries (15 '(H)' attack strength points each).
Air Strikes
5 (22 'A' attack strength points each).

SYRIAN (MORALE B)

Off-board artillery
3-130mm batteries (13 '(H)' attack strength points each).
1-180mm battery (21, '(H)' attack strength point each).

ARAB LEBANESE ARMY (MORALE D)

PALESTINE LIBERATION ARMY (MORALE B)

S-12 MARJAYOU

SET-UP:
ARAB: Arab Labanese Army sets up on board C, north of hex row J. Palestine Liberation Army sets up anywhere on board D. Syrians enter anywhere along north edge of board D on turn 1.

ISRAELI: Enters anywhere along south edge of board C on turn 1.

SPECIAL RULE:
Units from one national army cannot spot targets for indirect fire attacks made by another army's units.

GAME LENGTH: 15 turns—ISRAELI moves first.

VICTORY POINTS:
ARAB: 3 points for each town hex not containing an Israeli unit, 3 points for each Israeli unit eliminated, 2 points for each Israeli tank unit on board.

ISRAELI: 2 points for each town hex occupied by an Israeli unit, 2 points for each Israeli tank unit exited off the north edge of board D, 1 point for each Arab T-62 unit eliminated.

SITUATION S-13 CHINESE FARM

AVAILABLE FORCES:

ISRAELI (MORALE A)

Off-board artillery:
2-155mm batteries (each 15 (H) attack points).

October 16, 1973: Sharon's Israeli Armored Division attacks the Egyptian 16th Infantry Brigade (16th Infantry Division) and 14th Tank Brigade (21st Armored Division) near Deversoir:

EGYPTIAN (MORALE B)

Off-board artillery:
2-122mm howitzers (each 12 (H) attack points).
1-152mm howitzer (14 (H) attack points).

MAPBOARD:

SET-UP:
EGYPTIAN: Set up Group A first on or north of hex row AA on either board; each unit counter must be within 12 hexes of a Suez Canal hex. Trench counters must be placed on Suez Canal hexes (as "cuts"), and there must be at least three empty Suez hexes between any two trench counters; trench counters may be placed south of hex row AA. Each bridge counter must be placed on a separate trench counter, and there must be at least two empty trench counters between any two bridges. The fortification counters must be placed so that each counter is within two hexes of both other fortification counters.

Group B enters anywhere along the north edge of either board on turn 10 or later; all units in Group B must enter on the same turn.

ISRAELI: Group B enters anywhere along the east edge of board B on turn 1. Group A enters anywhere along the south edge of either board on turn 1—but no units may enter west of the Suez Canal.

SPECIAL RULES: None.

GAME LENGTH: 20 turns—ISRAELIS move first.

VICTORY POINTS:
ISRAELI: 1 point for each Egyptian unit destroyed, 20 points for each bridge destroyed, 30 points for each bridge occupied by an Israeli unit at the end of the game and 30 points if the ferry unit is on or adjacent to a "cut" (trench counter) at the end of the game.

EGYPTIAN: 2 points for each Israeli unit destroyed.

SITUATION A-1 SHOVACH YONIM

AVAILABLE FORCES:

ISRAELI (MORALE A)

October 6, 1973: A reinforced infantry brigade of the Egyptian 2nd Infantry Division attacks a battalion of "Mendler's" Armored Division just north of Ismailia:

EGYPTIAN (MORALE B)

Off-board artillery
4-122mm howitzers (each 12 (H) attack strength points).
1-240mm mortar (18 M attack strength points).

MAPBOARD:

SET-UP:
EGYPTIAN: Set up first anywhere west of the Suez Canal. Each Egyptian improved position must be placed adjacent to a Suez Canal hex.

ISRAELI: Set up second, anywhere east of the Suez Canal. Each Israeli improved position or fortification must be placed adjacent to a Suez Canal hex, and there must be at least 2 empty hexes between any two improved positions and/or fortifications. Each infantry platoon must be placed on a different fortification.

SPECIAL RULES:
1. Use the Assault Boat Optional rule. The Egyptians have assault boats for 24 units.
2. Use the Infantry Bridge Optional rule. Each Egyptian construction unit may construct one infantry bridge (use two normal bridge counters; if a construction unit is eliminated before it builds its bridge, that bridge cannot be built by the other unit).

GAME LENGTH: 20 turns—EGYPTIANS move first.

VICTORY POINTS:
EGYPTIAN: 2 points for each Israeli unit eliminated, and at the end of the game 1 point for each Egyptian unit east of the Canal and 5 points for each bridge across the Canal.

ISRAELI: 1 point for each Egyptian unit destroyed and 5 points for each fortification occupied by an Israeli unit at the end of the game.

SITUATION A-2
LITUF

AVAILABLE FORCES:

ISRAELI (MORALE A)

GROUP A

16 (elm)		
7 I 4 / 8 INF 1	FORT 10 •2	I.P. •2

GROUP B

'DAN' (elm)
25 A 14 / 15 M-48A5 6 / **6**

SET-UP:

ISRAELI: Set up Group A first, adjacent to east bank of the canal, with positional defenses separated by at least 4 hexes. Group B enters along east edge of board on turn 1.

EGYPTIAN: Set up Group A west of the canal. Set up Group B within 4 hexes of the canal at least three hexes away from the Israeli fortification. Set up bridges in the canal at least 10 hexes apart.

SPECIAL RULES: None.

GAME LENGTH: 10 turns—ISRAELIS move first.

October 6, 1973: An Egyptian infantry brigade (7th Infantry Division) crossing the Suez Canal is attacked by the Israeli "Dan" Armored Brigade:

EGYPTIAN (MORALE B)

GROUP A — 7

6 I 6 / 8 INF 1 / **15**	10 A 8 / 10 T-M 6 / **6**	30 G 12 / 2 SAGGER 1 / **5**	15 A 4 / 2 107mm 2 / **2**	4 M 12 / 3 1 / **2**	I.P. •2 / **6**	10 A 8 / 10 T-54 6 / **6**

GROUP B — 7(elm)

6 I 6 / 8 INF 1 / **12**	30 G 12 / 2 SAGGER 1 / **4**	15 A 4 / 2 107mm 2 /	4 M 12 / 3 1 /	24 — / **2**	TRENCH (cuts) / **7**

Off-board artillery
2-122mm batteries (12 '(H)' attack strength points each).

MAPBOARD:

A ↑ N

VICTORY POINTS:

ISRAELI: 20 points for each bridge destroyed, 4 points for each Israeli unit in the fortification, 1 point for each Egyptian unit eliminated.

EGYPTIAN: 10 points if the (Israeli) fortification is occupied by an Egyptian unit, 2 points for each Israeli unit destroyed.

SITUATION A-3
EGYPTIAN AIRMOBILE ATTACK

AVAILABLE FORCES:

ISRAELI (MORALE A)

'GABY'

25 A 14 / 15 M-48 6 / **7**

EGYPTIAN (MORALE A)

6 I 6 / 8 INF 1 / **10**	30 G 12 / 2 SAGGER 1 / **4**	0 * 0 / 12 Mi-8 32 / **4**

SET-UP:

ISRAELI: Enter from the east edge of the board on turn 1.

October 6, 1973: An Egyptian airmobile brigade ambushes an Israeli tank battalion west of Refidim (Bir Gifgafa):
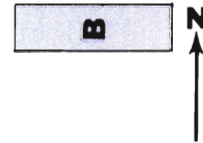
EGYPTIAN: Enter from the west edge of the board on turn 1.

SPECIAL RULES:

Use the helicopter rules in the ADVANCED RULES.

Each Mi-8 carries one 30-point 'G' air strike.

GAME LENGTH: 10 turns—ISRAELIS move first.

VICTORY POINTS:

EGYPTIAN: 4 points for each Israeli unit destroyed and 1 point for each Israeli unit left

MAPBOARD:

B N ↑

on the board at the end of the game.

ISRAELI: 1 point for each infantry or Sagger unit destroyed, 2 points for each Mi-8 helicopter unit destroyed, 4 points for each Israeli unit exited off the west edge of the board before turn 7, and 2 points for each Israeli unit exited from the board on turn 7 or later.

SITUATION A-4
RAFA

AVAILABLE FORCES:

ISRAELI (MORALE A)

— 7

25 A 12 / 15 CENTURION 5 / **7**	25 A 12 / 16 PATTON 6 / **7**	7 I 4 / 8 INF 1 / **9**	5 I 6 / 6 MC 1 / **2**	4 M 19 / 3 81mm 1 / **2**	3 I 6 / 3 M-3 8 / **12** C	2 I 6 / 3 JEEP 10 /

16 A 4 / 3 HALF-TRK 10 / **2**	9 M 25 / 3 160mm 6 / **2**	11 A 8 / 9 SHERMAN FLAIL 5 /	3 I 2 / 7 COMBAT 1 /	0 — 0 / 1 TRUCK 10 / C

Off-board artillery:
3-105mm batteries (10 '(H)' attack strength points each).

SET-UP:

EGYPTIAN: Set up Group A on board C west of hex row K. Set up Group B on board A south of the Suez Canal and between hex rows H and Y. Set up Group C on board B between hex rows H and Y. Units may not start in the hex rows named above.

ISRAELI: Enter anywhere along the east edge of board C on turn 1.

SPECIAL RULES:

1. Note that the boards are not adjacent. It is, however, possible to move from board to

June 5, 1967: Israeli 7th Armored Brigade assaults strung-out positions defended by the Egyptian 7th Infantry Division.

MAPBOARD: ← ←

B	A	C	N ↑

(Note that the boards are not connected.)

EGYPTIAN (MORALE B)

GROUP A — 7(-) — 7 — 7(att) — 7(att) — HVY

6 I 6 / 8 INF 1 / **18**	15 A 4 / 2 107mm 1 / **2**	5 I 4 / 10 SU-BAIT 1 / **3**	13 (H) 48 / 1 122mm 0 /	7 A 8 / 7 T-34/85 6 / **6**	16 A 8 / 15 SU-100 7 / **3**	12 A 8 / 11 T-10M 5 / **6**

9 M 23 / 2 120mm 0 /	4 M 12 / 3 81mm 1 / **2**	FORT 10 •2 / **3**	I.P. •2 / **6**	BLOCK / **3**	MINE 2-1 / **3**	MINE 3-1 / **3**

GROUP B — 7(att) — CDO

7 I 4 / 7 T-34/85 6 / **6**	5 I 4 / 6 MC 1 / **4**	3 I 4 / 8 BTR-152 9 / **4**	I.P. •2 / **3**	MINE 1-1 / **3**

GROUP C — 7 — 7

14 A 8 / 2 85mm 3 / **2**	14 A 10 / 2 17 pdr 0 / **9**	6 I 6 / 8 INF 1 / **9**	15 A 4 / 2 107mm 1 / **3**	4 M 12 / 3 81mm 1 /	FORT 10 •2 / **3**	I.P. •2 / **3**

BLOCK / **6**	MINE 1-1 / **6**

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board using the following rules:

a. The turn after a unit exits the west edge of one board it must enter anywhere along the east edge of the next most westerly board. Units may never move to a more easterly board.

b. Only Israeli units may exit from board B (along the west edge). These exited units may not re-enter the game.

c. Israeli units may exit any board freely.

d. Egyptian T-34/85, SU-100 and T-10 units may exit boards C and A. These units may not exit a board until after an Israeli unit has exited from that board.

e. Other Egyptian units may never exit the board they start on.

2. Egyptian units on a board may not move until an Israeli unit has moved onto that board.

3. LOS/LOF does NOT extend from one board to another board; units on one board may not attack units on another board.

4. Off-board artillery may execute attacks against any board.

5. On board A, only the hexes south of the Suez Canal may be occupied or entered.

GAME LENGTH: 20 turns—EGYPTIANS move first.

VICTORY POINTS:
EGYPTIAN: 2 points for each Israeli unit eliminated, 1 point for each Israeli unit on board C at the end of the game, 1 point for each road junction hex occupied by an Egyptian unit at the end of the game, and 2 points for each town hex occupied by an Egyptian unit at the end of the game. NOTE: The Egyptian player gets 1 point for each occupied road junction on any of the three boards. A "road junction" is any clear terrain hex with three hexsides crossed by roads—on board B, hex CC3 and hex D5 are junctions—hex BB4 is NOT a junction.

ISRAELI: 1 point for each Egytian unit eliminated, 1 point for each Egyptian unit on a board from which an Israeli unit has exited, 1 point for each Israeli unit on board B at the end of the game, and 2 points for each Israeli unit exited brom board B by the end of the game.

SITUATION A-5 DEVERSOIR

AVAILABLE FORCES:

October 17, 1973: The Israeli "Sharon" Armored Division, having penetrated to the Suez Canal, is isolated by counterattacking elements of the Egyptian 16th Infantry and 21st Armored Divisions.

MAPBOARD:

ISRAELI (MORALE A)

Off-board artillery:
3-155mm batteries (15 '(H)' attack strength points each).
Air Strikes:
7-(45 'H' attack strength points each).
7-(21 'A' attack strength points each).

EGYPTIAN (MORALE B)

SET-UP:
Egyptians and Israelis alternate set up of groups, starting with Group A.

ISRAELI: Group A sets up on board A, west of Suez Canal.

EGYPTIAN: Group A sets up in any hex west of Suez Canal at least three hexes from any Israeli units.

ISRAELI: Group B sets up on board A anywhere east of the canal south of hex row X.

EGYPTIAN: Group B sets up on board A anywhere west of the canal and north of hex row U.

ISRAELI: Group C sets up anywhere on board D north of hex row Q.

EGYPTIAN: Group C sets up anywhere on board B north of hex row Q.

ISRAELI: Group D sets up anywhere on board D south of hex row R.

EGYPTIAN: Group D sets up anywhere on board B.

All other groups appear during the course of the game.

EGYPTIAN: Group E enters anywhere along the north edge of board A east of the canal on turn 7. Group F enters anywhere along the

Off-board artillery:
3-130mm batteries (13 '(H)' attack strength points each).
2-152mm batteries (14 '(H)' attack strength points each).

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west edge of board C on turn 10. Group G enters anywhere along the south edge of board C on turn 12. Egyptian player may, at his option, bring Group G anywhere along the west edge of board C on turn 16.

SPECIAL RULES: None.

SITUATION A-6
FAYID

AVAILABLE FORCES:

ISRAELI (MORALE A)

GROUP A

'HIAM'		☒		
25 A 14 / 15 M-48A5 6 **10**	12 I 6 / 5 ARMORED INF 8 **5**	7 I 4 / 8 INF 1 **8**	3 I 6 / 3 M-3 8 **4**

GROUP B

				'AMNON'	⌂(att)
7 I 4 / 8 INF 1 **3**	1 I 2 / 5 PONTOON 1	0 – 0 / 3 FERRY 1	I.P. **3**	MINE •1-1 **4**	25 A 14 / 16 M-60A1 7 **7**	22 A 10 / 11 SHERMAN 5 **5**

| TRENCH (cuts) **2** | 24 – |

Air Strikes:
15 air strikes (each 21 A attack points).

GROUP C

'NATKE' (-)				
25 A 12 / 16 M-48A5 6 **5**	12 I 6 / 5 ARMORED INF 4 **4**	7 I 4 / 8 INF 1 **5**	I.P. •2 **4**	MINE •1-1 **4**

GAME LENGTH: 20 turns—ISRAELI moves first.

VICTORY POINTS:

EGYPTIAN: 1 point for each Israeli unit eliminated, 10 points for destroying Israeli bridge, 1 point for each Israeli unit on board D.

ISRAELI: 2 points for each Israeli unit on board C, 5 points for each Egyptian bridge or ferry destroyed, 15 points if Israeli bridge is adjacent to the Suez Canal.

October 18, 1973: Operating from a secure bridgehead across the Suez Canal, Israeli forces advance behind Egyptian lines against opposition from Egyptian infantry, tank and mechanized units:

MAPBOARD:

D	C
→ N	A
	B

EGYPTIAN (MORALE B)

GROUP A

PONTOON				☒ 16		
5 I 4 / 10 COMBAT 1 **2**	2 I 4 / 6 CONST 1	–	0 – 0 / 3 GSP FERRY 6	6 I 6 / 8 INF 1 **6**	30 G 12 / 2 SAGGER 1 **2**	4 M 12 / 3 82mm 1
TRENCH (cuts) **5**	I.P. •2 **2**	BLOCK **2**	•MINE 2-1 **2**

GROUP B

16(-)						16(att)
6 I 6 / 8 INF 1 **14**	30 G 12 / 2 SAGGER 1 **4**	15 A 4 / 2 107mm 1 **2**	4 M 12 / 3 82mm 1 **2**	9 M 23 / 2 120mm 0	BLOCK **2**	10 A 8 / 10 T-55 6 **7**
FORT 10 •2 **2**	I.P. •2 **4**

GROUP E

		☒ 'SCRATCH FORCE'		HVY	
6 I 6 / 8 INF 1 **3**	30 G 12 / 2 SAGGER 1	3 I 4 / 4 BTR-152 9 **4**	12 A 8 / 11 T-10M 6 **6**

GROUP C

'SCRATCH FORCE'						
14 A 8 / 10 T-62 6 **3**	7 A 6 / 4 PT-76 6	10 A 8 / 10 T-55 6 **2**	16 A 8 / 15 SU-100 7	17 A 12 / 5 T-34/100 6 **4**	6 I 6 / 8 INF 1 **2**	2 I 4 / 6 CONST 1
30 G 12 / 2 SAGGER 1 **2**	15 A 4 / 2 107mm 1 **2**	14 A 8 / 2 85mm 3 **7**	13 (H) 48 / 1 122mm 0 **5**	3 I 4 / 5 BTR-50 6	0 – 0 / 1 TRUCK 10

GROUP D

1	1(att)		22	☒ CDO		helo
10 A 8 / 10 T-55 6 **10**	16 A 8 / 15 SU-100 7 **2**	14 A 8 / 10 T-62 6 **10**	5 I 4 / 6 CDO 1 **4**	10 A 3 / 6 BMP 8 **4**	0 * 0 / 12 Mi-8 32 **3**

Air Strikes:
10 air strikes (each 10 A attack points—each Mi-8 carries one air strike of 20 (H) attack points).

SET-UP:

The players set up their groups alternatingly, starting with Israeli Group A:

ISRAELI; Set up Group A on board A on or south of hex row X and west of the Suez Canal.

EGYPTIAN: Set up Group A second anywhere (on any board) west of the Suez Canal and at least three hexes from the nearest Israeli unit.

ISRAELI: Set up Group B next, on or south of hex row X and east of the Suez Canal.

EGYPTIAN: Set up Group B on board A east of the Suez Canal and at least three hexes from the nearest Israeli unit.

ISRAELI: Set up Group C on board B on or south of hex row J.

The remainder of the groups enter the mapboard during play.

EGYPTIAN: Group C enters anywhere along the west edge of board C on turn 1. Group D enters anywhere along the north edge of board B on turn 5. Group E enters anywhere along the north edge of board C on turn 9. Group F enters anywhere along the south edge of borad D on turn 12.

SPECIAL RULES:

1. At the beginning of the game (before placement of units on the board) the Israeli player secretly notes how many of his air strikes will be allocated towards maintaining air superiority. The Israeli player may allocate from none to ten; he must write down how many, and he may not change his choice. Each such air strike automatically cancels one Egyptian air strike—when an Egyptian air

strike is supposed to occur it is automatically cancelled and one air superiority strike is cancelled from the Isreali's list. As soon as all air superiority strikes have been used up, remaining Egyptian air strikes are executed normally. Note that the Egyptian air strikes are automatically eliminated in the order that they are announced—the Israeli player may not "hold back" an air superiority strike if he has any left when an Egyptian air strike is announced. Air strikes allocated to air superiority may not be used to make attacks against unit counters on the board.

2. Air superiority strikes do not affect helicopter air strikes.

GAME LENGTH: 20 turns—ISRAELI moves first.

VICTORY POINTS:

EGYPTIAN: 1 point for each Israeli unit destroyed, 1 point for each Israeli unit east of the Suez Canal at the end of the game, 10 points for each bridge occupied by an Egyptian unit at the end of the game, and 1 point for each Egyptian east of the Suez Canal at the end of the game.

ISRAELI: 3 points for each Israeli unit exited off the south edge of board D, and at the end of the game 15 points for each bridge occupied by an Israeli unit and 1 point for each Israeli unit west of the Suez Canal.

Some Time in the Future: Egyptian and Israeli reconnaissance forces engage in combat somewhere between the Suez Canal and Bir Gifgafa.

MAPBOARD: N

AVAILABLE FORCES:

ISRAELI (MORALE A)

GROUP A

25 A 14	12 I 6	9 M 25	50 G 12	3 I 2	5 I 6	helo
16 6 M-60A1	5 ARMORED INF 8	3 M3/120mm	5 M-113/TOW 8	7 COMBAT 1	5 M-113A1 8	12 A/* 6
4	**4**					18 HUEY COBRA 40

GROUP B: **3**

EGYPTIAN (MORALE B)

GROUP A

1(elm)	14 A 8	7 A 6	6 I 6	3 I 4	40 G 12	helo
	10 6 T-62	4 6 PT-76	8 INF 1	5 BTR-50 6	6 BRDM-1 10	0 * 0
	6	**3**	**3**			12 M-8 32

GROUP B: **3**

SET-UP:
EGYPTIAN: Sets up Group A first west of hex row BB. Group B enters anywhere along the west edge of board on turn 2.
ISRAELI: Sets up Group A anywhere east of hex row G. Group B enters anywhere along the east edge of the board on turn 2.

SPECIAL RULES:
Each Cobra helicopter unit carries one 40-point 'G' air strike.
Each Mi-8 helicopter unit carries one 30-point 'G' air strike.
GAME LENGTH: 15 turns—EGYPTIANS move first.

VICTORY POINTS:
EGYPTIAN: 1 point for each Israeli unit eliminated, 1 point for each non-helicopter unit exited off the east edge of the board.
ISRAELI: 1 point for each Egyptian unit eliminated, 1 point for each non-helicopter unit exited off the west edge of the board.

DESIGNER'S NOTES

Arab-Israeli Wars is a third generation game, successor to two previous games (*Panzer Leader* and *Panzerblitz*). While this permitted the use of an already tried and proven game design, many changes were necessary. First, there were a number of features of the previous games that detracted from them as game systems or as simulations. Second, changes have occurred in combat since the Second World War, the period the previous games recreated. Third, the Middle East environment and the special characters of the forces that fought there required special handling.

As much as possible an attempt was made to make the units in *Arab-Israeli Wars* interchangeable with those in the previous games. The two changes that were made in the units reflect changes made to correct fundamental problems with the game design. First, virtually all movement rates have been considerably reduced. Movement rates in the previous· games were far too high, permitting movement far greater than realistically possible. A typical *Panzerblitz* or *Panzer Leader* unit has a maximum off-road speed of about 25 kilometers-per-hour (representing movement of 10 hexes per turn for each of 10 turns, for a total of 100 hexes or 25 kilometers in one hour). At most, however, cross-country speeds should probably not exceed about 16 kilometers-per-hour (equal to about 6.4 hexes per game turn). To reduce the movement rates, the criteria for establishing speed was altered. In *Panzer Leader*, speed in miles-per-hour was divided by *three* to give the movement rate. This was changed. In *Arab-Israeli Wars*, the speed in miles-per-hour was divided by *five* (or in kilometers-per-hour by *eight*). To convert previous movement rates to make them comparable with those in *Arab-Israeli Wars*, multiply a vehicular rate by .6. For example, the *Sherman*, with a movement rate of eight in *Panzer Leader*, has a movement rate of five in this game.

This reduction in movement rate, while improving the accuracy of the simulation, also improved the game. In the previous games, mobility was really too great considering the limited size of the boards. While some gamers disagree, the high movement rates reduced the importance of tactics, and was quite possibly the greatest weakness of the old system. Reducing movement rates forces more careful manipulation of units and tends to make the game more interesting.

The second change in the unit counters also resulted from a fundamental change in the game design. Indirect fire was treated very simplisticly in *Panzer Leader*. In that game, the total number of attack strength points firing indirectly into a hex

was equally divided between all the units in the hex. This meant that not only did increased concentration reduce vulnerability to indirect attacks (the exact opposite of what should actually be happening), but it also encourages exotic behavior as a means of reducing the vulnerability of important units (such as stacking them with trucks or wagons, thereby diluting the attacking fire). The revised indirect fire rule applies the total number of indirect firing points against each unit in the target hex. To make this possible without making indirect fire excessively powerful, it was necessary to divide the attack strength of indirect fire units (all '(H)'—class units) by four. The strength of mortar units was also reduced, but not as severely.

Another change made necessary by a weakness in the game system was the overrun rule. Previously overruns were executed by physically moving the overruning vehicles over the target hex. In addition to constituting an anomaly in the game system, this rule made it possible to prevent overruns by stacking units behind a possible target, blocking any exit hexes. Since the overruning unit had to end its movement in a hex opposite the hex from which it entered the target hex, this tactic effectively blocked overruns. If, in fact, an overrun attack required such massive movements in reality, the problem would not be so great. However, it was this designer's belief that what was being recreated was the combination of firepower and intimidation created by moving into and around the positions occupied by the enemy. This would seem to be a sub-hex type of move, i.e., one that would occur within the area represented by one hex. In consequence, the movement represented by the old rules was not actually necessary. Thus the new rule was substituted requiring the expenditure of two movement points in order to execute an overrun (representing the movement required in such an attack).

Yet another area in which the game was changed to make it more interesting and a better simulation was the introduction of a new Weapons Effectiveness Chart (WEC). Not only did the old WEC inaccurately reflect the effects of various weapons, but it did not reflect the conditions of modern warfare. For example, the old WEC line for Armored or 'A' class attacks against armored targets made the attack strength double out to half range and normal thereafter. There were two problems with this. First, it did not accurately reflect the actual change in hit probabilities or in the chance for causing lethal damage. The actual probabilities are largely

dependent upon the sighting system used, whether an optical rangefinder or a ranging machinegun, or some kind of visual estimation technique (as actually used by the Israelis). Such systems are affected severely at specific ranges, and the old system bore little resemblance with reality. (It is, however, worth noting that the old system probably recreated modern conditions better than World War II conditions. The chances of hitting a target at much beyond 800 meters with most tanks at that time were pretty slim). In other cases, changes in the WEC reflect changes in warfare. For example, improvement in the anti-tank capabilities of infantry units requires giving them a direct fire ability against armored targets at close ranges (which they did not previously possess). This same improvement also required giving the infantry increased attack strengths when making Close Assault Tactics (CAT) attacks. In the case of the Egyptians, who provided their infantry with large quantities of anti-tank equipment, an even greater increase in ·effectiveness was necessary. For this reason, the attack strengths of infantry units executing CAT attacks against armored targets were doubled, except for the Egyptians in 1973, where the strengths were tripled. Thus the changes in the WEC reflect a variety of factors. A desire to make the chart more accurate, and to conform more or less to real life considerations, as well as attempt to make it reflect the specific conditions existing in the Middle East.

Changes that have occurred in combat since the Second World War are not as great as most people think. The only important changes are reflected in the WEC. First, there is the introduction of the anti-tank guided missiles. These 'G' class units have special characteristics (some cannot hit targets at less than 500 meters—2 hexes). Second, there have been changes in the effectiveness of infantry weaponry, reflected in greater attack strengths and in greater capabilities against tanks. Finally, tanks have become increasingly more effective. This is reflected in the provision that makes Israeli fire more effective at three to six hexes (doubled instead of normal attack strength against armored targets) during the 1967 and 1973 wars. What this reflects is not improved technology. Rather, it reflects the improved doctrines adopted by the Israelis that increase the effectiveness of their weapons at such ranges. For example, the Israelis found that the trajectory of the APDS (Armored Piercing Discarding Sabot) round fired from the British high-velocity gun used in virtually all their tanks is sufficiently flat that, out to about 1800 meters, it is possible to merely point the gun at the target to

ensure a hit. No rangefinding procedure is necessary. Further, use of visual estimation techniques coupled with this capability makes it possible for them to use the *Centurion* tanks equipped with ranging machineguns (effective only out to about 1700 meters) out to 3000 meters (though with somewhat reduced accuracy).

The greatest change in warfare during the thirty years since the end of the Second World War has been in the lethality of weapons. The new weapons have enormous killing power. Coupled with improved accuracy, this gives the new weapons much higher attack strengths in the game. Since defense has not kept pace, the attack has a much greater lethality than was possible thirty years ago.

A number of changes in the game system were introduced to accurately reflect the nature of combat in the Middle East. Because the situation is so different from that found in Europe, several important changes were mandatory. The most immediately obvious is the new terrain system. The system used in this game is far less complex than the one used in *Panzer Leader* and *Panzerblitz*. This relative simplicity should make using terrain much less difficult. It is important, however, for those familiar with the old system to remember that when in the hex directly behind the terrain hex side symbol, the tank is no longer invulnerable but can be seen and fired upon. As long as this important adjustment is made, players should find the new system not only easier to use, but also much more interesting. While it must be admitted that to a certain extent the new system is stylized and is not strictly accurate, the effects that it creates in the game are both realistic and interesting.

A special comment is needed on the Suez Canal. As a result of the construction undertaken by both sides in the vicinity of the canal, it was an extremely complex terrain feature. In an attempt to recreate its use as accurately as possible, an intensive study of its characteristics was made. Some of the results of that study are reasoned speculation (primarily the Israeli improved positions). Nevertheless, the game should give an intimate feel of how the Suez Canal and the Bar-Lev Line affected the conflict. It is unfortunate that so may special rules had to be created for the Canal. It is hoped however, that the realism of this approach will compensate for any complexity.

The addition of the morale rule is a significant change in the game system. In the predecessors to *Arab-Israeli Wars*, units were automatically undispersed at the end of the player's game turn. This simple system was both inaccurate and bad for the game. It made opportunity fire attacks almost worthless, since dispersed units almost immediately became dispersed. Also, the simulation aspect of this automatic undispersal was unfortunate. Dispersal should indicate disorganization resulting from the effects of fire, casualties, physical dispersion of the men and equipment making up the unit, and the psychological effects of being under fire (fear, etc.). If the undispersion is automatic, these effects are minimized. In reality, these effects are extremely severe. Because of the specific character of dispersion, recovering from its effects is largely a function of troop quality. Armies with better training, with better leaders, and with better motivation will reorganize more quickly than poorer quality units. From the point of view of a simulation of the battles between Arab and Israeli this is fortunate, since it accurately reflected much of the difference between opposing armies. By varying the ability of units to recover from dispersion, it is possible to vary the overall quality of the armies. Since, with the exception of the tanks (which are special cases), qualitative differences are not reflected in combat strength values on the counters themselves, the variable dispersal mechanism was

necessary. This allows the use of the same unit counters to represent different national armies and yet still derive varying levels of combat effectiveness from one army to the next. Contrary to obvious expectations, varying the combat strength values would be even less accurate when attempting to model the effects of the same weapon system in the hands of different national groups. The morale rule introduces an element of uncertainty, making it impossible to predict exactly when a unit will become undispersed. This is sufficient to force great care in tactical placement and movement. It also retains a dispersed unit's normal defense strengths. Thus dispersal does not affect a unit's passive defensive abilities so much as it inhibits a unit's active offensive capabilities. Once a unit has been rendered offensively impotent, its eventual destruction is simply a matter of time.

Since units can remain dispersed for several turns, their ability to inflict enemy casualties can be lost for an extended period. A smart player can reduce his losses simply by keeping enemy units dispersed. This allows the player to achieve a firepower superiority even when outnumbered by a considerable margin. This is especially useful for an outnumbered force (with the better morale level) that is attempting to fight a mobile defensive action. In most of the game situations, it is possible for the outnumbered side to take advantage of this effect, and actually seize firepower superiority by judicious dispersal of enemy units. This is similar to what happens on the battlefield when one side attempts to pin-down the other, thereby reducing enemy fire, thus making it possible to inflict a severe defeat upon the enemy with only limited casualties.

THE OPPONENTS

TANKS

October 6, 1973: Five Israeli *Centurions* of the 7th Armored Brigade are sent to intercept 40 Syrian *T-55* tanks advancing along the road to Israel. Forty-five minutes after the two forces meet, twenty Syrian tanks are destroyed, and the rest have retreated. By the end of the war the company from which these tanks are drawn will be credited with 130 Syrian tanks—without suffering any losses.

This is but an extreme case of a typical situation: Israeli forces, often substantially outnumbered, inflict heavy losses upon Arab units equipped with Soviet tanks, suffering only minor losses themselves. Most western tank analysts seem to believe this should not have happened; that Soviet tanks are equal to or superior to comparable western tanks. For this reason, it is asserted that Israeli success is a result of crew quality: superior Israeli troops against poor Arab troops. While there may be an element of truth in this particular observation, it is by no means a complete analysis. Closer examination reveals that the correct answer may be in the type of training received; the inferior performance of the Soviet tanks is a result of the way they are employed.

For the above reasons it is essential to examine performance in a multi-unit engagement. This is what is being simulated in the game: a *group* of tanks attacking another *group* of tanks. Such encounters are intrinsically different from one-on-one battles. In an engagement, it is important to examine 'process', the manner in which the characteristics of the tank and the doctrines used affect its performance. This is completely different from examining the usual list of characteristics and statistics and results in completely different conclusions.

The analysis of tank engagements has indicated that the most important single characteristic of such actions is who fires *first*. The importance of first fire was discovered in a study of World War II tank battles. In that study, it was found that if an attacking force was outnumbered 2:1, but fired first, it has a higher chance of success than an attacking force with a 5:1 superiority but firing second. The Israelis firmly believe that first fire is a key to their success, and since 1973 the U.S. Army has begun emphasizing the concept. If firing first has such importance, it follows that tank performance must be defined in terms of specific characteristics that increase first-fire capabilities. An examination of Soviet and western tanks and tank doctrines from this perspective clearly indicates why the Soviet tanks have demonstrated such inferiority.

The reasons for the importance of first fire are easy to discern. First, destroying an opposing tank before it is able to fire reduces the strength of the enemy, thereby reducing his firepower and decreasing his ability to inflict damage. Second, first fire is closely related to the problem of spotting. A tank is a very small target when seen from 2000 or 3000 meters away. While this is a problem common to all units on the battlefield, its importance for tanks is increased by restricted visibility from inside a vehicle. Because of this, the Israeli doctrine requires the tank commander to fight with his hatch open and his upper body exposed outside the tank. In contrast, the Arabs, following Soviet doctrine, fight buttoned-up with all hatches closed. While fighting with an open hatch increases the chance that the tank commander will be injured (making it the most dangerous job in the Israeli army), the U.S. Army calculates that it makes the tank *twice* as efficient

as one in which the tank commander fights with a closed hatch. The Israelis found that the improvement in visibility is so significant that they have not changed the doctrine despite heavy losses in 1967 and 1973 among tank commanders.

A second problem facing the Arabs is that their crews must execute a much longer preparation procedure before firing than do the Israeli crew. Israeli gunners rely less upon standard sighting procedures than any other army in the world. Other armies require tank crews to determine target distance using a rangefinding system to determine the proper superelevation for the gun using a ballistic computer, then firing the gun. In most cases, Israeli gunners totally avoid this time-consuming process. Instead, they rely heavily on the 'battlesight' technique. Essentially, all that this requires is aiming the gun at the target. The Israelis found that the trajectory of the APDS round (Armored Piercing Discarding Sabot) is flat enough so that if the gun is set for a target range of 1600 meters, the round will hit any target along that line between the firing tank and about 1800 meters. The net result is that out to that distance, the Israeli crews can completely by-pass the whole ranging system. In addition, the Israelis also rely upon visual estimation of range, based on intimate knowledge of terrain, to enable gunners to rapidly fire at even greater ranges. In contrast to the flexible and efficient Israeli system, the Arabs use an extremely inefficient Soviet system. The Soviet sighting system is only efficient out to about 800 meters. At greater ranges they require a whole platoon or company to mass fire upon one target. This kind of coordination procedure considerably slows rates-of-fire, a serious drawback given Soviet weakness in this area under normal circumstances.

There are also a number of design differences that contribute to the inferiority of Soviet tanks. The British 105mm high velocity tank gun used on all Israeli tanks in 1973 (except for the *Shermans*), can fire up to 10 rounds per minute (the sustained rate is only 6 rounds per minute). In contrast, Soviet tanks can achieve a rate of only 3-5 or 4-6 rounds per minute. This means that Israeli tanks could fire at least two rounds for every one fired by the Arabs. The slow rate of fire results from the method of loading. Reportedly, Soviet tank guns are top-loaded. This means that every time the gun is fired, it must be elevated to lower the breach, enabling the loader to put in another round. On the *T-62* an automatic mechanism returns the gun to its former setting. Reportedly, this system is not totally satisfactory and the gunner must still make additional adjustments. In any case, the whole process makes it more difficult for the gunner to make the kind of fine-adjustments usually necessary after firing the first round. A second design problem results from the use of manual traverse and the lack of a turret basket. Both reduce the ability of the tank turret to turn quickly and still permit the crew to rapidly engage another target. A third problem is the lack of crew space. To produce a small tank, with a low profile, the Soviets have sacrificed crew comforts. A western tank will usually have aout 3000 cubic meters of crew space; a Soviet tank only about 2000 cubic meters. This cramped space, coupled with the lack of crew comforts, reduces the ability of the crew to operate efficiently over extended periods of time. It also makes it difficult to handle large tank rounds, further slowing the loading process. For the Arabs, this was compounded by their adherence to Soviet doctrine requiring the crews to operate in buttoned-up tanks. With no cooling system, this turned the tanks into ovens, thereby further reducing crew efficiency.

An additional weakness of Soviet tanks is their limited ammunition supply; most can carry no more than about 45 rounds and some hold less than 30. This is illustrated in the game by the unit combat strengths. Since the tanks have to fight over extended periods of time, the combat strength represents an average capability during that period. Since most western tanks carry at least 60 rounds, this has a significant effect on the combat strengths of Soviet tank units. (This same factor has affected the combat strengths of the

AMX-13 and the *TI-67*).

Finally, the defense strengths of game units were affected by the documented inability of real-life Arab tank crews to fully use terrain. Israeli crews would use terrain well (even in open areas there are slight undulations that a well-trained crew can capitalize upon). In addition, Israeli crews would also constantly shift positions slightly, to increase the aiming difficulties of opposing gunners. For these reasons, the Israeli *TI-67*, which is nothing more than a slightly improved version of the *T-55*, has a higher defense strength.

The relative effectiveness of the tanks is clearly illustrated by 1973 performances. The Arab tanks, largely following Soviet practices, accounted for about 30% of the roughly 400 Israeli tanks destroyed (120 in all). On the other hand, Israeli tanks accounted for at least 70% of the 1250 Arab tanks destroyed (875 in all), and some sources put the percentage at an even higher level. Thus, by a conservative estimate, the Israeli tanks destroyed at least seven times as many tanks as did the Arab tanks. Whatever the reason for the difference in effectiveness, such a margin is well-represented by the combat strengths of the units in the game.

INFANTRY

While Israeli tank forces tend to be superior to Arab tank forces, the exact opposite is true of infantry forces. The superiority of the Arab infantry was limited to the Egyptian and Syrian forces. The cause of this superiority was equipment. While the Egyptians and Syrians were equipping their infantry forces with Soviet automatic rifles, machineguns, and recoilless guns, the Israeli forces relied upon a mixture of submachineguns and automatic rifles, with the submachineguns predominating. While the submachinegun used by Israel was a sound weapon, (the Israeli *UZI* might be the most successful submachinegun in the world), it is not in the same class as the *AK-47*, the automatic rifle used widely by the Arabs. The submachinegun is best for fighting at close-ranges. In contrast, the *AK-47* can put out firepower like the *UZI*, and has a longer range. This, combined with superior numbers of machineguns supporting the automatic rifles, gave the Arab infantry greater firepower than the Israelis.

The Egyptians further increased the superiority of their infantry by adding large numbers of *RPG-7* rocket launchers after 1967. This gave the infantry the ability to deal with Israeli tanks. Thus, in 1973 Egyptian infantry managed to inflict defeats on Israeli tank and infantry units.

The effects of this superiority became evident in 1973 when an Israeli paratroop brigade employed in the breakthrough east of the Suez Canal was defeated with heavy losses solely by Egyptian infantry. The paratroop brigade, composed of elite troops (some of whom have participated in commando raids in the past), attacked the fortified position known as the Chinese Farm on the evening of October 16. The brigade was able to make no headway against the withering firepower of the Egyptians, and the attack stalled. By the next day, the Israelis had to be withdrawn after suffering heavy losses.

All of the infantry forces have developed anti-tank capabilities. In 1956, Israeli infantry had 82mm bazookas and rifle-launched anti-tank grenades. By 1973 they had added the *LAW* (Light Anti-tank Weapon), a disposable light-weight anti-tank weapon obtained from the U.S. The Egyptians were much more successful in developing anti-tank capabilities. In 1956 they used equipment not too different from Israel's, but relying more on small recoilless weapons. By 1967, the *RPG-2*, an anti-tank rocket launcher, was added. While this increased capabilities somewhat, the most important improvements came just prior to the 1973 war. In 1973, the Egyptian infantry received the *RPG-7* in substantial quantities. The *RPG-7* proved far superior to its predecessor and, coupled with anti-tank grenades and recoilless guns, gave the Egyptian infantry extraordinary anti-tank capabilities.

These improved anti-tank capabilities are reflected in the new Weapons Effectiveness Chart that replaces the one used in *Panzer Leader* and *Panzerblitz*. It gives infantry the ability to make fire attacks upon armored targets and increases the effectiveness of Close Assault Tactics. This accurately reflects the improvements in infantry anti-tank weaponry.

THE UNIT FUNCTION TABLE

KEY   **CLASS** – indicates the class of each group of units – infantry-class, etc. **SYMBOL** – picture of the counter representing the unit. **NAME AND PICS NUMBERS** – name of the unit, and the range of PICS numbers printed on the counters. *PICS numbers: – the first digit indicates the unit's CLASS, the second digit differentiates between units in the same class. The third and fourth digits differentiate different counters that are the same type of unit. Zeroes have been skipped in the numbering sequence – a final "O" indicates that a counter is unique in the game. (Special: Only Jordanian units have a third digit of "1".)* **WEAPON** – the unit's weapon type. **TARGET** – the unit's target type. **HULL D** – the addition to the CRT die roll this unit gets when it is HULL DOWN shielded. **ATTACK MODES** – a dot in a column indicates that that unit can execute that type of attack. **DF** – direct fire. **OF** – opportunity fire. **IF** – indirect fire. **OR** – overrun attacks. **CAT** – CAT attacks. **TRUCK** – a dot in the column indicates that the unit moves at the truck rate (use the "Trucks" column of the Terrain Effects Chart). **CARR** – a symbol in the column indicates that the unit can carry passengers. "T" – the unit can carry "T" (towed artillery) or "I" (infantry) passengers. "I" – the carrier can carry only "I" (infantry) passengers. "3I" – the carrier can carry three passengers at once, infantry only. Dot – the carrier cannot carry normal passengers – see note. *(Special: Special Infantry units can do "Mounted Infantry Fire" only when they are loaded aboard "I" carriers.)* **PASS** – letter in column indicates that the unit can be a passenger. "T" – towed artillery passenger (costs carrier's entire MA to load or unload); "I" – infantry passenger (costs ½ of carrier's MA to load or unload).

SMF – a dot in the column indicates that the unit can split-move-and-fire. **ENGINEER ABILITIES** – indicates the engineer functions the unit may perform. **STANDARD** – the unit can execute only those engineer functions indicated for engineers in the *STANDARD RULES*. **ADVANCED** – the unit can execute only the construction functions given in the *ADVANCED RULES*. **BRIDGING** – unit may emplace AVLB bridges in clear terrain. **FLAIL, FERRY, BRIDGE TRANSPORT, MINELAYER** – see the appropriate rules. **CROSS** – a dot in the column indicates that the unit must pay the "Cross-country penalty" to cross elevation hex sides. **SPECIAL** – a dot in the column indicates that the unit is "Special Infantry" able to do "Mounted Infantry Fire", "Bailout" and "Quick March". **AMPH** – a dot in the column indicates that the unit is amphibious. **WIRE G** – a dot in the column indicates that the unit uses "wire-guided" missiles. **SMOKE** – a dot in the column indicates that the unit is able to place smoke in its own hex.

NOTES: 1) Treat as "A" weapon type for direct fire attacks when using OPTIONAL RULE I.A. **2)** unit uses a "reload" when it attacks (ADVANCED RULES). **3)** Counts as ½ passenger – two allowed per carrier (ADVANCED RULES). **4)** Subtract an additional 1 from the die roll when an engineer unit joins in a CAT attack. **5)** Trucks and units loaded in trucks may not "spot" enemy units. **6)** Unit may not overrun if there is an armored unit in the defending hex. **7)** Unit can carry one unit of any type, passenger or not, but only while in a Suez Canal hex. **8)** Unit can carry bridges only. **9)** Includes anti-aircraft attacks during the enemy air phase. **10)** Air strikes only.

ARAB

CLASS	SYMBOL	NAME AND PICS NUMBERS	WEAPON	TARGET	HULL D	DF	OF	IF	OR	CAT	TRUCK	CARR	PASS	SMF	ENGINEER ABILITIES	CROSS	SPECIAL	AMPH	WIRE G	SMOKE
TOWED ARTILLERY (0000's)	14 A 10 / 1 0	17 Iber ATG (0III-0112)	A	NA	2	●	●						T							
	9 (H) 35 / 2 0	25 Iber HOW (0211-0212)	(H)	NA	2	●		●					T							●
	14 A 8 / 2 3	85mm ATG (0321-0322)	A	NA	2	●	●						T							
	13 (H) 48 / 1 0	122mm HOW (0421-0423)	(H)[1]	NA	2	●		●					T							●
	9 M 23 / 2 0	120mm MORTAR (0521-0522)	M	NA	2	●		●					T							●
INFANTRY (1000's)	6 I 6 / 8 1	Infantry (1111-1139)	I	NA	2	●	●			●			I				●			●
	5 I 4 / 6 1	Commando (1321-1324)	I	NA	2	●	●			●			I				●			●
	4 M 12 / 3 1	82mm MORTAR (1411-1413)	H	NA	2	●	●						I							●
	30 G 12 / 2 1	SAGGER MISSILE (1621-1629)	G	NA	2	●[2]	●[2]						I[3]					●		
	15 A 4 / 2 1	107mm R.G. (1721-1723)	A	NA	2	●	●						I							●
	5 I 4 / 10 1	Combat Eng. (1821-1822)	I	NA	2	●	●		●[4]				I		STANDARD					●
	2 I 4 / 6 1	Const. Eng. (1921-1922)	I	NA	2	●							I		ADVANCED					
TRANSPORT (2000's)	0 - 0 / 1 10	Truck (2111-2112, 2121-2124)		NA	2						●	T[5]				●				
	3 I 6 / 4 8	M113 APC (2211-2214)	I	A	2	●	●		●[6]				I			●		●		
	3 I 4 / 4 9	BTR 152 APC (2321-2325)	I	A	2	●	●		●[6]		●		I							
	3 I 4 / 5 6	BTR 50 APC (2421-2432)	I	A	2	●	●		●[6]				I			●		●		
	5 I 8 / 5 10	BTR 60 APC (2521-2532)	I	A	2	●	●		●[6]		●		I					●		
	7 A 4 / 5 6	OT 62 APC (2621-2625)	A	A	2	●	●		●				I			●		●		
	10 A 3 / 6 8	BMP APC (2721-2732)	A	A	2	●			●				I					●		
LIGHT ARMOR (3000's)	16 A 4 / 3 10	106mm RR on jeep (3111-3112)	A	NA	2	●	●							●		●				
	7 A 6 / 4 6	PT-76 lt. tank (3221-3222)	A	A	2	●	●											●		
SPA (4000's)	21 (H) 36 / 8	140mm ROCKET (4121-4122)	(H)	NA	2	●		●			●					●				
TANK DESTROYERS (5000's)	16 A 8 / 15 7	SU-100 (5121-5123)	A	A	2	●	●		●											
	17 A 12 / 5 6	T-34/100 (5221-5222)	A	A	2	●	●													
	40 G 12 / 6 10	BRDM-I ROCKET (5321-5323)	G	A	2	●	●				●							●	●	

ARAB

CLASS	SYMBOL	NAME AND PICS NUMBERS	WEAPON	TARGET	HULL D	DF	OF	IF	OR	CAT	TRUCK	CARR	PASS	SMF	ENGINEER ABILITIES	CROSS	SPECIAL	AMPH	WIRE G	SMOKE
BATTLE TANKS (6000's)	7 A 8 / 7 T-34/85 6	T-34/85 (6121-6133)	A	A	1	●	●		●											
	10 A 8 / 10 T-55 6	T-55 (6221-6241)	A	A	1	●	●		●			1								●
	12 A 8 / 11 T-10M 5	T-10M (6321-6326)	A	A	1	●	●		●											●
	14 A 8 / 10 T-62 6	T-62 (6421-6441)	A	A	1	●	●		●											
	16 A 12 / 14 CENTURION 5	Centurion III (6511-6517)	A	A	2	●	●		●											●
ENGINEERING VEHICLES (7000's)	2 I 4 / 6 MTU-2 6	MTU-2 AVLB (7121-7122)	I	A	2	●	●								BRIDGING					
	7 A 8 / 10 PT-54 6	PT-54 FLAIL (7221-7222)	A	A	2	●	●								FLAIL					
	0 – 0 / 3 GSP FERRY 6	GSP FERRY (7320)		NA	2							●[7]			FERRY			●		
	0 – 0 / 1 PMP 6	PMP carrier (7421-7422)		NA	2						●	●[8]			BRIDGE TRANSP					
	0 – 0 / 4 MLG MINELAYER 9	MLG minelayer (7520)		NA	2						●				MINELAYER					
AA (8000's)	24 AA 10 / 4 SHILKA 6	Shilka SP AA (8101-8102)	AA	NA	2	●[9]	●[9]										●			
	12 AA 6 / 2 ZPU-4 0	ZPU-4 14.7mm AA (8201-8203)	AA	NA	2	●[9]	●[9]													
	18 AA 48 / 1 S-60 0	S-60 57mm AA (8301-8302)	AA	NA	2	●[9]	●[9]													
AIR (9000's)	0 * 0 / 12 Mi-8 32	Mi-8 helicopter (9121-9124)	*	F	0	●[10]	●[10]	●[10]					3l							
	– * – / 18 ∞	Jet aircraft (9901-9902)	*	F	0	●[10]			●[10]											

ISRAEL

CLASS	SYMBOL	NAME AND PICS NUMBERS	WEAPON	TARGET	HULL D	DF	OF	IF	OR	CAT	TRUCK	CARR	PASS	SMF	ENGINEER ABILITIES	CROSS	SPECIAL	AMPH	WIRE G	SMOKE
INFANTRY (1000's)	7 I 4 / 8 INF 1	Infantry (1111-1129)	I	NA	2	●	●			●			1				●			●
	5 I 6 / 6 MG 1	Machine gun (1211-1214)	I	NA	2	●	●			●			1				●			●
	4 M 19 / 3 81mm 1	81mm MORTAR (1411-1412)	H	NA	2	●							1							●
	30 G 8 / 2 COBRA 1	COBRA MISSILE (1511-1512)	G	NA	2	●[2]	●[2]						1[3]					●		
	3 I 2 / 7 COMBAT 1	Combat Eng. (1811-1813)	I	NA	2	●	●			●[4]			1		STANDARD					
	1 I 2 / 5 PONTOON 1	Pontoon Eng. (1911-1912)	I	NA	2	●							1		ADVANCED					

ISRAEL

CLASS	SYMBOL	NAME AND PICS NUMBERS	WEAPON	TARGET	HULL D	DF	OF	IF	OR	CAT	TRUCK	CARR	PASS	SMF	ENGINEER ABILITIES	CROSS	SPECIAL	AMPH	WIRE G	SMOKE
TRANSPORT (2000's)	0-0 / 1 TRUCK 10	Truck (2111-2114)		NA	2						●	T[5]				●				
	3 I 6 / 3 M3 8	M3 halftrack APC (2211-2223)	I	A	2	●	●		●[6]			I		●		●				
	5 I 6 / 5 M113A1 8	M113A1 APC (2311-2323)	I	A	2	●	●		●[6]			I		●		●		●		
LIGHT ARMOR (3000's)	2 I 6 / 3 JEEP 10	Scout jeep (3111-3112)	I	NA	2	●	●							●		●				
	16 A 4 / 3 JEEP 106 10	106mm RR on jeep (3211-3212)	A	NA	2	●	●							●		●				
	13 A 12 / 9 AMX-13 7	AMX-13 (3311-3317)	A	A	2	●	●		●					●						●
	12 I 6 / 5 ARMORED INF 8	Armored infantry (3411-3421)	I	A	2	●	●		●[6]					●		●		●		●
SPA (4000's)	9 M 25 / 3 M3/120mm 6	120mm MORTAR on M3 (4111-4112)	M	A	2	●								●		●				
TANK DESTROYERS (5000's)	40 G 12 / 3 M3-SS 11 6	SS11 MISSILE on M3 (5110)	G	A	2	●	●									●		●		
	18 A 6 / 3 M3/90mm 6	90mm ATG on M3 (5211-5212)	A	A	2	●	●									●				
	50 G 12 / 5 M113-TOW 8	TOW MISSILE on M113A1 (5311-5312)	G	A	2	●	●									●		●	●	
BATTLE TANKS (6000's)	14 A 10 / 10 SHERMAN 50 5	Sherman Mk 50 (6111-6113)	A	A	2	●	●		●			●[8]		●						
	16 A 10 / 10 SHERMAN 51 5	Sherman Mk 51 (6211-6217)	A	A	2	●	●		●			●[8]		●						●
	22 A 10 / 11 SHERMAN 51 HV 5	Sherman Mk 51HV (6311-6317)	A	A	2	●	●		●			●[8]		●						●
	25 A 14 / 15 M48A5 6	M-48A5 (6411-6421)	A	A	2	●	●		●			●[8]		●						
	25 A 14 / 16 M60A1 6	M-60A1 (6511-6517)	A	A	2	●	●		●			●[8]		●						
	25 A 12 / 15 CENTURION 5	Centurion VIII (6611-6617)	A	A	2	●	●		●			●[8]		●						●
	25 A 12 / 16 PATTURION 6	Patturion (6711-6721)	A	NA	2	●	●		●			●[8]		●						●
	18 A 12 / 13 TI-67 6	TI-67 (6811-6817)	A	A	2	●	●		●			●[8]		●						●
ENGINEERING VEHICLES (7000's)	11 A 8 / 9 SHERMAN FLAIL 5	Sherman FLAIL (7111-7112)	A	A	2	●									FLAIL					
	0-0 / 6 M-60 AVLB 6	M-60 AVLB (7211-7212)		A	2										BRIDGING					
	0-0 / 3 FERRY 1	Motorized FERRY (7311-7312)		NA	2							●[7]			FERRY			●		
AA (8000's)	14 AA 6 / 3 M3/AA 6	Twin 20mm AA on M3 (8001-8002)	AA	A	2	●[9]	●[9]													
AIR (9000's)	12 A/* 6 / 18 HUEY COBRA 40	Huey gunship (9111-9113)	A/*	F	0	●	●	●[10]												
	2 I 6 / 12 UH-1 32	UH-1 transport (9211-9212)	I	F	0	●	●	●[10]				3I								
	24 ∞	Jet aircraft (9901-9904)	*	F	0	●[10]	●[10]													

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NON-SUEZ HEXES

COUNTER	NAME	PLACEMENT			MOVEMENT EFFECTS			COMBAT EFFECTS	
		Hexes where allowed:[1]	How placed:	How removed:	Neg Rd.	Stacking effects:	SPECIAL:	Prohibited attacks:	SPECIAL:
MINE 2-1	2-1 MINE	any except towns[2]	Init only	E(1-2) Flail (½MA)	Y	NONE	ALL MINES: A unit dispersed by MINE attack must remain in that MINE's hex.	CAT and overrun	ALL MINES: Each MINE attacks each time a unit enters or leaves that MINE's hex. The odds printed on the MINE are used each time that MINE attacks.
MINE 3-1	3-1 MINE	any except towns[2]	Init only	E(1-3) Flail (½MA)	Y	NONE		CAT and overrun	
MINE 1-1	1-1 MINE	any except towns[2]	Init MLG(MA)	E(1-1) Flail (½MA)	Y	NONE		CAT and overrun	
BLOCK	BLOCK (during play)	any[2]	Init	E(MA, then AUTO)	Y	NONE	A unit entering a BLOCK can move only one hex that turn.	overrun	NONE
		any hex adjacent to a town, woods or ridge or crest[2]	E(MA)						
TRENCH	TRENCH	clear terrain only[2]	Init only	NONE	Y	only inf. class in hex	(see BRIDGE)	overrun	NONE
24	BRIDGE	only on TRENCH[2]	AVLB, MTU-2 (MA)	E(MA, then AUTO); AVLB,MTU-2(MA);DF,IF	N	1 stacking point of non-inf. allowed in hex	a road in the hex is no longer negated	overrun[3]	Attacker has option of not attacking BRIDGE in CAT attack.
FORT 10	FORT	any except towns[4]	Init only	NONE	Y	NONE	NONE	overrun	Defender in hex +10 points per unit; CRT roll +2
I.P.	IMPROVED POSITION	any except towns[4]	Init only	NONE	N	NONE	NONE	NONE	CRT die roll +2
2 (wreck)	WRECK	road, town or[5] on a BRIDGE	combat	Battle tank (MA)	N	counts as 1 pt.	NONE	NONE	NONE
(double wreck)	DOUBLE WRECK	road, town or[5] on a BRIDGE	combat (2 units)	Battle[6] tank (2MA)	Y	counts as 2 points	NONE	NONE	NONE

Key: *Init,* initial placement; *MLG,* MLG minelayer unit; *E,* combat engineers; *AVLB, MTU-2,* AVLB and MTU-2 bridge laying units; *combat,* counter is placed when an armored unit is eliminated in that hex; *Flail,* PT-54 or Sherman Flail units; *DF,IF,* counter can be attacked by direct or indirect fire and is removed on an "X" result; *Battle tank,* any battle tank class unit *(1-1), (1-2), (1-3),* combat engineer unit removes this counter by attacking it at the stated odds — "D" or "DD" results causes a face-up MINE to be inverted (the MINE is still effective), and a subsequent "D" or "DD" result causes an inverted MINE to be removed; *(MA, then AUTO),* combat engineer removes this counter by expending its entire movement allowance (to move off the counter) one turn — the counter is inverted and is removed on a later turn as soon as an adjacent combat engineer attacks it; *(xMA),* the number of turns the unit must expend its entire movement allowance in order to place or remove the counter.

Notes:

[1] Only one counter of each type (i.e. one MINE of any type, etc.) may be placed in the same hex. *Exception:* WRECKS.

[2] Not allowed in the same hex with a FORT or IMPROVED POSITION.

[3] The BRIDGE is not included in any CAT attacks against its hex.

[4] Not allowed in the same hex with any MINE, BLOCK, TRENCH or BRIDGE.

[5] Not allowed in the same hex with a FORT.

[6] Each battle tank that expends its full movement allowance to clear wreckage removes one wreck.

COUNTER	Hexes where allowed:[1]	How placed:	How removed:	Units allowed on counter:	EFFECTS:
TRENCH	empty Suez Canal hex	Init,[2] CE(40MA)	NONE	1 amphibious	ENTRY hex sides become SAND DUNES for all purposes.
BRIDGE (pontoon)	on TRENCH	Init,[3] CE(60MA)	E(MA, then AUTO); DF, IF	1 stacking point plus 1 amphibious[4]	ENTRY hex sides remain SAND DUNES due to the TRENCH.
BRIDGE (infantry)	empty Suez Canal hex	CE(5MA)	E(MA, then AUTO); DF, IF	1 infantry class unit	Infantry class units may cross the ENTRY MORAINES of the hex.[5]
ALL MINES, BLOCKS, ALL WRECKS	on BRIDGE only[6]	FOR RESTRICTIONS AND EFFECTS SEE THE NON-SUEZ HEXES CHART ABOVE			
FORT	East Bank[7] (not allowed in Suez Canal)	Init only	NONE	normal stacking	1) See the **NON-SUEZ HEXES** chart for rules governing FORTS. 2) MORAINES in the FORT's hex do not block LOS/LOF to or from units in the FORT's hex.
IMPROVED POSITION	East Bank (not allowed in Suez Canal)	Init only	NONE	normal stacking	1) See the **NON-SUEZ HEXES** chart for rules governing I.P.'s. 2) MORAINES in the I.P.'s hex do not block LOS/LOF to or from non-infantry-class units in the I.P.'s hex.
	West Bank (not allowed on town hex	Init only	NONE	limit: 2 inf.-class units and 1 non-inf. class unit	1) See the **NON-SUEZ HEXES** chart for rules governing I.P.'s. 2) The I.P.'s hex becomes a SLOPE hex for purposes of combat and sighting. 3) The normal terrain in the hex still governs movement.

Notes:
[1] Only one counter of each type (i.e. one MINE, etc.) is allowed in the same hex. Exception: WRECKS.
[2] TRENCHES placed during initial placement must be at least three hexes apart.
[3] BRIDGES placed during initial placement must have at least two empty TRENCHES between them.
[4] One amphibious unit is allowed to be on the TRENCH in addition to the unit on the BRIDGE.
[5] MORAINES remain in effect for all other purposes.
[6] The NON-SUEZ HEXES chart governs the placement of these counters in Suez Bank hexes.
[7] FORTS may be placed on the West Bank normally, with no special effects.

CAT and overrun attacks can never be executed into or out of Suez Canal hexes. Key: CE, construction engineers. See also the Key for the NON-SUEZ-HEXES chart.

GAME FUNCTION MARKERS

MARKER	NAME	USE:
N	NORTH	Placed beside board pointing to "NORTH" for the Situation being played.
TURN NOW	TURN NOW	Moved along TURN RECORD TRACK to keep track of turns.
DISPERSED	DISPERSED	Placed on units dispersed by combat; removed before friendly movement phase (see MORALE rules).
SPOTTED	SPOTTED	Placed on moving units and units that end their turn inverted in woods or town and in enemy LOS/LOF.
INTERDICTION FIRE	INTERDICTION FIRE	Placed on target hex of "INT" indirect fire attack at the end of the friendly turn. Remains on board as long as the attack has 14 attack points, up to one complete turn. (ADVANCED RULES)
SMOKE	SMOKE	Placed on target hex of SMOKE attack, or in the hex of a unit generating SMOKE. Remains on board for two complete turns, blocking sighting and spotting. (OPTIONAL RULES)
SAGGER RELOAD	SAGGER RELOAD	Placed on the Sagger unit with the same PICS number at the beginning of the game, and is removed when that Sagger attacks. See the MISSILE RELOADS rule in the ADVANCED RULES.
COBRA RELOAD	COBRA RELOAD	Placed on the Cobra unit with the same PICS number at the beginning of the game, and is removed when that Cobra attacks. See the MISSILE RELOADS rule in the ADVANCED RULES.
DOWN	DOWN	Placed on a helicopter unit that is flying low. See HELICOPTERS DOWN in the OPTIONAL RULES.

ARAB COUNTER SHEET

JORDANIAN

EGYPTIAN/SYRIAN/PALESTINIAN

Constructions

BRIDGE
24

TRENCH

FORT
10
+2

I.P.
+2

ISRAELI COUNTER SHEET

SUEZ CANAL CHART

WEST BANK HEX

SUEZ CANAL

NORTH

MORAINE
hex sides

EAST BANK HEX

The two MORAINE hex sides that are directly across from each other in the Suez Canal hex are the ENTRY hex sides for that Suez Canal hex. The Bank hexes which contain these ENTRY hex sides are the *debouchement* hexes for that Suez Canal hex.

Example: For the Suez Canal hex marked "A", the ENTRY hex sides are marked "a" and the *debouchement* hexes are marked "(A)". The TRENCH counter in A transforms these ENTRY hex sides into SAND DUNE hex sides.

Units entering or leaving the bridge on hex "A" could cross only the transformed moraine hex sides marked "a". Units moving onto an infantry bridge, or amphibious units (and FERRY passengers) moving onto a TRENCH counter with no bridge, are similarly restricted.

Units in the FORT in hex "C" — an East Bank hex — can trace LOS/LOF through the MORAINE hexsides marked "c". If an IMPROVED POSITION was in hex "C" instead, only non-infantry-class units in hex "C" could trace LOS/LOF through the "c" MORAINES.

The IMPROVED POSITION counter in the West Bank hex transforms that hex into a SLOPE hex for all purposes of sighting. Units in that hex ignore ground-level obstructions (including all MORAINE hexsides) when tracing LOS/LOF.

SUEZ CANAL HEX contains:	UNITS ALLOWED IN HEX:[1]	OVERRUNS/CAT attacks allowed into/out of hex:	MORAINE HEXSIDES[2] which are affected:	method of crossing:	sighting effects:	TURNS TO CONSTRUCT:
EMPTY	NONE	NO	ALL in hex	NOT ALLOWED	NONE	—
ASSAULT BOATS[3]	4 infantry-class[4] (1 per boat)	NO	ALL in hex	load/unload into/out[5] of adjacent Bank hex	NONE	(initial placement only)
TRENCH ("cut")	(includes FERRY) 1 amphibious[6]	NO	two ENTRY hex sides	full movement to enter; exit normally	ENTRY hex sides become SAND DUNES[7]	40, in East Bank debouchement hex
FERRY (on trench)	any 1 unit[4] plus FERRY	NO	two ENTRY hex sides	load/unload into/out[5] of debouchement hex	ENTRY hex sides become SAND DUNES[7]	enter hex as amphibious unit
BRIDGE[8] (on trench)	any 1 stacking[6,9] point	NO	two ENTRY hex sides	1 MP to enter, normal to leave	ENTRY hex sides become SAND DUNES[7]	60, in Suez Canal hex
INFANTRY BRIDGE[8] (NOT on trench)	1 infantry-class[6]	NO	two ENTRY hex sides	1 MP to enter, normal to leave	NONE	5, in Suez Canal hex
EAST BANK HEX contains:						
FORTIFICATION	normal stacking	only OVERRUNS prohibited	ALL in hex	(NOT ALLOWED)[10]	These moraines do NOT block LOS/LOF to/from this hex	(initial placement only)
IMPROVED POSITION (I.P.)	normal stacking	YES	ALL in hex	(NOT ALLOWED)[10]	These moraines do NOT block LOS/LOF to non-infantry-class units in hex	(initial placement only)
WEST BANK HEX contains:						
IMPROVED POSITION (I.P.)	2 infantry-class and 1 non-infantry-class	YES	ALL on board	(NOT ALLOWED)[10]	Hex becomes a SLOPE hex, sighting over all moraines	(initial placement only)

NOTES:

1. If there is more than one type of neutral counter or transport in a Suez Canal hex, each type can have its full load of units in that hex, up to a limit of four stacking points in that hex. Example: If there were a TRENCH and BRIDGE in a hex, that hex could contain: 1) one unit on the bridge; 2) one amphibious unit; and 3) two assault boats with passengers. If the amphibious unit was a FERRY, there could also be one unit loaded aboard the FERRY.

2. Unaffected moraine hexsides block all ground-level LOS/LOF, prohibit combat, and cannot be moved across.

3. Each ASSAULT BOAT has a defense strength of 1.

4. Unit cannot be attacked while it is a passenger, but it is destroyed if its carrier is eliminated.

5. Carrier unit remains in the Suez Canal hex during loading and unloading.

6. Unit's defense strength is halved while it is in a Suez Canal hex.

7. These SAND DUNE/MORAINE hex sides can confer HULL DOWN SHIELDING.

8. The bridge is NOT a road hex. Infantry-class units may QUICK MARCH across a bridge.

9. Includes WRECKS.

10. Use the Suez Canal Hexes section of this chart to determine which hex sides may be crossed.

Flying units (including "DOWN" helicopters) may cross MORAINE hex sides and enter SUEZ CANAL HEXES without restriction; these units also do not count towards the hex capacity.

WEAPONS EFFECTIVENESS CHART

Cross-index type of target and type of attack to find the block that will be used to calculate all attack strengths in that attack.

Within the chosen block cross-index each firing unit's weapon type with its range to the target. The result is the effect on that attacking unit's attack strength.

Retain fractional attack strength points.

If a weapon type is not represented in a block that weapon type may not make that type of attack.

"NOT ALLOWED" means that the attacking unit may not attack under those conditions. Its effective attack strength is zero.

The "PROXIMITY AND SIGHTING" column indicates what conditions a unit must meet in order to make each type of attack. The attacking unit(s) and defending unit(s) in an attack must have the relationships listed or the attack cannot take place.

The "MODIFY DIE ROLL BY" column indicates what additions and subtractions to the CRT die roll are applicable for each type of attack.

Type of Attack	Weapon Type	ARMORED (A) 1-2 hexes	ARMORED (A) 3-6 hexes	ARMORED (A) 7+ hexes	NON-ARMORED (NA) 1-4 hexes	NON-ARMORED (NA) 5+ hexes	AIRCRAFT (F)[8] 1-4 hexes	AIRCRAFT (F)[8] 5-6 hexes	AIRCRAFT (F)[8] 7+ hexes	Proximity and Sighting[1]	Modify Die Roll By[2]
DIRECT FIRE (AND OPPORTUNITY FIRE) — I		NORMAL (See CAT)[3]	NOT ALLOWED		NORMAL	HALVED	NORMAL	HALVED	HALVED	LOS/LOF AND SPOTTING	TERRAIN EFFECTS APPLY[4]
	A	DOUBLED	NORMAL / DOUBLED[5]	HALVED	HALVED	QUARTERED	HALVED	QUARTERED	NOT ALLOWED		
	H,M,(H)	NORMAL	HALVED		DOUBLED		NOT ALLOWED				
	G	NOT ALLOWED / NORMAL[6]	NORMAL		NOT ALLOWED		NOT ALLOWED				
	AA	NOT ALLOWED			NOT ALLOWED		NORMAL	NORMAL	HALVED		
IN-DIRECT FIRE	M,(H)	HALVED			NORMAL		NOT ALLOWED			SPOTTING	NONE
OVERRUN	A	NORMAL	NOT ALLOWED		NORMAL	NOT	NOT ALLOWED[10]			ADJACENT + EXPEND 2 MOVEMENT POINTS[9]	DIE ROLL MINUS 2; ODDS +1 COLUMN
	I	NOT ALLOWED			NORMAL	ALLOWED	NOT ALLOWED[10]				
CAT	I	DOUBLED / TRIPLED[7]	NOT ALLOWED		NORMAL	NOT ALLOWED	NOT ALLOWED[10]			ADJACENT[9]	DIE ROLL MINUS 2
AIR STRIKES	A	DOUBLED	NORMAL	HALVED	HALVED	NOT ALLOWED	NOT ALLOWED			(RANGE)	NONE
	G	NORMAL			NOT ALLOWED		NOT ALLOWED			(RANGE)	
	H	HALVED	NOT ALLOWED		NORMAL	NOT ALLOWED	NOT ALLOWED			ON TOP OF DEFENDER	
	(H)	HALVED	NOT ALLOWED		NORMAL	NOT ALLOWED	NOT ALLOWED			ON TOP OF DEFENDER	

TYPES OF TARGETS

NOTES:

[1] In all types of attacks the defending units must be within each attacking unit's range or that attacking unit may not attack.

[2] Die roll modifications due to (the defending units' occupying) town hexes, woods hexes, improved positions and fortifications are in effect for ALL types of attacks. (The die roll is not modified when the defender is an aircraft type target or the defender is in the process of overrunning. See notes 4 and 8 below). The CRT die roll is *always* +1 if the defender is attacked while dispersed.

[3] Infantry units making an opportunity fire attack use their CAT multipliers to calculate their effective attack strengths if and only if they are firing at adjacent units that are in the process of overrunning those same infantry units.

[4] Towns, woods and improved positions do *not* modify the CRT die roll if the defending unit is attacked by opportunity fire just as it expends the two movement points to execute an overrun attack. Also, overrunning units do *not* get HULL DOWN SHIELDING from attackers in the hex being overrun, although the overrunning units do get normal HULL DOWN SHIELDING from other attackers. Note that the overrun attack is modified normally — it is only in the opportunity fire attack that towns, etc. do not modify the die roll.

[5] In Situations after 1960 Israeli units are doubled. In Situations after 1967 Jordanian units are doubled.

[6] "TOW" units are the only "G" class units that can fire at a range of 1 or 2 hexes.

[7] In Situations after 1970 Egyptian units are *tripled* not doubled.

[8] Towns, woods, forts and improved positions *never* modify the CRT die roll if the defending unit is an air unit (nor does the air unit get any additions to its defense strength).

[9] Not allowed to or from Suez Canal hexes.

[10] Only "down" helicopters can be attacked by these attacks. Treat the "down" helicopter as the target type most favorable to the *attacker*. (OPTIONAL RULES)

A1

B1

C1

D1

E1

F1

G1

H1

I1

J1

K1

L1

M1

N1

O1

P1

Q1

A'

C'

R1
S1
T1
U1
V1
W1
X1
Y1
Z1
AA1
BB1
CC1
DD1
EE1
FF1
GG1

R1
S1
T1
U1
V1
W1
X1
Y1
Z1
AA1
BB1
CC1
DD1
EE1
FF1
GG1